TRANSITION AND WELLBEING RESEARCH PROGRAMME

MENTAL HEALTH AND WELLBEING TRANSITION STUDY

Technology Use and Wellbeing

Summary Report

2019

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Context

DVA and Defence Healthcare contexts – e-mental health

The prolific uptake and use of new and emerging technologies over the past decade have fundamentally changed the way people connect, communicate and transact in digitally connected communities – both online and offline. We can no longer make a distinction between the online and the offline worlds – and the advent of the smart phone has created a 21st century expectation of immediacy and responsiveness that meets the needs of the person. This is also true for military personnel, who can now access health information and self-help resources 24/7 from any location, including areas of operational deployment.

Several recommendations were adopted by Defence and the Department of Veterans' Affairs (DVA) following the Dunt (2009) Review of Mental Health Care in the Australian Defence Force (ADF), the 'Transition Through Discharge' (Dunt, 2009), and the establishment of the Mental Health Strategy by the ADF in 2002. These recommendations prioritised the mental health and wellbeing of serving and ex-serving personnel. In more recent years, the adoption of e-mental health has been prioritised as a key pillar of both the ADF and DVA mental health strategies (Australian Government Department of Veterans' Affairs, 2016; Australian Government Department of Veterans' Affairs, 2013; Australian Government Department of Defence, 2017).

The Defence Mental Health and Wellbeing Strategy 2018–2023 and DVA's Veteran Mental Health and Social Health Strategies 2013–2023 position the person at the centre of system reform. These advances in digital health solutions to support good mental health create unique opportunities to improve services available for military personnel. A significant investment has been made by Defence, DVA and Open Arms – Veterans and Families Counselling (formerly the Veterans and Veteran Families Counselling Service, or VVCS) to develop a suite of online tools and resources. These included:

- *Fighting Fit*, developed by Joint Health Command, within Defence, which is a health and wellbeing portal with direct links to services, including a toll-free 24-hour phone number and mental health information and services (http://www.defence.gov.au/Health/HealthPortal/)
- *Engage*, developed by Defence as an online portal that current, transitioning and former ADF members, their families and/or those involved in their support can use to find support services in the community (https://engage.forcenet.gov.au/)
- Defence Community Organisation programs and services to help Defence families manage military life, including a toll-free 24-hour phone number and website (http://www.defence.gov.au/DCO/)
- *At Ease*, a suite of resilience and strength-based resources for serving and ex-serving ADF members, developed by DVA (http://at-ease.dva.gov.au/) in consultation with Defence, which includes:
  - High Res (https://at-ease.dva.gov.au/highres), a website supported by an app, designed to create a toolbox to manage stress, build resilience and optimise performance, including making an action plan
  - Operation Life, an app to support the management of suicidal thoughts, to be used with a clinician
  - PTSD Coach Australia, designed as an educational tool with practical approaches to the management of symptoms that commonly occur after trauma
  - ON TRACK with The Right Mix, a website and app (https://www.therightmix.gov.au/) that help with the management of alcohol consumption

- the Open Arms website (www.vvcs.gov.au/index.htm), including digital content and toll-free 24-hour phone number
- a variety of Departmental psycho-educational materials, including factsheets, videos and booklets that are increasingly being promoted through social media channels such as Twitter, Facebook and Linked In.

Work has also been done recently to link these resources to the national digital Mental Health Portal maintained by the Department of Health, or 'Head to Health' site, which includes a veteran-specific section (https://headtohealth.gov.au/supporting-yourself/support-for/veterans).

Background to the *Technology Use and Wellbeing Report*

Highlighting the investment by Defence and DVA in developing digital technology, the Transition and Wellbeing Research Programme sought to gather baseline data on technology use alongside prevalence data to investigate the extent to which current and ex-serving ADF members are already utilising technology to support their health. The first two reports in the Transition and Wellbeing Research Programme, the *Mental Health Prevalence Report* (Van Hooff et al., 2018) and the *Pathways to Care Report* (Forbes et al., 2018), were the first of their kind to provide baseline data on how recently transitioned ADF members used technology compared to those serving in the Regular ADF in 2015 and the implications this has for the mental health and wellbeing of Australian military personnel. Overall, these reports tell us that:

- Approximately 30% of Transitioned ADF and 2015 Regular ADF preferred to receive their services via the internet. Telephone hotlines were not a preferred model of service delivery.
- Approximately 20% of the Transitioned ADF and 10% of 2015 Regular ADF used the internet to assess their mental health, with 18.1% and 9.9% of Transitioned ADF and 2015 Regular ADF respectively using social media and approximately 55% of those finding it helpful.
- Generally, Transitioned ADF and 2015 Regular ADF were satisfied with the DVA and ADF websites, with utilisation rates of around 40%. However this use was about the same for other community-based websites. Specific tailored online interventions that were not military-specific were poorly used.
- The Transitioned ADF and 2015 Regular ADF were more likely to access face-to-face and online services that are tailored for the military.
- Despite significant effort across Defence and DVA in the development of online resources and apps, such as High Res and PTSD Coach, utilisation was relatively low.

The *Technology Use and Wellbeing Summary Report*

This report presents a summary of the key findings from the *Technology Use and Wellbeing Report*. It is part of the Mental Health and Wellbeing Transition Study within the Transition and Wellbeing Research Programme. The report sought to investigate technology and its utility for health and mental health programs, including implications for future health service delivery in the ADF and veteran community. In the context of understanding the challenges of transitioning to civilian life, this report explores how technology can impact on serving and ex-serving communities and the role of technology in supporting mental health and wellbeing, ranging from information provision right through to supporting care. Thus, the objectives of *the Technology Use and Wellbeing Report* were to:

- describe and compare internet usage patterns and attitudes to online communication, and explore the relationships between internet use, attitudes and probable disorder

- describe the use of new and emerging technologies among the Transitioned ADF and the 2015 Regular ADF, and also break down these factors by probable disorder (and no probable disorder) for the two populations
- examine the estimated proportion of Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help for, look for information on or manage mental health issues more broadly, not necessarily in relation to their own mental health
- explore the use of the internet specifically for one's own mental health, among those who reported using the internet to seek help or assistance for mental health more broadly
- explore barriers that may exist in relation to talking about mental health online for Transitioned ADF and 2015 Regular ADF
- examine the use of the internet in general, as well as specific Defence and DVA websites and helplines, to assist in the management of mental health among Transitioned ADF and 2015 Regular ADF
- examine the use of the internet in relation to probable 30-day mental disorder, subsyndromal mental health symptoms, and no disorder/symptoms
- examine the use of the internet among those with a probable mental disorder, according to the presence or absence of stigmas and barriers to care
- examine the use of technologies for mental health support for the Transitioned ADF compared to a younger civilian cohort.

Summary of key findings

The Transition and Wellbeing Research Programme addresses key research priorities of both DVA and Defence over three studies: The Mental Health and Wellbeing Transition Study, the Impact of Combat Study and the Family Wellbeing Study. The *Technology Use and Wellbeing Report* is part of the Mental Health and Wellbeing Transition Study. It is one of the first studies internationally to investigate the use of the internet and new and emerging technology to support the mental health of the Transitioned ADF and 2015 Regular ADF.

Overall internet use was high, with more than 95% of the Transitioned ADF and Regular ADF using it 1–2 hours a day. Around 20% of both the Transitioned and Regular ADF reported that going online when going through a difficult time made them feel better. Among the Transitioned ADF, those with a probable disorder were more likely to spend more time on the internet and to use the internet after 11 pm. Both the Transitioned ADF and Regular ADF with a probable disorder reported that it was easier to be themselves online and to talk about private things. In the Transitioned ADF, those with a probable disorder reported that they talked about different things online, they went online more often when going through a difficult time, and going online made them feel better.

Half of the Transitioned ADF and Regular ADF reported using new and emerging technologies, with 80% using apps and a third using wearable devices. Of those who used new and emerging technology, half used them to improve their health and wellbeing, with a focus on improving fitness, tracking progress and staying organised. A quarter of the Transitioned ADF and Regular ADF used them to 'improve sleep'. Apps, when not being used to improve health and wellbeing, were being used for fun or recreation, for study and work or to enhance social interaction. Among those who reported using new or emerging technology, around 20% of Transitioned ADF and almost 10% of the Regular ADF met the criteria for a probable disorder. Transitioned ADF with a probable disorder were more likely to use new and emerging technology to improve their mood.

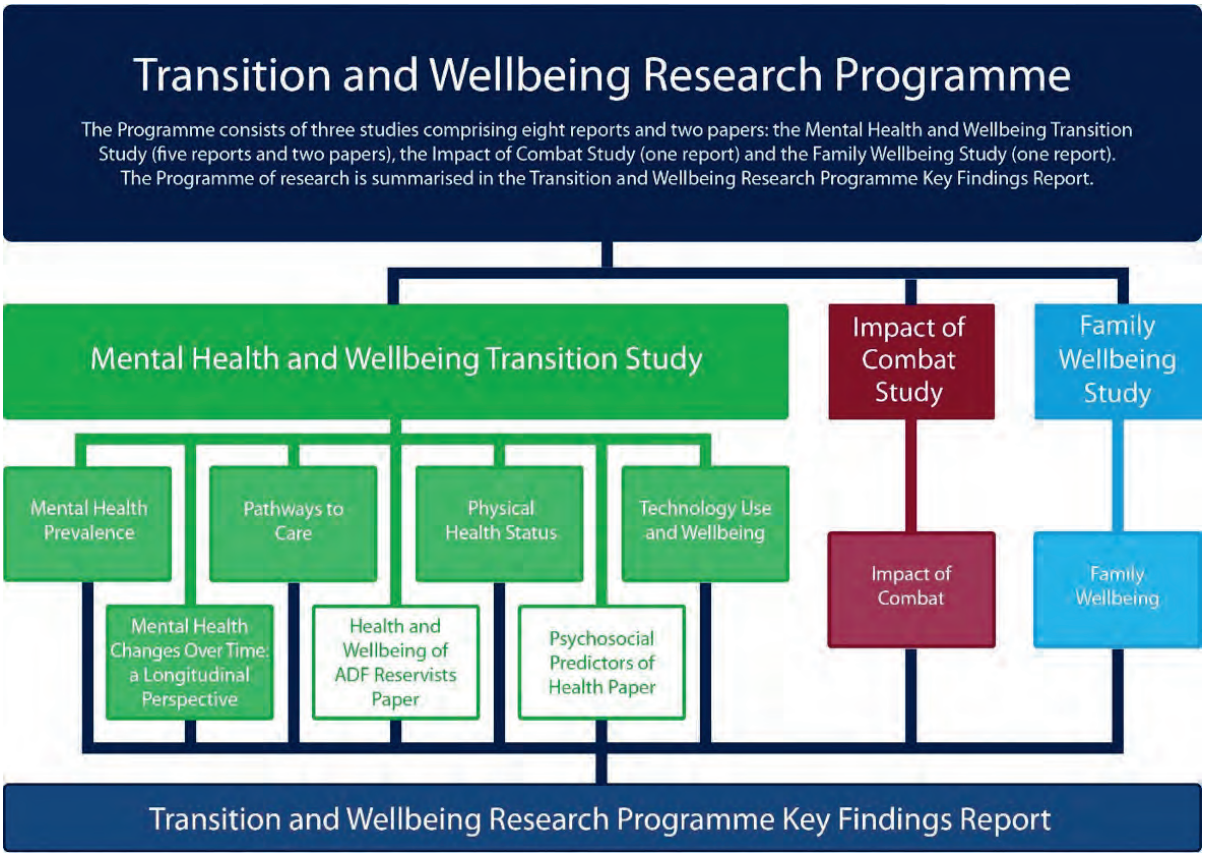
Transitioned ADF and Regular ADF were asked about the use of the internet to seek information or help for mental health, and then specifically asked about the use of the internet for their own mental health. Around one in four Transitioned ADF and one in six Regular ADF used the internet to seek information or help for mental health. When asked about using the internet for their own mental health, around 30% of the Transitioned ADF and 20% of the Regular ADF reported using the internet for this purpose once a month. Generally, use was low and only a small proportion of the Transitioned ADF and Regular ADF talked online with peers, family or friends, used a blog or chatroom or spoke to a professional.

For the Transitioned ADF and Regular ADF who used the internet to seek information or help for mental health but did not talk to someone online, the main barriers were a preference for face-to-face contact and concerns about a lack of privacy or confidentiality.

Mental health status and the use of DVA, Defence and other civilian websites were examined, and for those that met the criteria for a probable 30-day disorder about 40% of the Transitioned ADF and between 20 and 40 per cent of the Regular ADF used the internet. For those with probable anxiety/depression, Transitioned ADF who reported self-stigma or at least one barrier to care were more likely to use the internet. Overall, for both Transitioned and Regular ADF with a probable disorder, use of a Defence, DVA or civilian website was generally high.

Psychological distress in the Transitioned ADF young adults compared to young adults in the Australian community differed significantly, with almost 20% of the Transitioned ADF young adults reporting very high psychological distress, compared to 5% of the general young adult population. Regardless of higher rates of psychological distress, the Transitioned ADF young adults were less likely than the general population to use the internet to seek help for or to manage mental health issues than the general young adult population.

1 Background



The Transition and Wellbeing Research Programme (Programme) is the most comprehensive study undertaken in Australia that examines the impact of military service on the mental, physical and social health of:

- serving and ex-serving Australian Defence Force (ADF) members, including those who have been deployed in contemporary conflicts, and
- their families.

This research further extends and builds on the findings of the world-leading research conducted with current serving members of the ADF in the 2010 Military Health Outcomes Program (MilHOP).

This current research, conducted in 2015, arises from the collaborative partnership between the Department of Veterans' Affairs (DVA) and Department of Defence. It aims to implement the Government's goal of ensuring that current and future policy, programs and services are responsive to the current and emerging health and wellbeing needs of serving and ex-serving ADF members and their families before, during and after transition from military life.

Ten objectives were developed to guide the Programme. The objectives are being realised through three studies comprising eight reports: the Mental Health and Wellbeing Transition Study (five reports and two papers), the Impact of Combat Study (one report), the Family Wellbeing Study and the Transition and Wellbeing Research Programme Key Findings Report, which summarises the research, as the diagram above shows. The table below shows which reports deliver on the objectives. This summary report, on the findings of

the *Technology Use and Wellbeing Report*, addresses the fifth research objective, which is to investigate technology and its utility for health and mental health programmes, including implications for future health service delivery.

Programme objectives	Corresponding reports and papers
1. Determine the prevalence of mental disorders among ADF members who have transitioned from Regular ADF service between 2010 and 2014. 2. Examine self-reported mental health status of Transitioned ADF and the 2015 Regular ADF.	*Mental Health Prevalence Report*
3. Assess pathways to care for Transitioned ADF and the 2015 Regular ADF, including those with a probable 30-day mental disorder.	*Pathways to Care Report*
4. Examine the physical health status of Transitioned ADF and the 2015 Regular ADF.	*Physical Health Status Report*
5. Investigate technology and its utility for health and mental health programmes, including implications for future health service delivery.	*Technology Use and Wellbeing Report*
6. Conduct predictive modelling of the trajectory of mental health symptoms/disorder of Transitioned ADF and the 2015 Regular ADF, removing the need to rely on estimated rates.	*Mental Health Changes Over Time: a Longitudinal Perspective Report*
7. Investigate the mental health and wellbeing of currently serving 2015 Ab-initio Reservists.	*The Health and Wellbeing of ADF Reservists Paper*
8. Examine the factors that contribute to the wellbeing of Transitioned ADF and the 2015 Regular ADF.	*Psychosocial Predictors of Health Paper*
9. Follow up on the mental, physical and neurocognitive health and wellbeing of participants who deployed to the Middle East Area of Operations between 2010 and 2012.	*Impact of Combat Report*
10. Investigate the impact of ADF service on the health and wellbeing of the families of Transitioned ADF and the 2015 Regular ADF.	*Family Wellbeing Study*
All objectives	*Transition and Wellbeing Research Programme Key Findings Report*

Two eminent Australian research institutions, one specialising in trauma and the other in families, have led the research programme. The Centre for Traumatic Stress Studies at the University of Adelaide is conducting the Mental Health and Wellbeing Transition Study and the Impact of Combat Study, and the Australian Institute of Family Studies is conducting the Family and Wellbeing Study.

Their research expertise is enhanced through partner institutions from Monash University, the University of New South Wales, Phoenix Australia – Centre for Posttraumatic Mental Health and, until June 2016, the Young and Well Cooperative Research Centre, the work of which is being continued at the University of Sydney.

Through surveys and interviews, the researchers engaged with a range of ex-serving and serving ADF members, including:

- ADF members who transitioned from the Regular ADF between 2010 and 2014 (including Ex-Serving, Active and Inactive Reservists)
- a random sample of Regular ADF members serving in 2015
- a sample of Ab-initio Reservists serving in 2015 (who have never been full-time ADF members)
- 2015 Regular ADF and Transitioned ADF members who participated in MilHOP
- family members nominated by the above.

DVA and Defence thank the current and ex-serving ADF members and their families who participated in this research, for sharing your experiences and insights. Your efforts will help inform and assist the ways you, your colleagues, friends and families, as well as those who come after you, can best be supported during and after your military career.

2 Methodology

2.1 Study design

Data from this report was obtained from a 60-minute self-report questionnaire completed by Transitioned ADF and 2015 Regular ADF as part of phase 1 of the Mental Health and Wellbeing Transition Study. Participants completed this questionnaire either online or in hard copy and were screened for mental health problems, psychological distress, physical health problems, wellbeing factors, pathways to care (including technology use) and occupational exposures.

Each participating sample received a slightly different questionnaire relevant to their current ADF status – Transitioned ADF member, 2015 Regular ADF member or Ab-initio Reservist – and in regard to demographics, service and deployment history. However, the core validated measures of psychological and physical health remained the same and replicated where possible the measures previously administered as part of the 2010 ADF Mental Health Prevalence and Wellbeing Study (McFarlane, Hodson, Van Hooff, Verhagen, & Davies, 2011).

As the demographic and service characteristics of the Transitioned ADF and 2015 Regular ADF were known (i.e. sex, service branch, rank and medical fitness, a dichotomous variable derived from Medical Employment Classification status), it was possible to compare members who responded to the survey with members who did not. This allowed weighting of the data to provide estimates of technology use and wellbeing that are representative of each of the study populations: Transitioned ADF and 2015 Regular ADF.

2.2 Study population

In this report, Transitioned ADF refers to the population of ADF members who transitioned from full-time ADF service between 2010 and 2014, including those who transitioned into the Active and Inactive Reserves and those who had discharged completely (Ex-Serving). The 2015 Regular ADF refers to ADF members who were serving full-time in 2015.

Of the Transitioned ADF population of 24,932, 96% (n = 23,974) were invited to participate in phase 1 of the study. Those not invited represented those individuals who may have opted out of the study or did not have any usable contact information. Thirty-eight per cent (n = 20,031) of the 2015 Regular ADF population (n = 52,500) were invited to participate in phase 1 of the study. The sample of 2015 Regular ADF invited to participate included a stratified random sample of 5040 regular ADF members in 2015 as well as those who had participated in the MilHOP between 2010 and 2012, and who were still serving in 2015.

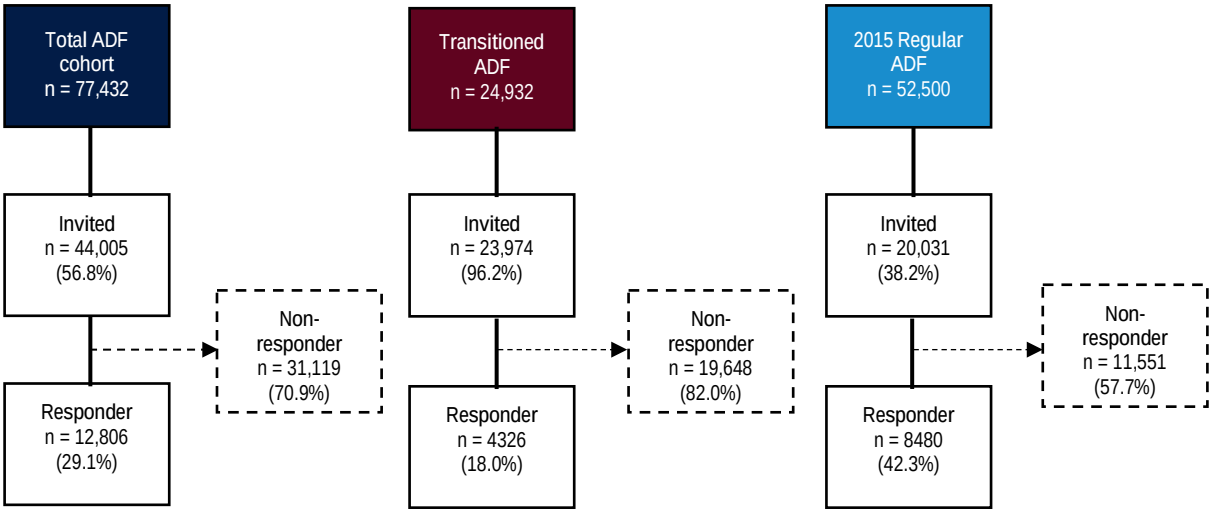
This report summarises findings on the Transitioned ADF and the 2015 Regular ADF, and provides self-report comparisons with the Australian community using Young and Well National Survey data, which was collected in 2012 (Burns et al., 2013). The limited comparison of technology use in the Transitioned ADF with an Australian community sample, matched on age, sex and employment status, was included in this study to situate the Transitioned ADF in the context of the civilian population. Because of the limited age range of participants in the Young and Well National Survey, however, this comparison was limited to young adults between the ages of 18 and 25.

2.3 Response rates

Of those invited, 18% (n = 4326) of the Transitioned ADF population and 42.3% (n = 8480) of the 2015 ADF population completed the phase 1 survey. Figure 1 summarises the breakdown of Transitioned ADF and 2015 Regular ADF members who provided enough data to be included in the survey.

Phase 1 survey responders in both the Transitioned ADF and 2015 Regular ADF were predominantly Army (followed by Air Force and Navy), male and higher in rank, with the mean age of responders in both groups being approximately 41 years. Transitioned females were more likely to respond than transitioned males, while 2015 Regular ADF females were less likely to respond than their male counterparts. Not unexpectedly, Transitioned ADF were more likely to be unfit on transition from Regular ADF (31.1%) compared to the 2015 Regular ADF population (16.1%).

Figure 1 Survey response rates for the Transitioned ADF and the 2015 Regular ADF



2.4 Measures used in the current report

2.4.1 Outcome variables

Internet usage

Internet usage questions were taken from the Young and Well National Survey (Burns et al., 2013) and examined frequency, duration and timing of internet use, means of accessing the internet, the use of the internet for social support, the use of the internet for obtaining information relating to mental health, the use of the internet for managing mental health, barriers to using the internet for mental health and the efficacy of the internet in meeting needs.

Emerging technologies

The use of new and emerging technologies for health and wellbeing was assessed using a series of items developed by Young and Well Co-operative Research Centre (Burns et al., 2013; Young and Well Cooperative Research Centre, 2013). Questions looked at participants' current usage of new and emerging technologies, barriers to usage, types of new and emerging technologies preferred and utilised, reasons for using new and emerging technologies and the early adoption of new technologies.

12-month use of the internet and Defence/DVA/and other websites to seek help or information for, or manage, mental health issues

12-month use of the internet for mental health was examined using the following question: 'Do you use the internet to seek help or information for, or manage mental health issues?' Questions relating to the use of Defence/DVA or other websites in the past 12 months to inform about or assess the participant's mental health were drawn from the pathways to care section of the survey.

2.4.2 Stratification variables

Outcome variables in this report were stratified according to the presence or absence of barriers and stigmas to care, as well as probable disorder, subthreshold disorder and no disorder in relation to PTSD, psychological distress, alcohol use disorder, depression, generalised anxiety disorder, and suicidality as outlined below:

Barriers and stigmas to care

For the purpose of the current report, participants were categorised as having no barriers/no stigmas, or one or more barrier/stigma from the following list which was then used as a stratification variable.

Stigmas: Respondents were asked about the following stigmas that they may hold towards seeking help for a mental health condition:

- I feel they wouldn't understand problems related to my veteran and military experience.
- Most of what would happen if I sought treatment for a mental health issue would be beyond my control.
- I would feel inadequate if I went to a mental health professional for psychological help.
- I would feel embarrassed if I had a mental health problem.
- I would feel worse about myself if I could not solve my own problems.
- People with a mental health problem could snap out of it if they wanted to.
- If I sought mental health treatment from a professional, I might feel worse.
- I would worry that seeking treatment might lead to me losing control of my emotions or reactions.
- People would treat me differently.
- I would be seen as weak.
- People might have less confidence in me.
- I don't trust mental health professionals.

Barriers: Respondents were also asked about the following barriers that they may hold towards seeking help for a mental health condition:

- It is too expensive.
- I wouldn't know where to get help.
- I would have difficulty getting time off work.
- It would harm my career/career prospects.
- It would stop me from being deployed.
- It would be difficult to get an appointment.

Probable disorder, subsyndromal disorder, no disorder

Posttraumatic Stress Disorder Checklist – civilian version (PCL-C)

The Posttraumatic Stress Disorder Checklist – Civilian version (PCL-C) (Weathers, Litz, Herman, Huska, & Keane, 1993) was used to examine symptoms of posttraumatic stress in the past month. For the purpose of this report an optimal screening cut-off of 29 (subsyndromal disorder) and an optimal epidemiological cut-off of 53 (probable disorder) was used. These cut-offs were derived from the 2010 ADF Mental Health Prevalence and Wellbeing Study.

The Kessler Psychological Distress Scale (K10)

The Kessler Psychological Distress Scale (K10) (Kessler et al., 2002) was used to measure psychological distress. Two sets of cut-offs derived from the 2010 Regular ADF Mental Health Prevalence and Wellbeing study were utilised in this section of the report. For the purpose of this report an optimal screening cut-off of 17 (subsyndromal affective or anxiety disorder) and an optimal epidemiological cut-off of 25 (probable affective or anxiety disorder) were used. These cut-offs were derived from the 2010 ADF Mental Health Prevalence and Wellbeing Study.

Alcohol Use Disorders Identification Test (AUDIT)

The Alcohol Use Disorders Identification Test (AUDIT) (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) was used to examine at risk patterns of drinking. In this chapter the optimal screening cut-off of 8 (subsyndromal disorder) and the optimal epidemiological cut-off of 20 (probable disorder) were used. These cut-offs were derived from the 2010 ADF Mental Health Prevalence and Wellbeing Study.

Patient Health Questionnaire – 9 (PHQ-9)

Self-reported depression was examined using the Patient Health Questionnaire – 9 (PHQ9) (Kroenke, Spitzer, & Williams, 2001). Two sets of cut-off values derived from the 2010 ADF Mental Health Prevalence and Wellbeing study were used in this section of the report: an optimal epidemiological cut-off of 18 (probable disorder) and an optimal screening cut-off of 6 (subsyndromal disorder).

Generalised Anxiety Disorder – 7 (GAD-7)

Self-reported generalised anxiety disorder was examined using the Generalised Anxiety Disorder 7-item (GAD-7) Scale (Spitzer, Kroenke, Williams, & Lowe, 2006). Scores for the seven questions were then added up to give a total score of 0–21. The standard cut-off of 10 was used to denote probable generalised anxiety disorder.

Suicide

12-month suicidal ideation and behaviour was assessed using four items that looked specifically at suicidal thoughts, plans and attempts. Three of the items in this section were adapted from the National Survey of Mental Health and Wellbeing (Australian Bureau of Statistics, 2008) and the final item was devised by researchers for use in the current study.

2.5 Ethics

The study protocol was approved by the DVA Human Research Ethics Committee (E014/018) and was recognised under expedited review processes by Defence and the University of Adelaide Human Research Ethics Committee. The study protocol was also submitted to the Australian Institute of Health and Welfare Ethics Committee, which granted approval (EO 2015/1/163). This study was conducted in accordance with the Australian Code for the Responsible Conduct of Research (https://www.nhmrc.gov.au/guidelines-publications/r39).

How to interpret and discuss the findings in this report

Weighted prevalence estimates:

- Where the report talks about prevalence estimates, it is referring to the estimated rates of a particular outcome within the entire population or subpopulation. It is important to understand that these are estimates. These estimates represent the proportion of cases we would predict to observe in the total population, based on the proportion of actual cases detected in the subpopulation who completed the outcome measure.
- When considering prevalence estimates, estimated proportions are more informative than estimated numbers.
- While results in this report were weighted to represent the total population, this weighting was performed on the basis of four key variables: sex, rank, service (Navy, Army or Air Force) and medical fitness. This assumes a general consistency across individuals with each combination of these characteristics (strata) and does not account for individual differences or other factors that may influence the outcomes of interest.
- The relatively low response rates observed in the study mean that the weighted estimates presented may have a lower level of accuracy, with estimates more highly dependent on the characteristics used for weighting.
- Estimates for subpopulations (strata) with higher response rates more accurately represent those subpopulations than those with lower response rates.
- Where an outcome is relatively rare and is detected at a high rate in individuals who share characteristics with a large proportion of the population (such as Other Ranks), the estimated proportion of the entire population predicted to have achieved that outcome should be greater than the proportion of cases detected.
- Where an outcome is relatively common and is detected at a high rate in those who share characteristics with a small proportion of the population, the estimated proportion of the total population predicted to have achieved that outcome should be lower than the proportion of cases detected.
- To interpret the precision or imprecision of a given estimate, readers might consider additional information supplied with the estimates, such as confidence intervals.

Confidence intervals: These represent the possible range of values within which the presented estimate falls. Where the value of interest is a prevalence estimate, confidence intervals show the range of error in the estimate. In general, confidence intervals that are very close to the estimate value indicate that the estimate is more precise, while very wide confidence intervals suggest that the estimate is imprecise. Where there are wide confidence intervals, associated estimates should be interpreted cautiously, and the upper and lower limits should be considered the top and bottom range of possible precise values.

Standard errors: Like confidence intervals, standard errors indicate the range of error in an average score.

Between-group comparisons: Where comparing prevalence estimates between groups, the overlap in confidence intervals provides an indication of between-group differences. Where there is significant overlap, any apparent difference in estimates is more likely to reflect an error in measurement or estimate. In general, the smaller the subpopulation of interest the greater the error, so where a stratification variable has a very small number in some categories, estimates are likely to have large associated confidence intervals or standard errors.

Using mean differences in proportions for between-group comparisons: Where standardised estimates for a younger civilian cohort were compared with Transitioned ADF estimates, the mean differences in proportions (along with their associated standard error and confidence intervals) were calculated. Significant differences were identified by mean difference confidence intervals that did not span zero (i.e. due to measurement and/or sampling error, the mean difference in proportions between the two groups could plausibly be zero).

Odds ratios (ORs): When estimating the prevalence of a particular health outcome there could be differences in the prevalence rates between two groups (for example, between 2015 Regular ADF and Transitioned ADF). This could be due to differences in factors other than transition status – such as sex, age, service or rank – across the comparison groups, particularly if these other factors are associated with the health outcome. If this is true, these factors potentially confound the findings. One way to address this is to employ a logistic regression model that controls (adjusts for) these factors. The statistical output from a logistic regression model is an odds ratio (OR), which denotes the odds of a particular group (such as Transitioned ADF) having a particular health outcome compared to a reference group (such as 2015 Regular ADF).

An OR of greater than one indicates increased odds of having the outcome compared to the reference group, whereas an OR of less than one suggests less likelihood of having the particular health outcome compared to the reference group. For example, an OR of 1.7 for the Transitioned ADF (compared to 2015 Regular ADF) suggests that the Transitioned ADF members have 70% increased odds of having that particular health outcome. Conversely, an OR of 0.70 suggests that the Transitioned ADF members are 30% less likely to have the particular health outcome compared to the 2015 Regular ADF. When an OR is greater than two, we can then say that the Transitioned ADF are twice as likely to have the particular health outcome compared to the 2015 Regular ADF. Similarly, if the OR is greater than three, they would be three times as likely to have the particular health outcome, and so forth.

Significance: Where the text describes a between-group difference as significant, this means that the difference between groups was statistically tested then adjusted for sex, age and service, and there was no overlap in the associated confidence intervals between groups.

Further caveats to be considered when reading and discussing the findings from this study:

- The overall response rate for the study was low, particularly among Transitioned ADF. While responder data could be statistically weighted up to the total population, the lower the number of responders, the less accurate the resulting weighted-population estimates.
- Response rate data show that some subpopulations had substantially lower response rates, which affects the accuracy of the associated estimates. In particular, Officers and Non-Commissioned Officers were over-represented among responders, while Other Ranks were highly under-represented, despite accounting for the largest proportion of the total population. Therefore, any estimates stratified by rank should be interpreted with a degree of caution.
- A large proportion of this study relates to self-reporting measures, which are subject to potential biases, including recall bias. The collection of diagnostic mental disorder data allows for corroboration of findings, although these potential biases should be noted.

Standardisation methods for comparison with the Australian population: To compare technology use estimates in the Transitioned ADF population with an Australian community sample, direct standardisation was applied to estimates within the 2012 Young and Well National Survey data. For comparability, only participants from both the Transitioned ADF and the Young and Well Study who were aged between 18 and 25 years were included. This limited the number of Transitioned ADF participants to 426, which resulted in a weighted sample of 2630. The Young and Well cohort were limited to an unweighted sample of 1123. The Young and Well data were standardised by sex (male or female), employment status (employed or not) and age category (18–21 or 22–25), and estimates were generated on the outcomes of interest.

These standardised rates are not the true rates in the Young and Well sample, but are hypothetical rates that would have been observed if this group had the same age, sex and employment distribution as the Transitioned ADF young adult population. These standardised rates take into account any differences in the age, sex and employment structure of the two populations. Thus, when comparing the two populations using standardised rates, any remaining differences between them cannot be attributed to confounding by these three demographic factors.

Significant differences were determined by calculating confidence intervals on the difference in proportions. If the confidence interval spanned zero, the difference in proportions was considered not significant.

Glossary: refer to the Glossary of terms for definitions of key terms.

3 Socio-demographic characteristics

In order to fully understand how Transitioned ADF members are functioning in their civilian lives it is important to consider their current socio-demographic profile, as well as the circumstances surrounding their transition. There are known risk factors for social disadvantage in the literature that can contribute to mental health issues (Australian Bureau of Statistics, 2010), including unemployment, incarceration, housing instability (including homelessness), and being in receipt of disability payments. Understanding the extent to which Transitioned ADF members are exposed to these factors can provide valuable insight into the overall mental, physical and social health of this population.

Overall, approximately 84% of the Transitioned ADF were either working or engaged in some purposeful activity (62.8% employed) with the most commonly reported areas of employment being government administration and Defence (16.8%), mining (9.9%), construction (8.8%) and transport and storage (8.6%). Just over 5.5% of the Transitioned ADF had retired.

Similar to the 2015 Regular ADF, the majority of the Transitioned ADF were aged 28–47 years (56.2%), were male (86.9%), were in a significant relationship (74.7%), were of lower rank (52.2%) and were Army (60.3%). Just over one third of Transitioned ADF had served 4–7.9 years in the Regular ADF (36.2%), followed by 23.2% who had served for 20+ years. Compared to the 2015 Regular ADF, Transitioned ADF were *more likely* to be: aged over 58 years, female, lower in rank, from the Army, classified as medically unfit, and to have under eight years of service with the ADF. In contrast, Transitioned ADF were *less likely* than 2015 Regular ADF to be in a relationship where they are not living with their partner.

Under half (43.3%) of the Transitioned ADF were Ex-Serving (discharged) at the time of survey completion and therefore no longer remained engaged with Defence in a Reservist role. A quarter of the Transitioned ADF had remained in an Active Reservist role (25.7%) and therefore continued to be engaged in service for a specified number of days per year; 30.1% were Inactive Reservists and therefore their contact with Defence would be variable and for some there would be no ongoing contact.

The most common type of discharge/resignation reported was ‘own request’ (53.7%), with more than 60% of these respondents voluntarily discharging or discharging because of the end of a fixed period of service. Just over 20% of the Transitioned ADF were estimated to have been medically discharged, with their employment terminated by the ADF on the grounds of being permanently or at least in the long term not fit to serve, or not fit for deployment to operational (war-like) service. The most common reasons for transition were ‘impact of service life on family’ (10.2%), ‘better employment prospects in civilian life’ (7.2%), ‘mental health problems’ (6.5%) and ‘physical health problems’ (4.3%).

In relation to the Transitioned ADF, potentially at greatest risk were a small subset (5.2%) who reported being unemployed at the time of the survey. In addition, just under half of Transitioned ADF members reported being unemployed for a period of three months or more after transitioning from Regular ADF service. There was also a very small proportion who reported having been arrested, convicted or incarcerated since transition (an estimated 5.1%), and approximately 3.4% who reported that they had not been living in stable housing in the two months prior to completing the survey.

One final group of particular interest, and who may be at significant risk because they have a known/diagnosed physical or mental health condition, was the 9.8% who were on some form of disability support pension, as well as those discharged from the ADF on medical grounds but have not yet engaged with DVA. While more than 43% of the Transitioned ADF reported currently accessing DVA-funded treatment, there is likely to be a proportion of those who had medically discharged who were not.

4 Definition of key terms used in this report

Transitioned ADF. Population of ADF members who transitioned from full-time ADF service between 2010 and 2014, including those who transitioned into the Active and Inactive Reserves and those who had discharged completely (Ex-Serving).

2015 Regular ADF. ADF members who were serving full-time in the ADF in 2015.

2012 Young and Well Cohort. An Australian community sample of males and females aged between 18 and 25 who participated in the 2012 Young and Well National Survey.

Probable mental disorder. Where probable rates of mental health disorder are presented, these are based on self-report epidemiological cut-offs.

Mental disorders. Defined according to the detailed diagnostic criteria within the World Health Organization International Classification of Diseases. This publication reports data for ICD-10 criteria.

Optimal epidemiological cut-off. The value that brings the number of false positives (mistaken identifications of a disorder) and false negatives (missed identifications of a disorder) closest together, thereby counterbalancing these sources of error most accurately. Therefore, this cut-off would give the closest estimate to the true prevalence of a 30-day ICD-10 disorder as measured by the Composite International Diagnostic Interview (CIDI) and should be used to monitor disorder trends.

Optimal screening cut-off. The value that maximises the sum of the sensitivity and specificity (the proportion of those with and without a disease who are correctly classified). This cut-off can be used to identify individuals who might need further care.

Posttraumatic stress disorder (PTSD). A stress reaction to an exceptionally threatening or traumatic event that would cause pervasive distress in almost anyone. Symptoms are categorised into three groups: re-experiencing memories or flashbacks, avoidance symptoms and either hyperarousal symptoms (increased arousal and sensitivity to cues) or inability to recall important parts of the experience.

Suicidal ideation. Serious thoughts about taking one's own life.

Suicidality. Suicidal ideation (serious thoughts about taking one's own life), suicide plans and attempts.

Subsyndromal disorder. Characterised by or exhibiting symptoms that are not severe enough for diagnosis as a clinically recognised syndrome.

5 Key findings

Demographic characteristics in the Transitioned ADF and 2015 Regular ADF

- More than half of Transitioned ADF members remained in the ADF as Reservists (55.8%). Of Transitioned ADF, 25.7% were Active Reservists.
- Just over one-fifth of the Transitioned ADF were estimated to have been medically discharged.
- The most commonly reported reasons for transition were 'impact of service life on family' (10.2%), 'better employment prospects in civilian life' (7.2%), 'mental health problems' (6.5%) and 'physical health problems' (4.3%).
- Approximately 84% of the Transitioned ADF were either working or engaged in some purposeful activity, with 62.8% being employed. Just over 5.5% of the Transitioned ADF had retired.
- More than 43% of Transitioned ADF members reported accessing DVA-funded treatment through either a DVA White Card (39.4%) or DVA Gold Card (4.2%).
- Just over 40% of the Transitioned ADF and 36% of the 2015 Regular ADF reported having a diploma or university qualification.
- There were no significant differences in housing stability between the Transitioned ADF and the 2015 Regular ADF, with more than 93% estimated to have been in stable housing in the previous two months.
- Twice as many members of the Transitioned ADF were classified as medically unfit compared to the 2015 Regular ADF.

Internet use and attitudes to using the internet in Transitioned ADF and 2015 Regular ADF

Frequency, duration and timing of internet use

- Internet use among Transitioned ADF and 2015 Regular ADF was high, with over 95% using the internet at least every day.
- Approximately half of the Transitioned ADF and 2015 Regular ADF reported using the internet 1–2 hours daily, while approximately a quarter used it 3–4 hours daily.
- Use of the internet after 11 pm was common in one third of the Transitioned ADF and one quarter of the 2015 Regular ADF.

Attitudes to using the internet

- One in four Transitioned ADF and 2015 Regular ADF reported that they talked about different things with people online than when face to face, and that they went online when going through a difficult time.
- One in five Transitioned ADF and 2015 Regular ADF reported that going online when going through a difficult time made them feel better.

Probable 30-day disorder and duration and timing of internet use

- Transitioned ADF and 2015 Regular ADF with a probable disorder spent more hours on the internet than those without a probable disorder.

- Among the Transitioned ADF, those with a probable disorder were significantly more likely to report using the internet after 11 pm compared to those without a probable disorder (45.1% vs 28.4%).

Probable 30-day disorder and attitudes to using the internet

- For the Transitioned ADF and Regular ADF, those with a probable disorder were significantly more likely than those without a probable disorder to report that it was easier to be themselves online, and that they talked about private things when online.
- Transitioned ADF with a probable disorder were significantly more likely than those without a probable disorder to report that they talked about different things with people online, they went online more often when going through a difficult time, and when they are going through a difficult time and they went online it made them feel better.

Use of new and emerging technology in Transitioned ADF and 2015 Regular ADF

Use of apps and wearable devices

- Half of the Transitioned ADF and 2015 Regular ADF reported using new and emerging technologies. Of these, over 80% used apps, while almost a third used wearable devices.
- Of those who did not use new and emerging technologies, about three quarters did not use them because they had 'no need or interest', it was 'too expensive' or it was a 'privacy issue'.
- Of the Transitioned ADF and 2015 Regular ADF who used apps and wearable devices, just under half reported using them to improve their health and wellbeing.
- A quarter of the Transitioned ADF and 2015 Regular ADF who used apps and wearable devices for health and wellbeing used them to 'improve sleep'.

Probable 30-day disorder and use of new and emerging technology

Among those who reported using new or emerging technologies for the purpose of improving health and wellbeing:

- 20.9% of Transitioned ADF and 7.8% of 2015 Regular ADF met the criteria for a probable disorder.
- Transitioned ADF with a probable disorder were significantly more likely to use new or emerging technologies to improve their mood and less likely to use them to improve their fitness than those without a probable disorder.

Among those who reported using new or emerging technologies for reasons other than to improve health and wellbeing:

- 25.2% of the Transitioned ADF and 14.1% of the 2015 Regular ADF met the criteria for a probable disorder.
- Transitioned ADF with a probable disorder were significantly less likely to use them for fun and recreation compared to Transitioned ADF with no probable disorder.

Use of the internet to seek mental health information or help (for self or other)

Use of the internet to seek help or information for, or to manage, mental health issues

- One in four Transitioned ADF and one in six 2015 Regular ADF used the internet to seek help or information for, or to manage, mental health issues.
- A higher proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder reported using the internet to seek help or information or to manage mental health issues than those without a probable disorder.
- Among those with a probable 30-day disorder, Transitioned ADF were more likely than 2015 Regular ADF to report using the internet to seek information on mental health issues.

Suitability, usefulness and level of satisfaction with using the internet to seek help or information, or to manage mental health

- The majority of Transitioned ADF and 2015 Regular ADF who used the internet to seek information about mental health reported that they received the kind of information they required.
- The majority of Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information or to manage mental health reported that the internet helped them either a little or a lot.
- Almost 18% of Transitioned ADF and 13.2% of 2015 Regular ADF reported being dissatisfied with the information they received.

Use of the internet for one's own mental health

Frequency and timing of seeking help or information about their *own* mental health

- Among those who reported using the internet to seek help or information or manage mental health issues, almost 30% of the Transitioned ADF (29.1%) and 19.8% of the 2015 Regular ADF used the internet to seek help or access information about their own mental health at least once per month.
- While frequent use (at least once a month) was more common among Transitioned ADF with a probable disorder than those without (42.5% and 18.4%), the majority of the Transitioned ADF and 2015 Regular ADF used the internet infrequently (less than once per month) for their own mental health (52.3% and 68.8%), if at all (3.7% and 2.1%).

Talking online to peers, family or friends about one's *own* mental health

- Almost one in three Transitioned ADF and 2015 Regular ADF who used the internet to seek help, information or manage mental health issues reported talking online to a peer, family member or friend about their *own* mental health (33.4% and 30.6% respectively), with the majority finding this helpful (63.3% and 75.2% respectively).
- Approximately one third of the Transitioned ADF and 2015 Regular ADF with a probable disorder who used the internet to manage their mental health reported talking online with a peer, family member or friend about their mental health (37.2% and 37.0% respectively).
- In general, younger Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information or manage mental health issues were most likely to talk online to a peer, family member or friend, with nearly half of those aged 18–27 endorsing this.

Talking online to other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) about one's *own* mental health

- Just under 20% (17.4%) of the Transitioned ADF and just over 5% of the 2015 Regular ADF (6.2%) with a probable disorder and who used the internet to manage mental health reported talking to others on the internet about their own mental health.
- Among the Transitioned ADF, a greater proportion of those with a probable disorder than those without reported talking to others on the internet about their own mental health (17.4% vs 8.4%).
- Among the 2015 Regular ADF, there was little difference in the proportion of those with a probable disorder compared to those without a probable disorder who reported talking to others on the internet about their own mental health (6.2% vs 8.1%).

Talking online to a psychologist or other mental health professional about one's *own* mental health

- Almost one in 10 Transitioned ADF and 2015 Regular ADF who used the internet to manage mental health reported talking online to a psychologist or other mental health professional about their mental health (7.9% and 9.5%), with the majority finding this helpful (65.3% and 59.7%).

- Among those who used the internet to manage mental health who had a probable 30-day disorder, an estimated 7.2% of Transitioned ADF and an estimated 3.7% of 2015 Regular ADF reported using the internet to talk to a psychologist or other health professional about their own mental health.
- Transitioned ADF in the 18–27 age band (9.8%) and 2015 Regular ADF aged 28–37 (17.1%), followed by those aged 58+ (13.4%), were most likely to talk online to a psychologist or other mental health professional about their own mental health.

Barriers to talking online about one's own mental health in Transitioned ADF and 2015 Regular ADF

Barriers to talking online about one's own mental health

- Of the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information about or manage mental health issues but reported they did NOT talk to someone online about their own mental health, the main barriers were a preference for face-to-face contact (59.0% and 70.2% respectively), concerns about lack of privacy and confidentiality (50.4% and 63.3% respectively) and concerns about lack of website security (41.2% and 45.7%). Concerns about the validity of information online was also a factor (36.5% and 35.8%).
- Transitioned ADF were significantly less likely than 2015 Regular ADF to report concerns about a lack of privacy/confidentiality as a barrier to talking about their mental health issues online.
- Transitioned ADF were significantly more likely than 2015 Regular ADF to report unaffordable technology as a barrier preventing them from talking about their mental health issues online.

Mental health status and the use of mental health websites by Transitioned ADF and 2015 Regular ADF

Use of the internet to seek help or information for or manage mental health issues

- Overall, about 40% of the Transitioned ADF and 20–40% of the 2015 Regular ADF with a 30-day probable disorder (including PTSD, anxiety/depression and alcohol use) and/or 12-month suicidal ideation and behaviour used the internet to seek help or information for or manage mental health issues.
- Of those with a subsyndromal disorder, approximately 30% of the Transitioned ADF and 16–30% of the 2015 Regular ADF used the internet to seek help or information for or manage mental health issues.
- Internet use to seek help or information or manage mental health issues was generally higher in those with more mental health symptoms.
- There was no association between self-reported stigma and perceived barriers to care and use of the internet to seek help or information or to manage mental health issues among Transitioned ADF and 2015 Regular ADF members with probable PTSD, alcohol disorder or 12-month suicidal ideation and behaviour.
- Among those with probable anxiety/depression or depressive episodes, Transitioned ADF reporting at least one mental health stigma or at least one perceived barrier were more likely to use the internet to seek help or information or manage mental health issues than those with no stigma or barriers.
- Among those with probable anxiety/depression or probable generalised anxiety disorder and no barriers, Transitioned ADF members (30.5%) were more likely to use the internet to seek help or information for or manage mental health issues than the 2015 Regular ADF (8.6%).

Technology use and psychological distress in Transitioned ADF members aged 18–25: Comparison with young adults aged 18–25 in the Australian community

Frequency and duration of internet use

- A significantly greater proportion of Transitioned ADF young adults reported using the internet every day or almost every day (98.5%) compared to the Young and Well cohort (91.2%).
- Transitioned ADF young adults (27.2%) were significantly more likely to report that they used the internet for 5 to 9 hours on a week day compared to the Young and Well cohort (15.9%).

Internet use after 11 pm

- Transitioned ADF young adults (46.8%) were significantly less likely to use the internet after 11 pm compared to the Young and Well Cohort (66.0%).

Use of internet for mental health

- The Transitioned ADF young adults (27.4%) were significantly less likely to report using the internet to seek help for or manage mental health issues than the Young and Well Cohort (41.5%).
- Of those who indicated they had used the internet for mental health issues, the Transitioned ADF young adults were:
  - significantly less likely to find it helpful for getting the kind of information they needed in relation to mental health compared to the Young and Well cohort (very helpful: 7.7% vs 41.2%; not at all helpful: 15.4% vs 1.2%)
  - significantly less likely to report it helped them deal more effectively with mental health problems compared to the Young and Well cohort (helped a little 30.9% vs 53.9%; helped a lot: 6.4% vs 26.2%)
  - significantly more likely to endorse being 'somewhat dissatisfied' (20.5% vs 4.2%) and significantly less likely to endorse being 'very satisfied' (7.1% vs 20.7%) with the information they received on the internet in relation to mental health compared to the Young and Well cohort.

Psychological distress and internet use

- Levels of psychological distress were significantly higher in the Transitioned ADF young adults than in young adults in the Australian community (18.6% vs 5.4%).
- Of those with moderate/high levels of psychological distress:
  - the Transitioned ADF young adults reported using the internet for a longer duration (5–10+ hours) (38.7%) compared to the Young and Well cohort (20.1%)
  - the Transitioned ADF young adults (50.1%) were significantly less likely to use the internet after 11 pm compared to the Young and Well cohort (70.7%).

6 Internet use and attitudes to using the internet in Transitioned and 2015 Regular ADF

The following chapter examines internet use and attitudes towards using the internet in the Transitioned ADF and 2015 Regular ADF and among those with and without a probable disorder. The presence of a probable 30-day disorder was determined based on scores on the K10 and PCL-C. For the purpose of this chapter, participants were deemed to have a probable 30-day disorder if they scored above the optimal epidemiological cut-off (25 on the K10, 53 on the PCL) on either measure.

6.1 Internet use

The frequency, duration and timing of internet use as well as the search strategy used by Transitioned ADF and 2015 Regular ADF are presented in Table 1. Consistent with the overall population, use of the internet was very high, with over 95% of the Transitioned ADF and the 2015 Regular ADF using the internet every day or almost every day, regardless of probable disorder status.

Table 1 Internet use patterns (frequency, duration, timing of internet use and search strategies) among Transitioned ADF and 2015 Regular ADF

	Transitioned ADF n = 24,932			2015 Regular ADF n = 52,500		
Frequency of internet use*	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Every day or almost every day	3372	23,788	95.4 (94.5, 96.2)	7071	50,337	95.9 (93.5, 97.4)
Once or twice a week	146	993	4.0 (3.2, 4.9)	227	1871	3.6 (2.1, 6.0)
Once or twice a month	9	52	0.2 (0.1, 0.4)	23	74	0.1 (0.1, 0.2)
Less than once a month	13	68	0.3 (0.2, 0.5)	16	187	0.4 (0.1, 1.3)
Search strategy†						
Use a search engine (e.g. Google, Yahoo)	3161	22,287	89.4 (88.0, 90.6)	6484	46,271	88.1 (85.5, 90.3)
Deliberately accessing a specific website	346	2422	9.7 (8.5, 11.1)	812	5665	10.8 (8.7, 13.3)
Follow a link you accidentally came across	9	45	0.2 (0.1, 0.4)	7	32	0.1 (0.0, 0.1)
Some other way:	13	101	0.4 (0.2, 0.8)	10	39	0.1 (0.0, 0.2)
Duration‡						
<1 Hour	338	2275	9.1 (8.0, 10.4)	907	6268	11.9 (9.6, 14.8)
1–2 Hours	1673	11,210	45.0 (42.9, 47.0)	3979	24,990	47.6 (43.6, 51.7)
3–4 Hours	824	5742	23.0 (21.3, 24.8)	1492	11,641	22.2 (18.8, 25.9)
5–6 Hours	351	2664	10.7 (9.4, 12.1)	548	4945	9.4 (7.0, 12.6)
7–8 Hours	143	1224	4.9 (4.0, 6.0)	191	2091	4.0 (2.7, 5.9)
9–10 Hours	62	580	2.3 (1.7, 3.2)	78	383	0.7 (0.6, 1.0)
> 10 Hours	45	373	1.5 (1.1, 2.1)	47	308	0.6 (0.3, 1.1)
Internet use after 11 pm#						
No, do not use internet after 11 pm	2510	16,542	66.3 (64.3, 68.3)	5721	38,300	73.0 (68.9, 76.7)
Yes, use internet after 11 pm	1016	8260	33.1 (31.1, 35.2)	1587	13,882	26.4 (22.7, 30.5)

*Based on weighted counts, 32 (0.1%) Transitioned ADF and 31 (0.1%) 2015 Regular ADF had a missing value for this question.
†Based on weighted counts, 76 (0.3%) Transitioned ADF and 492 (0.9%) 2015 Regular ADF had a missing value for this question.
‡Based on weighted counts, 864 (3.5%) Transitioned ADF and 1874 (3.6%) 2015 Regular ADF had a missing value for this question.
#Based on weighted counts, 130 (0.5%) Transitioned ADF and 318 (0.6%) 2015 Regular ADF had a missing value for this question.
Notes
Denominator: Entire cohort.
However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

In relation to the hours spent on the internet on a typical work day, the majority of the Transitioned ADF and 2015 Regular ADF spent 1–2 hours per day using the internet (45.0% vs 47.6%). In general, those with a probable disorder spent more hours on the internet than those without. Just under 50% of the Transitioned

ADF (49.5%) and just over 50% of the 2015 Regular ADF (52.2%) with a probable disorder reported that they spent three or more hours on the internet each day compared to 39.7% of the Transitioned ADF and 34.2% of the 2015 Regular ADF with no disorder.

The majority of the Transitioned ADF (89.4%) and 2015 Regular ADF (88.1%) reported using a search engine to search for information on the internet and about 10% (9.7% vs 10.8%) deliberately accessed a specific website.

The Transitioned ADF were significantly more likely to use the internet after 11 pm compared to the 2015 Regular ADF (33.1% vs 26.4%; OR 1.5, 95% CI 1.1, 1.9), which is expected given the nature of active military service. That said, using the internet after 11 pm was common, with one third of the Transitioned ADF and one quarter of the 2015 Regular ADF doing so. Among the Transitioned ADF, a significantly larger proportion of those with than without a probable disorder reported internet use after 11 pm (45.1% vs 28.4%; OR 2.0, 95% CI 1.6, 2.5). No significant differences were observed for the 2015 Regular ADF with and without a probable disorder (32.7% vs 25.3%).

6.2 Attitudes toward using the internet in Transitioned ADF and 2015 Regular ADF

The Young and Well National Survey (*Game on* report) (Burns et al., 2013) found that the internet was a place where young people found it easier to 'be themselves' and 'talk about different things'. A particular focus for policy makers and practitioners has been on the potential of the internet as a 'softer, non-stigmatising' entry point to services, allowing people to seek information in their own time and in an environment where they feel safe. In this study, about one in four Transitioned ADF and 2015 Regular ADF reported that they felt it easier to be themselves online, could talk about different things online rather than face to face and would go online if going through a difficult time (Table 2). Similarly, a quarter of the Transitioned ADF and 2015 Regular ADF indicated that when they were going through a difficult time, going online made them feel better. Just over 10% of the Transitioned ADF and 2015 Regular ADF (13.5% and 12.0% respectively) indicated they talked about private things with people online that they did not share with people face to face.

Transitioned ADF were significantly more likely to report that they found it easier to be themselves when they were online than when they were with people face to face compared to the 2015 Regular ADF (26.2% vs 19.9%; OR 1.4, 95% CI 1.1, 1.9).

For both Transitioned ADF and 2015 Regular ADF, participants with a probable disorder were significantly more likely than those without a probable disorder to report that it was easier to be themselves online (Transitioned ADF – 42.2% vs 19.9%; OR 2.8, 95% CI 2.3, 3.5) (2015 Regular ADF – 33.4% vs 17.5%; OR 2.4, 95% CI 1.3, 4.2), and that they talked about private things when they were online (Transitioned ADF – 21.0% vs 10.6%; OR 2.2, 95% CI 1.6, 2.9) (2015 Regular ADF – 23.0% vs 10.1%; OR 2.3, 95% CI 1.1, 5.0). Transitioned ADF with a probable disorder were also significantly more likely than those without a probable disorder to report that they talked about different things with people online (34.9% vs 20.4%; OR 2.1, 95% CI 1.7, 2.6), they went online more often when they were going through a difficult time (34.9% vs 20.4%; OR 2.1, 95% CI 1.7, 2.6), and that going online when they were going through a difficult time made them feel better (34.2% vs 19.1%; OR 2.2, 95% CI 1.7, 2.7).

Table 2 Attitudes toward using the internet in Transitioned ADF and 2015 Regular ADF

I find it easier to be myself when online than when I am with people face to face*	Transitioned ADF n = 24,932			2015 Regular ADF n = 52,500		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
N/A	582	3515	14.1 (12.8, 15.5)	1133	8683	16.5 (13.5, 20.1)
Not true	2127	14703	59.0 (56.9, 61.0)	4976	32488	61.9 (57.7, 65.9)
True (A bit true/very true)	809	6544	26.2 (24.4, 28.2)	1194	10432	19.9 (16.5, 23.7)
I talk about different things with people when online than I do when face to face†						
N/A	761	4489	18.0 (16.6, 19.5)	1460	9840	18.7 (15.7, 22.2)
Not true	2030	14166	56.8 (54.7, 58.9)	4594	29008	55.3 (51.2, 59.3)
True (A bit true/very true)	727	6106	24.5 (22.6, 26.4)	1242	12721	24.2 (20.5, 28.4)
When I am online, I talk about private things that I do not share with people face to face*						
N/A	744	4289	17.2 (15.8, 18.7)	1453	9787	18.6 (15.6, 22.1)
Not true	2365	17066	68.4 (66.5, 70.3)	5250	35365	67.4 (63.2, 71.3)
True (A bit true/very true)	400	3368	13.5 (12.1, 15.1)	587	6308	12.0 (9.2, 15.6)
I go online much more on the weekends than I do on a regular work day*						
N/A	405	2435	9.8 (8.7, 11.0)	595	5147	9.8 (7.2, 13.2)
Not true	2105	14572	58.4 (56.4, 60.5)	3290	20713	39.5 (35.8, 43.2)
True (A bit true/very true)	1005	7698	30.9 (28.9, 32.9)	3414	25726	49.0 (44.8, 53.2)
When I am going through a difficult time, I go online more often*						
N/A	410	2359	9.5 (8.4, 10.6)	780	6593	12.6 (9.8, 16.0)
Not true	2258	15453	62.0 (59.9, 64.0)	5121	32158	61.3 (57.2, 65.2)
True (A bit true/very true)	843	6900	27.7 (25.8, 29.7)	1392	12782	24.3 (20.6, 28.5)
When I am going through a difficult time, going online makes me feel better*						
N/A	448	2623	10.5 (9.4, 11.7)	861	6864	13.1 (10.3, 16.5)
Not true	2336	16264	65.2 (63.2, 67.2)	5222	32980	62.8 (58.6, 66.9)
True (A bit true/very true)	726	5822	23.4 (21.6, 25.2)	1206	11663	22.2 (18.6, 26.3)

*Based on weighted counts, 170 (0.7%) Transitioned ADF and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
†Based on weighted counts, 171 (0.7%) Transitioned ADF and 931 (1.8%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Notes
Denominator: Entire cohort.
95%CI = 95% confidence interval.

7 Use of new and emerging technology in Transitioned and 2015 Regular ADF

7.1 Use of apps and wearable devices

This chapter describes the use of new and emerging technologies by the Transitioned ADF and the 2015 Regular ADF and by those with and without a probable disorder. For the specific survey items used in this chapter, please consult the full *Technology Use and Wellbeing Report*.

Approximately half of the Transitioned ADF (48.7%) and 2015 Regular ADF (50.4%) reported that they 'currently used' new and emerging technologies in the form of apps and wearable devices (Table 3). Of the 50% of respondents who used new and emerging technology, more than 80% of Transitioned ADF (83.0%) and 2015 Regular ADF (85.4%) used software applications (apps), and almost a third (28.7% vs 33.0%) reported using wearable technology (e.g. a commercially available wrist band). Nearly 10% of Transitioned ADF (6.9%) and just over 10% of the 2015 Regular ADF (11.7%) wore a Smartwatch. The Transitioned ADF were significantly less likely to use a Smartwatch than 2015 Regular ADF (OR 0.5, 95% CI 0.3, 0.9).

Table 3 Types of technologies used by Transitioned ADF and 2015 Regular ADF who reported that they used new and emerging technologies

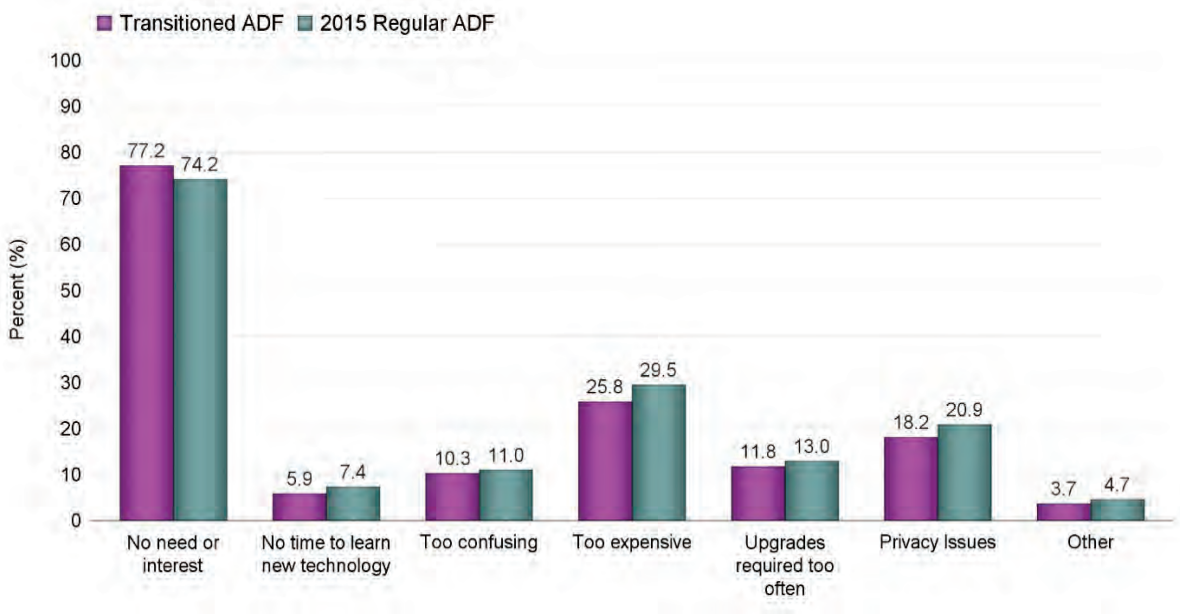
	Transitioned ADF n = 12,145			2015 Regular ADF n = 26,480		
Current types used	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Smartwatch	133	837	6.9 (5.6, 8.4)	314	3092	11.7 (8.0, 16.8)
Software applications or 'apps'	1456	10081	83.0 (80.6, 85.2)	3337	22618	85.4 (81.7, 88.5)
Wearable technology (e.g. wrist-based tracker)	538	3485	28.7 (26.2, 31.4)	1413	8730	33.0 (28.2, 38.1)
Other (please specify):	96	717	5.9 (4.6, 7.6)	179	1159	4.4 (2.9, 6.6)

Notes
Denominator: Those who use emerging technologies.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.

7.2 Barriers to using new and emerging technologies

Of the Transitioned ADF and 2015 Regular ADF who 'did not use' new and emerging technologies, the majority reported that they 'did not have a need or interest' (77.2% vs 74.2%) (Figure 2). Other barriers included that it was too expensive (25.8% vs 29.5%) or that privacy was an issue (18.2% vs 20.9%).

Figure 2 **Barriers to using new and emerging technologies in Transitioned ADF and 2015 Regular ADF among those who reported that they did not use new and emerging technologies**



7.3 Reasons for using new or emerging technologies

7.3.1 Use of new and emerging technologies to improve health and wellbeing

Approximately 50% of the Transitioned ADF (46.7%, n = 5668) and 2015 Regular ADF (49.6%, n = 13,131) who used new and emerging technologies reported using them to improve their health and wellbeing. This equates to approximately 25% of the entire Transitioned ADF and 2015 Regular ADF.

Among both of these groups, improving fitness (80.9% vs 88.4%), tracking progress (58.8% vs 56.1%) and staying organised (36.2% vs 37.4%) were the three most common reasons for using apps and wearable devices to improve health and wellbeing (Table 4). Furthermore, approximately a quarter of the Transitioned ADF and 2015 Regular ADF used them to improve their sleep (25.3% vs 24.9%). Transitioned ADF were significantly more likely to use emerging technologies to maintain their diet or track their food intake (OR 1.5, 95% CI 1.2, 2.0) or to keep motivated (OR 1.4, 95% CI 1.1, 1.9) than the 2015 Regular ADF.

Table 4 **The ways in which emerging technologies are used to improve health and wellbeing among Transitioned ADF and 2015 Regular ADF**

How emerging technologies are used to improve health and wellbeing	Transitioned ADF n = 5668			2015 Regular ADF n = 13,131		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Improve my fitness	694	4587	80.9 (77.3, 84.1)	1942	11,614	88.4 (84.0, 91.8)
Improve my mood	122	892	15.7 (12.7, 19.3)	225	2146	16.3 (11.0, 23.6)
Improve my sleep	216	1431	25.3 (21.8, 29.1)	529	3274	24.9 (19.1, 31.8)
Keep me organised	311	2053	36.2 (32.2, 40.4)	754	4912	37.4 (30.5, 44.9)
Maintain my diet/track food intake	223	1496	26.4 (22.8, 30.3)	633	2767	21.1 (17.9, 24.7)
To keep me motivated	259	1796	31.7 (27.8, 35.8)	697	3510	26.7 (22.5, 31.4)
Track my progress	492	3331	58.8 (54.5, 62.9)	1388	7362	56.1 (48.7, 63.2)
Other	23	134	2.4 (1.5, 3.8)	48	300	2.3 (1.0, 5.2)

Notes
Denominator: Transitioned ADF and 2015 Regular ADF who use new or emerging technologies to improve their health and wellbeing.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.

Just over 20% (20.9%) of the Transitioned ADF and 7.8% of the 2015 Regular ADF who reported using new and emerging technologies to improve their health and wellbeing met the criteria for a probable disorder. Further, Transitioned ADF with a probable disorder were significantly more likely to use new or emerging technologies to improve their mood (23.1% vs 13.7%; OR 1.9, 95% CI 1.1, 3.3) and less likely to use them to improve their fitness (68.6% vs 84.0%; OR 0.4, 95% CI 0.3, 0.7) compared to Transitioned ADF with no probable disorder.

7.3.2 Use of new and emerging technologies for reasons other than to improve health and wellbeing

Similarly, just under 50% of the Transitioned ADF (47.3%, n = 5749) and 2015 Regular ADF (45.0%, n = 11925) who used new and emerging technologies used them for reasons *other* than to improve their health and wellbeing. This also equates to just under 25% of the entire Transitioned ADF and 2015 Regular ADF.

Among the approximately 50% of Transitioned ADF and 2015 Regular ADF who *do not use* emerging technologies to improve health and wellbeing, the three most commonly reported reasons for using emerging technologies were for fun or recreation (73.4% vs 84.2%), study or work (51.7% vs 38.1%) and to enhance social interaction (29.5% vs 30.4%) (Table 5). Transitioned ADF were significantly more likely to use them for study or work (OR 1.9, 95% CI 1.1, 3.1) than the 2015 Regular ADF.

Approximately a quarter (25.2%) of the Transitioned ADF and 14.1% of 2015 Regular ADF who reported using new and emerging technologies to improve their health and wellbeing met the criteria for a probable disorder. Further, Transitioned ADF with a probable disorder were significantly less likely to use them for fun and recreation (65.1% vs 75.2%; OR 0.5, 95% CI 0.3, 0.8) compared to Transitioned ADF with no probable disorder and less likely to use them to improve their fitness (68.6% vs 84.0%; OR 0.4, 95% CI 0.3, 0.7) compared to Transitioned ADF with no probable disorder. In contrast, 2015 Regular ADF with a probable disorder were significantly less likely to use emerging technologies to make videos or take photos (9.1% vs 22.4%; OR 0.3, 95% CI 0.1, 0.7) compared to 2015 Regular ADF with no probable disorder.

Table 5 Other reasons for using new and emerging technologies among Transitioned ADF and 2015 Regular ADF, among those who currently used emerging technologies but not for health and wellbeing

Reasons for using new and emerging technologies if not to improve health and wellbeing	Transitioned ADF n = 5749			2015 Regular ADF n = 11,925		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Enhance social interaction	223	1694	29.5 (25.5, 33.7)	504	3623	30.4 (22.8, 39.3)
Fun or recreation	579	4221	73.4 (69.5, 77.0)	1371	10041	84.2 (77.6, 89.1)
Study or work	396	2974	51.7 (47.3, 56.1)	716	4538	38.1 (30.4, 46.3)
To make videos or take photos	147	1107	19.3 (16.0, 23.1)	340	2472	20.7 (14.2, 29.3)
Other (please specify):	71	517	9.0 (6.7, 12.0)	89	791	6.6 (2.9, 14.5)

Notes
Denominator: Transitioned ADF and 2015 Regular ADF who do not use new or emerging technologies to improve their health and wellbeing.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.

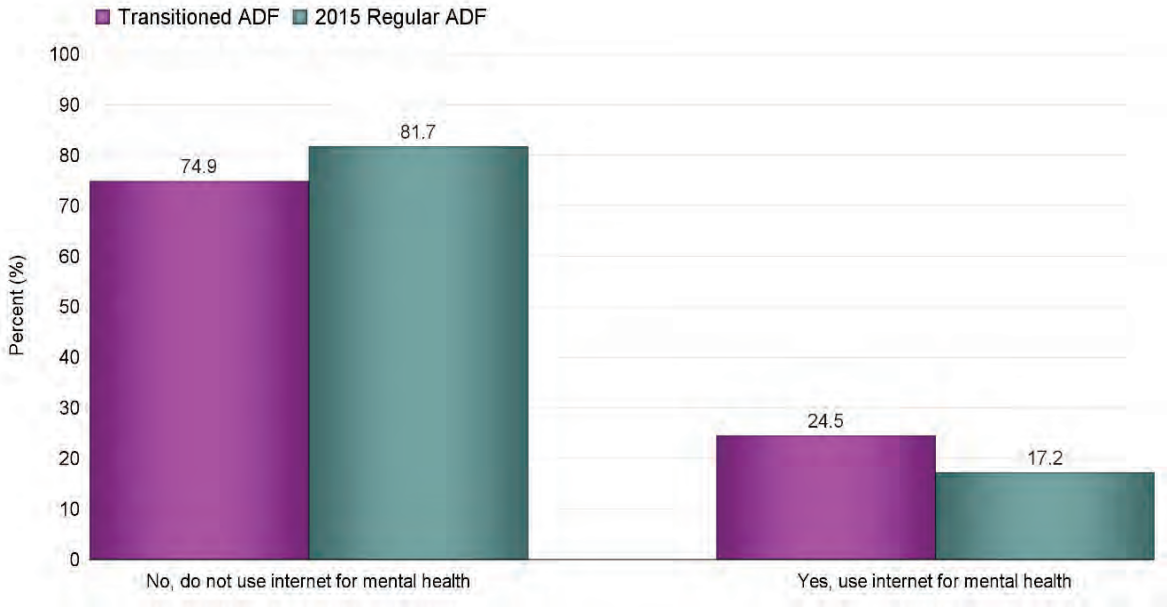
8 Use of the internet to seek mental health information or help (for self or other)

This chapter examines use of the internet to seek help or information for or to manage mental health issues more broadly, not necessarily for participants' own mental health, among the Transitioned ADF and 2015 Regular ADF. For those who indicated that they did use the internet to seek mental health information or help, a series of further questions about their experiences with using the internet for this purpose was asked. Results were stratified by probable disorder, age and sex. For specific questions, refer to the full *Technology Use and Wellbeing Report*.

8.1 Use of the internet to seek help or information for, or to manage, mental health issues

Figure 3 shows the estimated proportions of Transitioned ADF and 2015 Regular ADF who used the internet 'to seek help or information for, or manage, mental health issues'. One in four Transitioned ADF and one in six 2015 Regular ADF used the internet to seek help or information for, or to manage, mental health issues. Transitioned ADF were significantly more likely to use the internet to seek help or information for, or manage, mental health issues than 2015 Regular ADF (24.5% vs 17.2%; OR 1.6, 95% CI 1.2, 2.1). Most of the Transitioned ADF and the 2015 Regular ADF did not use the internet for seeking help or information or to manage mental health issues (74.9% vs 81.7%), regardless of whether or not they had a probable disorder.

Figure 3 Use of the internet for seeking help or information about or for managing mental health issues among Transitioned ADF and 2015 Regular ADF



A higher proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder reported using the internet to seek help or information or to manage mental health issues than those without a probable disorder (Transitioned ADF: 38.3% vs 19.1%; 2015 Regular ADF: 22.0% vs 16.4%). Among those *with* a probable disorder, Transitioned ADF (38.3%) were more likely than 2015 Regular ADF (22.0%) to report using the internet to seek information on mental health issues.

Overall, among both the Transitioned ADF and 2015 Regular ADF, males were less likely to report using the internet to seek help or information or to manage mental health issues compared to females (Transitioned ADF: 23.0% vs 34.5%; 2015 Regular ADF: 16.0% vs 29.0%), with the younger age groups (particularly young females aged 18–37 at 36% and young males aged 18–37 at 31%) being most likely to use it for this purpose.

8.2 Suitability and usefulness of and level of satisfaction with using the internet to seek help or information about or to manage mental health

Table 6 presents survey results on suitability and effectiveness of and satisfaction with information received on the internet about mental health among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information about or manage mental health issues.

The majority of Transitioned ADF and 2015 Regular ADF who used the internet to seek information about mental health reported that they received the kind of information they required, with most Transitioned ADF and 2015 Regular ADF participants indicating that they 'somewhat' or 'very much' received the kind of information they needed in relation to mental health (88.8% vs 90.4%) and only 9.6% of Transitioned ADF and 8.1% of 2015 Regular ADF responding 'not at all'.

Overall, the majority of Transitioned ADF and 2015 Regular ADF were satisfied (78.8% and 84.4%) with the information they received, reporting that it had helped a little or a lot (52.3% vs 62.4%). Eighteen per cent of Transitioned ADF and 13.2% of 2015 Regular ADF reported being dissatisfied with the information they received. Only a very small proportion reported that the internet 'made it worse' for them to deal effectively with mental health problems (1.6% vs 0.9%).

Table 6 Suitability and effectiveness of and satisfaction with information received on the internet about mental health among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues

	Transitioned ADF n = 6116			2015 Regular ADF n = 9042		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Suitability of information received*						
Not at all	69	585	9.6 (7.2, 12.6)	92	729	8.1 (3.4, 17.9)
Somewhat/Very much	774	5429	88.8 (85.6, 91.3)	1315	8170	90.4 (81.2, 95.3)
Effectiveness of the internet†						
Made it worse	15	99	1.6 (0.9, 3.0)	18	82	0.9 (0.5, 1.7)
Helped	481	3197	52.3 (48.0, 56.5)	885	5644	62.4 (52.8, 71.1)
Neither	343	2669	43.6 (39.4, 47.9)	505	3173	35.1 (26.5, 44.8)
Satisfaction with information received‡						
Very dissatisfied	11	81	1.3 (0.7, 2.6)	12	359	4.0 (0.7, 19.8)
Somewhat dissatisfied	126	1016	16.6 (13.6, 20.1)	149	831	9.2 (5.8, 14.2)
Somewhat satisfied	642	4495	73.5 (69.6, 77.1)	1121	7231	80.0 (71.4, 86.4)
Very satisfied	53	324	5.3 (3.9, 7.2)	106	404	4.5 (3.4, 5.9)
Collapsed grouping – satisfaction						
Dissatisfied	137	1097	17.9 (14.8, 21.5)	161	1190	13.2 (7.3, 22.6)
Satisfied	695	4820	78.8 (75.0, 82.2)	1227	7635	84.4 (75.4, 90.5)

*Based on weighted counts, 102 (1.7%) Transitioned ADF, and 144 (1.6%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
†Based on weighted counts, 151 (2.5%) Transitioned ADF, and 143 (0.1%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
‡Based on weighted counts, 200 (3.3%) Transitioned ADF, and 218 (2.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Notes
Denominator: Those who use the internet to seek help or information for, or manage, mental health issues.
95%CI = 95% confidence interval.

9 Use of the internet for one's own mental health

This chapter explores the use of the internet specifically for one's *own* mental health among those who reported using the internet to seek help or assistance for mental health more broadly. For details of the specific questions used, refer to the full *Technology Use and Wellbeing Report*.

The findings reported in this chapter are for the proportion of those in the Transitioned (n = 6116) and 2015 Regular ADF (n = 9042) who reported using the internet to seek help or information for, or to manage, mental health issues.

9.1 Frequency and timing of seeking information about one's own mental health on the internet

Table 7 presents estimated frequency and timing of internet use to seek help or access information about one's *own* mental health among Transitioned ADF and 2015 Regular ADF.

Most Transitioned ADF and 2015 Regular ADF reported using the internet to seek help or access information for their *own* mental health less than monthly (62.8% and 67.4% respectively), with only a very small proportion doing so every day or almost every day (1.7% and 1.0% respectively). Almost 30% of the Transitioned ADF (29.1%) and 19.8% of the 2015 Regular ADF used the internet to seek help or access information about their own mental health at least once per month.

Table 7 Estimated frequency and timing of internet use to seek help or access information about one's *own* mental health among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

	Transitioned ADF n = 6116			2015 Regular ADF n = 9042		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Frequency of use						
At least once per month	259	1778	29.1 (25.4, 33.0)	298	1788	19.8 (12.5, 29.8)
Less than monthly	547	3841	62.8 (58.6, 66.8)	1005	6095	67.4 (57.3, 76.1)
Never	41	399	6.5 (4.5, 9.4)	118	1120	12.4 (6.8, 21.5)
Timing of use						
Between 8 pm and 12 midnight (late at night)	346	2484	40.6 (36.5, 44.9)	635	3868	42.8 (33.8, 52.2)
Between 9 am and 8 pm	403	2840	46.4 (42.2, 50.7)	701	4744	52.5 (43.0, 61.7)
Between 8 pm and 9 am	411	2916	47.7 (43.4, 51.9)	674	4012	44.4 (35.3, 53.8)

Notes
Denominator: Those who used the internet to manage mental health.
Based on weighted counts, 97 (1.6%) Transitioned ADF and 39 (0.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Based on weighted counts, 360 (5.9%) Transitioned ADF and 266 (3.2%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

9.1.1 Frequency by probable disorder and key demographic factors

While frequent use (at least once a month) was more common among Transitioned ADF with a probable disorder than those without (42.5% vs 18.4%), the majority of the Transitioned ADF and 2015 Regular ADF used the internet infrequently (less than once per month) for their own mental health (52.3% vs 68.8%), if at all (3.7% vs 2.1%).

Among the Transitioned ADF and the 2015 Regular ADF, the frequency with which respondents reported using the internet to seek mental health information was reasonably evenly distributed by sex and age. However, among the Transitioned ADF, a higher proportion of males aged 18–37 reported never using the internet for their own mental health compared to males aged 38 and older (10.0% vs 2.4%).

9.2 Talking online to peers, family or friends, and other people e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) about one's own mental health

Table 8 presents the proportion of participants talking about one's own mental health on the internet among Transitioned ADF and 2015 Regular ADF.

Approximately one third of Transitioned ADF and 2015 Regular ADF reported talking online to a peer, family member or friend about their own mental health (33.4% and 30.6% respectively). Among these, the majority reported it to be helpful (63.3% and 75.2%).

Only a small proportion of the Transitioned ADF and 2015 Regular ADF reported talking online to other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) about their own mental health (12.4% and 7.8% respectively). Transitioned ADF were significantly more likely to talk online to other people about their own mental health compared to 2015 Regular ADF (33.4% vs 30.6%; OR 1.9, 95% CI 1.0, 3.4). The majority found it helpful to talk online with other people, although this proportion was smaller among the Transitioned ADF compared to the 2015 Regular ADF (60.9% vs 87.8%). A small minority of both the Transitioned ADF and 2015 Regular ADF who used the internet to manage mental health found it to be harmful to talk online to other people about their own mental health (5.9% and 1.3% respectively).

Table 8 Proportions of participants talking about one's own mental health on the internet among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

	Transitioned ADF n = 6116			2015 Regular ADF n = 9042		
Talk with peers	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No, did not talk on the internet with peers or family	577	4000	65.4 (61.2, 69.4)	1023	6202	68.6 (58.8, 77.0)
Yes, did talk on the internet with peers or family	269	2041	33.4 (29.4, 37.6)	395	2768	30.6 (22.2, 40.5)
Harmful	5	30	1.5 (0.5, 4.0)	#	–	–
Helpful	173	1292	63.3 (55.7, 70.3)	298	2081	75.2 (57.3, 87.3)
Neither	90	695	34.1 (27.3, 41.6)	92	672	24.3 (12.3, 42.3)
Talk with other people						
No, did not talk on the internet with other people	729	5194	84.9 (81.7, 87.7)	1295	8213	90.8 (85.0, 94.5)
Yes, did talk on the internet with other people	110	758	12.4 (10.0, 15.3)	114	704	7.8 (4.3, 13.8)
Harmful	8	45	5.9 (2.7, 12.3)	#	–	–
Helpful	67	462	60.9 (49.6, 71.1)	88	618	87.8 (77.0, 93.9)
Neither	35	252	33.2 (23.6, 44.4)	23	77	10.9 (5.4, 20.9)

Notes
Denominator: Those who used internet to manage mental health.
Based on weighted counts, 75 (1.2%) Transitioned ADF and 73 (0.8%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Based on weighted counts, 163 (2.7%) Transitioned ADF and 126 (1.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Based on weighted counts, 73 (1.2%) Transitioned ADF and 90 (1.0%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

9.2.1 Talking online to peers, family or friends by probable disorder and key demographic characteristics

Table 9 presents the estimated proportions of Transitioned ADF and 2015 Regular ADF who reported talking about their own mental health on the internet with a peer, family member or friend according to whether or not they had a probable disorder and demographic characteristics.

Among both the Transitioned ADF and 2015 Regular ADF who reported using the internet for their own mental health, approximately one third of those with a probable disorder (37.2% and 37.0% respectively) and without one (30.4% and 29.1% respectively) reported talking about their mental health on the internet with a peer, family member or friend. Among the 2015 Regular ADF who reported using the internet for their own mental health, females aged 18–37 were more likely to report talking about their mental health on the internet with a peer, family member or friend than females aged 38+ (37.7% vs 20.7%). In general, younger Transitioned ADF and 2015 Regular ADF who used the internet for their own mental health were most likely to talk online to a peer, family member or friend, with nearly half of those aged 18–27 endorsing this.

Table 9 Talking about one's own mental health on the internet with peers, family members or friends among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues by probable disorder and demographic characteristics

	Transitioned ADF n = 6116						2015 Regular ADF n = 9042					
	No, did not talk on the internet with peers or family n = 4000			Yes, did talk on the internet with peers or family n = 2041			No, did not talk on the internet with peers or family n = 6202			Yes, did talk on the internet with peers or family n = 2768		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	244	1672	61.9 (55.7, 67.7)	141	1005	37.2 (31.4, 43.4)	179	1073	61.9 (39.4, 80.3)	97	641	37.0 (18.9, 59.8)
No	333	2328	68.2 (62.4, 73.5)	128	1037	30.4 (25.1, 36.2)	844	5129	70.2 (59.0, 79.4)	298	2126	29.1 (19.9, 40.4)
Sex												
Male	449	3272	65.6 (60.7, 70.1)	206	1652	33.1 (28.6, 37.9)	734	5245	68.7 (57.0, 78.4)	259	2328	30.5 (20.8, 42.3)
Female	128	728	64.7 (56.4, 72.1)	63	389	34.6 (27.1, 42.8)	289	957	68.0 (63.7, 72.0)	136	439	31.2 (27.2, 35.5)
Age (yrs)												
18–27	53	643	52.2 (41.0, 63.3)	44	588	47.8 (36.7, 59.0)	73	1084	54.1 (25.7, 80.1)	44	919	45.9 (19.9, 74.3)
28–37	187	1653	68.5 (61.3, 74.9)	90	744	30.8 (24.4, 37.9)	353	2749	71.5 (55.7, 83.4)	150	1067	27.8 (16.0, 43.7)
38–47	175	926	63.9 (56.6, 70.6)	85	492	33.9 (27.5, 41.0)	360	1409	73.0 (67.6, 77.7)	133	503	26.1 (21.4, 31.3)
48–57	98	466	73.8 (65.8, 80.4)	38	162	25.6 (19.0, 33.5)	204	759	78.9 (72.9, 83.9)	57	197	20.5 (15.6, 26.5)
58+	57	243	82.8 (73.5, 89.4)	11	42	14.2 (8.5, 23.0)	19	70	83.8 (56.8, 95.3)	#	–	–

Notes
Denominator: Those who used internet to manage mental health.
Based on weighted counts, 75 (1.2%) Transitioned ADF, and 73 (0.8%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

9.2.2 Talking online to others (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) by probable disorder and key demographic characteristics

Almost a fifth (17.4%) of the Transitioned ADF and 6.2% of the 2015 Regular ADF with a probable disorder and who used the internet for their own mental health reported talking to others on the internet. Among the Transitioned ADF, a greater proportion of those with a probable disorder than those without reported talking to others on the internet about their own mental health (17.4% vs 8.4%). Among the 2015 Regular ADF, there was little difference between the proportion of those with a probable disorder and that for those without a probable disorder who reported talking to others on the internet about their own mental health (6.2% vs 8.1%).

9.3 Talking online to a psychologist or other mental health professional about one's own mental health

As Table 10 shows, of the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, 7.9% and 9.5% respectively reported talking online to a psychologist or other mental health professional about their mental health. Of these, the majority in both study populations reported finding this helpful (65.3% vs 59.7%).

Table 10 Talking about one's own mental health on the internet with a psychologist or other mental health professional among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

	Transitioned ADF n = 6116			2015 Regular ADF n = 9042		
Talk with psychologist	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No, did not talk on the internet with a mental health professional	785	5561	90.9 (88.0, 93.2)	1331	8093	89.5 (81.7, 94.2)
Yes, did talk on the internet with a mental health professional	62	481	7.9 (5.8, 10.6)	85	860	9.5 (4.9, 17.6)
Harmful	#	–	–	#	–	–
Helpful	40	314	65.3 (49.5, 78.3)	65	513	59.7 (25.4, 86.6)
Neither	18	132	27.4 (16.0, 42.9)	20	347	40.3 (13.4, 74.6)

Notes
Denominator: Those who used the internet to manage mental health.
Based on weighted counts, 73 (1.2%) Transitioned ADF and 90 (1.0%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

9.3.1 Talking online to a psychologist or other mental health professional by probable disorder and key demographic characteristics

Table 11 presents the estimated proportions of Transitioned ADF and 2015 Regular ADF who reported using the internet to talk with a psychologist or other health professional about their mental health, according to whether or not they had a probable disorder and demographic characteristics.

Among those who used the internet to manage their own mental health who had a probable 30-day disorder, 7.2% of Transitioned ADF and 3.7% of 2015 Regular ADF reported using the internet to talk to a psychologist or other health professional about their own mental health.

Transitioned ADF in the 18–27 age band (9.8%) and 2015 Regular ADF aged 28–37 (17.1%), followed by those aged 58+ (13.4%), were most likely to talk online to a psychologist or other mental health professional about their own mental health.

Table 11 Talking about one's own mental health on the internet with a psychologist or other mental health professional among Transitioned ADF and 2015 Regular ADF by probable disorder and demographic characteristics

	Transitioned ADF n = 6116						2015 Regular ADF n = 9042					
	No, did not talk on the internet with a mental health professional n = 5561			Yes, did talk on the internet with a mental health professional n = 481			No, did not talk on the internet with a mental health professional n = 8093			Yes, did talk on the internet with a mental health professional n = 860		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	350	2479	91.7 (88.3, 94.2)	35	195	7.2 (5.0, 10.3)	262	1660	95.8 (91.9, 97.9)	16	63	3.7 (1.8, 7.4)
No	435	3082	90.3 (85.6, 93.6)	27	287	8.4 (5.4, 12.9)	1069	6433	88.0 (78.4, 93.7)	69	797	10.9 (5.4, 20.8)
Sex												
Male	607	4535	90.9 (87.5, 93.4)	50	395	7.9 (5.6, 11.1)	938	6789	88.9 (79.4, 94.3)	54	769	10.1 (4.8, 19.8)
Female	178	1026	91.1 (85.1, 94.9)	12	87	7.7 (4.2, 13.7)	393	1304	92.7 (90.5, 94.4)	31	91	6.5 (4.8, 8.6)
Age (yrs)												
18–27	89	1110	90.2 (80.7, 95.3)	8	121	9.8 (4.7, 19.3)	113	1979	98.8 (95.9, 99.7)	#	–	–
28–37	258	2219	91.9 (86.6, 95.2)	19	178	7.4 (4.2, 12.6)	464	3139	81.6 (64.6, 91.6)	35	659	17.1 (7.5, 34.7)
38–47	242	1311	90.4 (84.5, 94.2)	16	96	6.6 (3.8, 11.3)	464	1794	92.9 (89.1, 95.4)	31	131	6.8 (4.3, 10.5)
48–57	126	591	93.5 (89.2, 96.1)	11	41	6.5 (3.9, 10.8)	248	910	94.6 (91.1, 96.8)	14	49	5.1 (3.0, 8.6)
58+	64	271	92.3 (85.2, 96.2)	6	23	7.7 (3.8, 14.8)	20	72	86.6 (57.1, 96.9)	#	–	–

Notes
Denominator: Those that said 'Yes' to using the internet for mental health issues.
Based on weighted counts, 73 (1.2%) Transitioned ADF and 90 (1.0%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Probable 30-day disorder = PCL ≥ 53 or K10 ≥ 25; No probable 30-day disorder = PCL < 53 and K10 < 25.
95%CI = 95% confidence interval.
= Cell size too small to be reported

10 Barriers to talking online about one's own mental health in the Transitioned ADF and 2015 Regular ADF

10.1 Barriers to talking online about one's own mental health

This chapter examines the barriers to talking about mental health online that may have been experienced by Transitioned ADF and the 2015 Regular ADF. Respondents who did not talk about their mental health online were asked 'Which of the following barriers might prevent you from talking about your mental health issues online?'

For the 50% who did not talk to someone online, the main reason was their preference for face-to-face contact, with 59% of the Transitioned ADF and 70.2% of the 2015 Regular ADF citing it. About 50% of the Transitioned ADF and 63.3% of the 2015 Regular ADF cited concerns about privacy and confidentiality and over 40% of both groups reported concerns about lack of website security (41.2% and 45.7% respectively) (Table 12).

Transitioned ADF were significantly less likely than 2015 Regular ADF to report concerns about a lack of privacy/confidentiality as a barrier to talking about their mental health issues online (50.4% vs 63.3%, OR 0.5, 95% CI 0.3, 0.9). In contrast, Transitioned ADF were more likely than 2015 Regular ADF to report affordability as a barrier preventing them from talking about their mental health issues online (1.9% vs 0.4%; OR 3.7, 95% CI 1.3, 10.3).

Lack of access to technology, lack of skills to use technology and lack of awareness about available online services were not issues of concern.

Table 12 Barriers preventing Transitioned ADF and the 2015 Regular ADF from talking about their mental health issues online among those who reported using the internet to seek help or information for or manage mental health issues but reported did NOT talk to someone online about their own mental health

	Transitioned ADF n = 3452			2015 Regular ADF n = 5470		
Barriers to talking about mental health issues online	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Lack of access to technology	6	54	1.6 (0.6, 4.2)	7	25	0.5 (0.2, 1.0)
Lack of awareness about available online services	65	438	12.7 (9.4, 17.0)	102	710	13.0 (5.5, 27.7)
Unaffordable technology	6	65	1.9 (0.7, 5.2)	8	22	0.4 (0.2, 0.7)
Concerns about validity of information available online	180	1260	36.5 (31.3, 42.0)	309	1960	35.8 (24.7, 48.8)
Lack of technological/computing skills	11	88	2.5 (1.4, 4.7)	14	54	1.0 (0.5, 1.9)
Preference for face-to-face contact	313	2036	59.0 (53.3, 64.4)	619	3842	70.2 (60.8, 78.2)
Concerns about a lack of privacy/confidentiality	278	1740	50.4 (44.8, 56.0)	510	3461	63.3 (53.5, 72.1)
Concerns about a lack of website security	218	1422	41.2 (35.8, 46.8)	411	2500	45.7 (34.2, 57.7)

Notes
Denominator: Those who do not talk about mental health online.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.

11 Mental health status and the use of the internet to seek help or information for or to manage mental health issues by Transitioned and Regular 2015 ADF members

This chapter explores the use of the internet to seek help or information for or to manage mental health issues among Transitioned and 2015 Regular ADF members according to the presence or absence of a probable mental disorder. The types of mental disorders included PTSD, anxiety/affective disorder, alcohol disorder, depressive episodes and generalised anxiety disorder, as well as suicidality, and severity (no disorder, subsyndromal disorder and probable disorder). This is followed by a focused examination of the use of the internet among those with a probable disorder who report mental health stigmas and barriers to care.

Probable 30-day disorder, subsyndromal disorder and no disorder categories on the self-report measures of PTSD, psychological distress, alcohol use and depression were calculated using cut-offs on the PCL, K10, AUDIT and PHQ which were developed as part of the 2010 ADF Mental Health Prevalence and Wellbeing Study (McFarlane et al., 2011). The epidemiological cut-offs give the 'closest estimate of the true prevalence of 30-day ICD-10 disorder as measured by the CIDI' (McFarlane et al. 2011, p. 103). The screening cut-offs reflect a broader spectrum of moderate to severe symptoms rather than diagnosable disorder, allowing for potential early intervention. These screening cut-offs maximise potential identification of true cases but include a larger proportion of 'false positives' than the epidemiological cut-offs.

Where scores on the relevant measures fall above the optimal screening cut off but below the optimal epidemiological cut off, this is referred to as 'subsyndromal'. Where scores on the relevant measures are above both the optimal screening and epidemiological cut offs, this is referred to as 'probable disorder'. The cut-offs used in this chapter to denote no disorder, subsyndromal disorder and probable disorder are presented in Table 13.

Table 13 Screening and epidemiological cut-offs used to denote no disorder, subsyndromal disorder and probable disorder on the self-report mental health measures

Mental disorder	Measure	No disorder	Subsyndromal disorder	Probable disorder
PTSD	PCL	<29	29 – 52	53+
Anxiety/affective disorder (psychological distress)	K10	<17	17 – 24	25+
Alcohol disorder	AUDIT	<8	8 – 19	20+
Depressive episodes	PHQ	<6	6 – 17	18+
Generalised anxiety disorder	GAD-7	N/A	N/A	10+

For suicidality, outcomes according to 'suicidal ideation', 'suicide plan' and 'any suicidality' (having either suicidal ideation or a suicide plan) are presented.

The total stigma count variables were dichotomised in order to identify those with no stigmas and those with one or more stigmas, as well as identify those with no barriers and those with one or more barriers to care.

For the specific survey items utilised in this chapter, and a more detailed breakdown of the types of websites accessed by Transitioned ADF and 2015 Regular ADF (e.g. ADF websites, DVA/At Ease website and other civilian mental health websites), please consult the full *Technology Use and Wellbeing Report*.

11.1 Use of the internet to seek help or information for or to manage mental health issues

11.1.1 By probable disorder/subsyndromal disorder and no disorder

Table 14 presents the estimated proportion of the Transitioned and 2015 Regular ADF with probable disorder, subsyndromal disorder, no disorder and suicidality who reported using the internet to seek help or information for or to manage mental health issues.

Overall, approximately 40% of the Transitioned ADF and 20–40% of the 2015 Regular ADF with a probable mental health disorder (including PTSD, depressive disorder, psychological distress, generalised anxiety disorder and alcohol use disorder) or suicidal thoughts and plans used the internet to seek help or information for or to manage mental health issues. For subsyndromal symptoms, approximately 30% of the Transitioned ADF and 16–30% of the 2015 Regular ADF used the internet to seek help or information for or to manage mental health issues. Internet use to seek help or information or manage mental health issues was generally higher in those with more mental health symptoms.

Table 14 The estimated proportion of the Transitioned and 2015 Regular ADF with probable disorder, subsyndromal disorder, no disorder and suicidality who reported using the internet to seek help or information for or to manage mental health issues

	Transitioned ADF			2015 Regular ADF		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress syndrome disorder (PCL-C)						
Probable disorder	220	1361	41.4 (36.2, 46.9)	107	633	42.4 (24.1, 63.0)
Subsyndromal disorder	317	2344	33.9 (30.2, 37.8)	376	2895	29.7 (20.4, 41.0)
No disorder	311	2362	16.4 (14.4, 18.7)	931	5411	13.3 (10.9, 16.1)
Psychological distress (K10)						
Probable disorder	366	2594	38.1 (34.3, 42.1)	265	1648	21.4 (13.4, 32.4)
Subsyndromal disorder	222	1471	29.4 (25.3, 33.8)	373	2822	29.8 (20.9, 40.6)
No disorder	262	2007	15.5 (13.4, 17.8)	785	4529	13.1 (10.6, 16.2)
Probable alcohol use disorder (AUDIT)						
Probable disorder	89	653	40.4 (32.6, 48.8)	25	103	20.6 (8.1, 43.3)
Subsyndromal disorder	246	1781	26.1 (22.6, 29.9)	318	1766	16.9 (11.8, 23.4)
No disorder	515	3633	22.4 (20.3, 24.6)	1082	7148	17.3 (14.0, 21.2)
Depression (PHQ-9)						
Probable disorder	201	1380	40.7 (35.4, 46.3)	92	679	35.8 (15.3, 63.2)
Subsyndromal disorder	378	2730	31.2 (28.0, 34.7)	597	4310	25.4 (19.0, 33.2)
No disorder	272	1967	15.5 (13.5, 17.8)	735	4028	12.1 (9.9, 14.6)
12-month suicidal ideation and behaviour						
Any suicide thought or plan	433	3068	40.3 (36.7, 44.0)	347	2090	29.9 (20.2, 41.9)
Probable generalised anxiety disorder						
Above screening cut-off	329	2258	40.2 (36.0, 44.6)	229	1931	39.5 (25.5, 55.4)
Below screening cut-off	521	3815	20.0 (18.1, 22.0)	1193	7076	15.0 (12.4, 17.9)

Notes
All Percentages are row percentages within the Transitioned ADF and 2015 Regular ADF.
95%CI = 95% confidence interval.

11.1.2 By probable disorder according to presence or absence of self-reported mental health stigmas and barriers to care

Table 15 presents the estimated proportions of the Transitioned ADF and 2015 Regular ADF meeting the criteria for a probable 30-day mental health disorder who reported using the internet to seek help or information for or to manage mental health issues according to the presence or absence of stigmas and perceived barriers to care.

Results showed no association between self-reported stigma and perceived barriers to care and use of the internet to seek help or information for or to manage mental health issues among Transitioned and 2015 Regular ADF members with probable PTSD, alcohol disorder or 12-month suicidal ideation and behaviour. Among those with probable anxiety/depression or depressive episodes, however, Transitioned ADF reporting at least one stigma or at least one perceived barrier were more likely to use the internet to seek help or information for or to manage mental health issues than those with no stigma or barriers.

Table 15 Estimated proportion of Transitioned and 2015 Regular ADF with a probable disorder who did and did not use the internet for mental health broken down by those with at least one stigma and by at least one barrier

	Transitioned ADF						2015 Regular ADF					
	At least one barrier			At least one stigma			At least one barrier			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress syndrome disorder (PCL-C)	n = 350 (Weighted n = 2445)			n = 413 (Weighted n = 2800)			n = 197 (Weighted n = 1368)			n = 197 (Weighted n = 1368)		
Used internet for mental health	164	1037	42.4 (36.1, 48.9)	199	1239	44.3 (38.5, 50.2)	96	598	43.8 (24.0, 65.8)	95	588	43.0 (23.4, 65.1)
Did not use internet for mental health	185	1394	57.0 (50.5, 63.3)	213	1546	55.2 (49.3, 61.0)	101	769	56.2 (34.2, 76.0)	102	780	57.0 (34.9, 76.6)
Probable psychological distress (K10)	n = 630 (Weighted n = 4847)			n = 716 (Weighted n = 5345)			n = 664 (Weighted n = 4905)			n = 647 (Weighted n = 5145)		
Used internet for mental health	274	2032	41.9 (37.2, 46.8)	314	2230	41.7 (37.3, 46.3)	232	1413	28.8 (17.7, 43.3)	236	1423	27.7 (16.7, 42.1)
Did not use internet for mental health	353	2794	57.6 (52.8, 62.4)	398	3091	57.8 (53.3, 62.3)	431	3489	71.1 (56.7, 82.3)	409	3707	72.0 (57.6, 83.0)
Probable alcohol use disorder (AUDIT)	n = 157 (Weighted n = 1156)			n = 190 (Weighted n = 1384)			n = 63 (Weighted n = 244)			n = 64 (Weighted n = 252)		
Used internet for mental health	67	509	44.0 (34.4, 54.0)	79	577	41.7 (33.2, 50.8)	21	82	33.4 (21.4, 48.1)	22	84	33.4 (21.6, 47.8)
Did not use internet for mental health	90	647	56.0 (46.0, 65.6)	111	807	58.3 (49.2, 66.8)	42	163	66.6 (51.9, 78.6)	42	168	66.6 (52.2, 78.4)
Probable depressive episode (PHQ-9)	n = 327 (Weighted n = 2415)			n = 382 (Weighted n = 2774)			n = 213 (Weighted n = 1788)			n = 208 (Weighted n = 1770)		
Used internet for mental health	149	1037	42.9 (36.5, 49.6)	180	1244	44.9 (38.9, 51.0)	87	665	37.2 (15.5, 65.6)	85	658	37.2 (15.3, 65.9)
Did not use internet for mental health	176	1360	56.3 (49.6, 62.8)	200	1512	54.5 (48.3, 60.5)	126	1124	62.8 (34.4, 84.5)	123	1112	62.8 (34.1, 84.7)
Any 12-month suicidal ideation and behaviour	n = 747 (Weighted n = 5585)			n = 850 (Weighted n = 6198)			n = 761 (Weighted n = 6163)			n = 769 (Weighted n = 6184)		
Used internet for mental health	310	2246	40.2 (35.9, 44.7)	362	2587	41.7 (37.6, 46.0)	297	1809	29.4 (18.8, 42.7)	296	1810	29.3 (18.8, 42.5)
Did not use internet for mental health	434	3317	59.4 (54.9, 63.7)	485	3590	57.9 (53.7, 62.0)	461	4345	70.5 (57.2, 81.0)	470	4366	70.6 (57.4, 81.1)
Probable generalised anxiety disorder	n = 546 (Weighted n = 4178)			n = 625 (Weighted n = 4616))			n = 525 (Weighted n = 4002)			n = 524 (Weighted n = 4297)		
Used internet for mental health	247	1757	42.0 (37.0, 47.3)	288	1971	42.7 (38.0, 47.6)	208	1871	46.7 (31.7, 62.4)	202	1835	42.7 (27.3, 59.7)
Did not use internet for mental health	297	2403	57.5 (52.3, 62.6)	335	2626	56.9 (52.0, 61.6)	315	2121	53.0 (37.4, 68.0)	319	2439	56.7 (39.9, 72.2)

Notes
Denominator: Transitioned and 2015 Regular ADF with a probable disorder.
All percentages are column percentages.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

12 Technology use and psychological distress in Transitioned ADF members aged 18–25: comparison with young adults aged 18–25 in the Australian community

This chapter compares internet use (both generally and to manage mental health) in the youngest age cohort of Transitioned ADF members (those aged 18–25) with an Australian community sample of males and females aged 18 to 25 who participated in the 2012 Young and Well National Survey (Young and Well cohort).

Mean differences in proportions between young adults in the Transitioned ADF and the Young and Well cohort were limited to a subset of related questions from the Mental Health and Wellbeing Transition survey which were comparable with the Young and Well survey. For details of these questions, please refer to the full *Technology Use and Wellbeing Report*.

To ascertain whether technology use in young adults in the Transitioned ADF and in the Australian community differed according to levels of psychological distress, the frequency of internet use, duration of internet use, internet use after 11 pm and use of the internet for mental health were also examined in those with low (K10 < 16) and moderate to high psychological distress on the K10 (K10 ≥ 16).

12.1 General internet use: frequency, duration and timing in young adults in the Transitioned ADF compared to young adults in the Australian community

Table 16 presents frequency and duration of internet use and use after 11 pm among the Transitioned ADF young adults and the 2012 Young and Well cohort.

A significantly greater proportion of the Transitioned ADF young adults reported using the internet every day or almost every day (98.5%) compared to the Young and Well cohort (91.2%). In contrast, a significantly greater proportion of the Young and Well cohort (5.8%) reported using the internet once or twice a week compared to the Transitioned ADF (1.5%,).

Both Transitioned ADF young adults and the Young and Well cohort were most likely to report using the internet 1 to 2 hours per day during the week (30.0% and 39.8% respectively). Transitioned ADF members (27.2%) were significantly more likely to report that they used the internet for 5 to 9 hours on a week day compared to the Young and Well cohort (15.9%). In contrast, the Transitioned ADF were significantly less likely to report using the internet for 1 to 2 hours per day (30.0% compared to 39.8%) and for less than 1 hour per day (6.6% compared to 14.2%).

Just under half of the Transitioned ADF young adults (46.8%) and over half (66.0%) of the Young and Well cohort reported using the internet after 11 pm, with Transitioned ADF young adults being significantly less likely to report using the internet after 11 pm compared to the Young and Well cohort.

12.2 Internet use for mental health

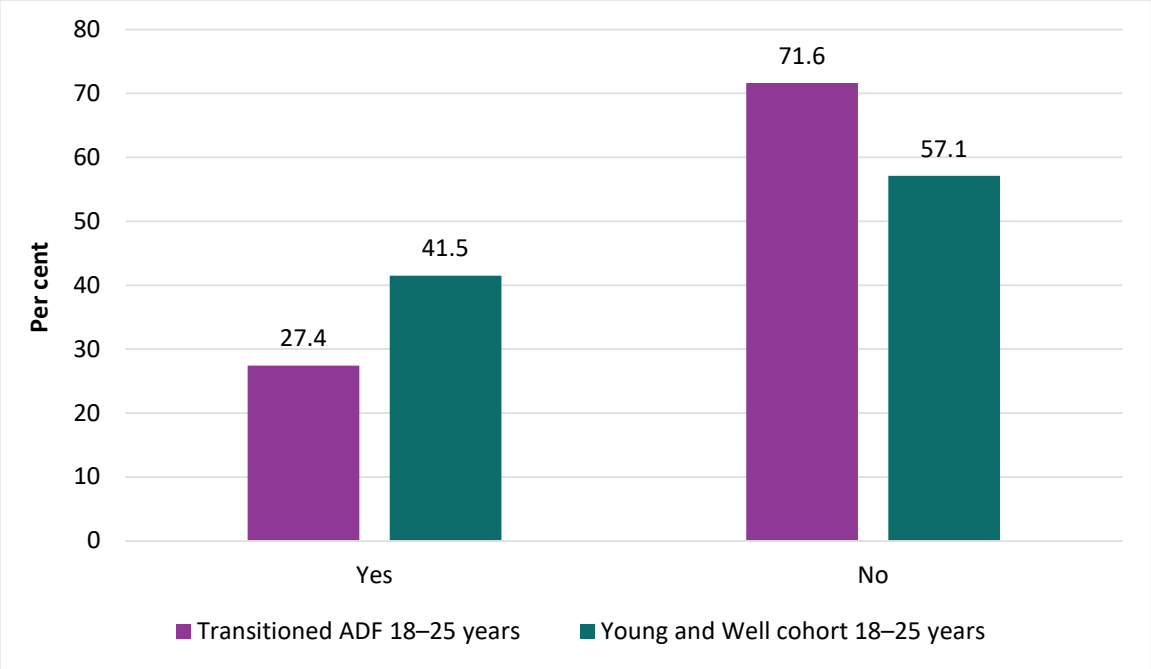
More than a quarter of the Transitioned ADF young adults (27.4%) and 41.5% of the Young and Well cohort reported using the internet to seek help for or manage mental health issues. However, in general, most of the Transitioned ADF young adults (71.6%) and Young and Well cohort (57.1%) did not use the internet to seek help for or manage mental health issues (Figure 4).

Table 16 **Frequency, duration and timing of internet use in the Transitioned ADF (aged 18–25) compared to the Young and Well cohort**

	Transitioned ADF 18–25 years n = 2630			Young and Well cohort 18–25 years n = 1123			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Frequency of internet use*									
Every day or almost every day	98.5	1.0	94.6, 99.6	91.2	1.5	88.4, 94.0	7.3	1.8	3.9, 10.8
Once or twice a week	1.5	1.0	0.4, 5.5	5.8	1.3	3.3, 8.4	–4.4	1.6	–7.6, –1.2
Once or twice a month	0.0	–	–	1.3	0.7	0.0, 2.6	–1.3	0.7	–2.6, 0.0
Less than once a month	0.0	–	–	0.0	–	–	0.0	–	–
Never	0.0	–	–	0.8	0.4	–0.0, 1.6	–0.8	0.4	–1.6, 0.0
Duration of internet use†‡									
<1 hour	6.6	2.1	3.5, 12.3	14.2	1.8	10.6, 17.8	–7.6	2.8	–13.1, –2.1
1 to 2 hours	30.0	3.8	23.1, 38.0	39.8	2.5	34.8, 44.7	–9.7	4.6	–18.7, –0.7
3 to 4 hours	27.9	3.7	21.2, 35.8	26.0	2.3	21.6, 30.4	1.9	4.4	–6.7, 10.4
5 to 9 hours	27.2	3.6	20.8, 34.8	15.9	1.8	12.3, 19.4	11.4	4.0	3.5, 19.2
10+ hours	5.5	1.8	2.9, 10.2	3.2	0.9	1.4, 5.0	2.3	2.0	–1.6, 6.2
Internet use after 11 pm†#									
No, do not use internet after 11 pm	51.7	4.1	43.7, 59.7	33.1	2.4	28.4, 37.7	18.7	4.8	9.3, 28.0
Yes, use internet after 11 pm	46.8	4.1	38.9, 54.9	66.0	2.4	61.3, 70.6	–19.2	4.8	–28.5, –9.8
Don't know ^	0.0	–	–	0.0	0.0	0.0, 0.1	0.0	0.0	–0.1, 0.0

*Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts
†Denominator: Total Transitioned ADF 18–25 years (n = 2630) and Young and Well 18–25 years (n = 1110) cohorts who used the internet
‡2.6% of the Transitioned ADF cohort had a missing value for this question.
#1.5% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
^Only the Young and Well participants had the option of responding 'Don't know'.
Note: 95%CI = 95% confidence interval.

Figure 4 **Use of the internet to seek help for or manage mental health issues in Transitioned ADF (aged 18–25) compared to the Young and Well cohort**



12.2.1 Suitability and effectiveness of and satisfaction with information received on the internet about mental health among young adults in the Transitioned ADF compared to young adults in the Australian community

Of those who indicated they had used the internet for mental health issues (Mental Health and Wellbeing Transition Study, n = 720; Young and Well Study, n = 490), most of the Transitioned ADF young adults and the Young and Well cohort reported that the internet 'somewhat' gave them the kind of information they needed in relation to mental health (76.9% and 54.8%). The Transitioned ADF young adults were significantly more likely than the Young and Well cohort to report that the internet did not help at all (15.4% vs 1.2%). They were significantly less likely to report that the internet 'very much' gave them the kind of information they needed in relation to mental health compared to the Young and Well cohort (7.7% vs 41.2%).

Transitioned ADF young adults were most likely to report that they found the internet neither helped nor made dealing with their mental health problems worse (59.5%), whereas the Young and Well cohort were most likely to report that the internet 'helped a little' (53.9%). Transitioned ADF were also significantly less likely than the Young and Well cohort to report that the internet helped them deal more effectively with mental health problems. Specifically, they were significantly less likely to report they found the internet 'helped a little' (30.9%) and 'helped a lot' (6.4%) compared to the Young and Well cohort (53.9% and 26.2% respectively).

Most of the Transitioned ADF young adults (69.1%) and Young and Well cohort (71.9%) reported that they were 'somewhat satisfied' with the information they received on the internet in relation to mental health. Transitioned ADF young adults (20.5%) were significantly more likely to endorse being 'somewhat dissatisfied' with the information they received on the internet in relation to mental health compared to the Young and Well cohort (4.2%) and significantly less likely to endorse being 'very satisfied' with the information they received on the internet in relation to mental health (7.1% compared to 20.7%). See Table 17.

Table 17 Suitability, effectiveness and satisfaction with information received on the internet about mental health in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n = 720			Young and Well cohort 18–25 years n = 490			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Suitability of information received									
Not at all	15.4	5.9	7.0, 30.5	1.2	0.8	–0.3, 2.7	15.4	5.9	7.0, 30.5
Somewhat	76.9	6.5	62.0, 87.2	54.8	4.0	47.0, 62.7	22.1	7.6	7.2, 37.0
Very much	7.7	3.5	3.1, 17.8	41.2	4.0	33.4, 49.0	–33.5	5.3	–43.9, –23.2
Don't know*	0.0	–	–	1.9	1.2	–0.5, 4.3	–1.9	1.2	–4.3, 0.5
Effectiveness of the internet									
Made it a lot worse	0.0	–	–	0.2	0.2	–0.2, 0.5	–0.2	0.2	–0.5, 0.2
Made it a little worse	3.2	1.6	1.1, 8.6	1.3	0.8	–0.2, 2.8	1.9	1.8	–1.7, 5.5
Neither	59.5	7.3	44.7, 72.7	14.1	2.8	8.7, 19.5	45.4	7.9	30.0, 60.8
Helped a little	30.9	6.9	19.2, 45.8	53.9	4.0	46.0, 61.8	–23.0	8.0	–38.7, –7.3
Helped a lot	6.4	3.7	2.0, 18.9	26.2	3.6	19.2, 33.3	–19.8	5.2	–30.0, –9.6
Don't know/refused†	0.0	–	–	3.4	1.6	0.3, 6.4	–3.4	1.6	–6.4, –0.3
Satisfaction with information received‡									
Very dissatisfied	0.0	0.0	0.0, 0.0	0.2	0.2	–0.2, 0.5	–0.2	0.2	–0.5, 0.2
Somewhat dissatisfied	20.5	6.3	10.8, 35.4	4.2	1.5	1.3, 7.1	16.3	6.4	3.7, 28.9
Somewhat satisfied	69.1	7.1	53.8, 81.1	71.9	3.5	65.0, 78.8	–2.8	7.9	–18.4, 12.8
Very satisfied	7.1	3.7	2.5, 18.5	20.7	3.2	14.5, 26.9	–13.6	4.8	–23.1, –4.2
Don't know/refused	0.0	0.0	0.0, 0.0	2.2	1.4	–0.5, 4.8	–2.2	1.4	–4.8, 0.5

*Only the Young and Well participants had the option of responding 'Don't know'.
†Only the Young and Well participants had the response options of 'Don't know' or 'Refused'.
‡3.3% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Notes
Denominator: Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet for mental health issues.
95%CI = 95% confidence interval.

12.3 Psychological distress and frequency, duration and timing of internet use

Overall, greater levels of psychological distress were reported among the Transitioned ADF young adults than among the Young and Well cohort. Specifically, nearly one in five of the Transitioned ADF young adults scored in the 'Very high' band compared with just over 5% of the Young and Well cohort (18.6% vs 5.4%). See Table 18.

Table 18 Estimated prevalence of psychological distress (K10 scoring bands) in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n = 2630			Young and Well cohort 18–25 years n = 1123			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Low (10–15)	52.9	4.1	44.8, 60.8	56.1	2.5	51.1, 61.0	–3.2	4.8	–12.6, 6.3
Moderate (16–21)	15.5	3.1	10.4, 22.5	27.2	2.3	22.7, 31.6	–11.6	3.8	–19.1, –4.2
High (22–29)	13.0	2.6	8.6, 19.0	10.5	1.5	7.6, 13.4	2.5	3.0	–3.4, 8.4
Very high (30–50)	18.6	3.1	13.3, 25.5	5.4	1.2	3.1, 7.7	13.2	3.3	6.7, 19.7

Notes
Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts.
Less than 1% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Table 19 presents frequency, duration and timing of internet use in the Transitioned ADF young adults compared to the Young and Well cohort, by level of psychological distress.

Similar patterns of frequency of internet use were found in Transitioned ADF young adults and the Young and Well cohort, irrespective of whether they had low psychological distress or moderate to very high psychological distress on the K10. More than 90% of participants in all groups reported using the internet every day or almost every day.

Those with moderate or very high psychological distress on the K10 were more likely to report using the internet for 10+ hours on a normal work/week day in both Transitioned ADF young adults (9.2%) and the Young and Well cohort (4.8%) compared to those with low psychological distress (2.3% and 2.2% respectively).

Overall, it can be seen that Transitioned ADF young adults with moderate to high psychological distress generally reported using the internet longer (5–10+ hours – aggregated proportion of 38.7%) compared to the Young and Well cohort with moderate to high psychological distress (aggregated proportion of 20.1%).

Finally, in both the low and moderate to very high psychological distress groups, a significantly lower proportion of Transitioned ADF young adults reported using the internet after 11 pm compared to the Young and Well cohort (low distress: 43.7% vs 62.4%; high distress: 50.1% vs 70.7%).

Table 19 Frequency, duration and timing of internet use in the Transitioned ADF (aged 18–25) compared to the Young and Well cohort, by level of psychological distress

	Low psychological distress (K10 scores 10–15)									Moderate to very high psychological distress (K10 scores 16–50)								
	Transitioned ADF 18–25 years n = 2630			Young and Well cohort 18–25 years n = 1123			Difference			Transitioned ADF 18–25 years n = 2630			Young and Well cohort 18–25 years n = 1123			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Frequency of internet use*																		
Every day or almost every day	97.6	1.9	89.7, 99.5	91.0	1.9	87.3, 94.8	6.5	2.7	1.3, 11.7	99.6	0.3	97.9, 99.9	91.6	2.2	87.3, 96.0	8.0	2.3	3.6, 12.4
Once or twice a week	2.4	1.9	0.5, 10.3	5.8	1.7	2.6, 9.1	–3.4	2.5	–8.3, 1.5	0.4	0.3	0.1, 2.1	5.7	2.0	1.8, 9.7	–5.3	2.0	–9.3, –1.3
Once or twice a month	0.0	0.0	0.0, 0.0	1.3	0.9	–0.4, 3.0	–1.3	0.9	–3.0, 0.4	0.0	0.0	0.0, 0.0	1.2	1.0	–0.8, 3.2	–1.2	1.0	–3.2, 0.8
Less than once a month	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0
Never	0.0	0.0	0.0, 0.0	0.9	0.6	–0.3, 2.2	–0.9	0.6	–2.2, 0.3	0.0	0.0	0.0, 0.0	0.5	0.2	0.1, 1.0	–0.5	0.2	–1.0, –0.1
Duration of internet use†‡																		
<1 hour	10.4	3.8	5.0, 20.4	17.5	2.6	12.4, 22.7	–7.1	4.6	–16.1, 1.8	2.4	1.4	0.8, 7.3	9.8	2.6	4.8, 14.8	–7.4	2.9	–13.1, –1.7
1 to 2 hours	25.5	5.0	16.9, 36.5	42.0	3.4	35.4, 48.6	–16.5	6.1	–28.4, –4.6	35.3	5.7	25.0, 47.2	38.0	3.9	30.3, 45.6	–2.7	7.0	–16.3, 10.9
3 to 4 hours	34.5	5.6	24.5, 46.1	21.2	2.8	15.8, 26.6	13.3	6.3	1.1, 25.6	20.6	4.6	13.0, 31.0	31.2	3.6	24.2, 38.3	–10.7	5.8	–22.1, 0.8
5 to 9 hours	25.0	4.7	16.9, 35.2	16.2	2.5	11.3, 21.2	8.8	5.3	–1.7, 19.2	29.5	5.4	20.1, 41.1	15.3	2.6	10.1, 20.5	14.3	6.0	2.4, 26.1
10+ hours	2.3	1.6	0.6, 8.5	2.2	0.9	0.4, 4.0	0.1	1.8	–3.5, 3.7	9.2	3.3	4.5, 17.9	4.8	1.9	1.1, 8.5	4.4	3.8	–3.0, 11.8
Internet use after 11 pm †#																		
No, do not use internet after 11 pm	54.5	5.8	43.2, 65.4	36.7	3.2	30.5, 42.9	17.8	6.6	4.9, 30.7	48.7	5.9	37.5, 60.2	28.3	3.7	21.2, 35.5	20.4	6.9	6.8, 34.0
Yes, use internet after 11 pm	43.7	5.7	33.0, 55.1	62.4	3.2	56.1, 68.6	–18.6	6.6	–31.5, –5.8	50.1	5.9	38.7, 61.5	70.7	3.7	63.5, 77.8	–20.6	6.9	–34.2, –7.0
Don't know*	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.1	0.1	0.0, 0.2	–0.1	0.1	–0.2, 0.0

*Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts.
†Denominator: Transitioned ADF 18–25 years (n = 2630) and Young and Well 18–25 years (n = 1110) cohorts who used the internet.
‡2.6% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
#1.5% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Note: 95%CI = 95% confidence interval.

13 Implications and future directions

The Defence and DVA mental health strategies have placed priority on member-centric and veteran-centric care, with a move away from services that focus on illness and treatment to holistic models that focus on wellbeing and the prevention of illness and with e-mental health a key pillar of both strategies (Australian Government Department of Defence, 2017; Australian Government Department of Veterans' Affairs, 2016). For providers of services, such as Joint Health Command and Open Arms – Veterans and Families Counselling, this transformational shift has seen a priority placed on the concepts of self-management and shared-management with a major focus on the role of leaders and managers, peers, families and communities in supporting good mental health.

This report has therefore been structured around a holistic approach to health care, with a focus on the use of technology to promote wellbeing and prevent illness through self-management, and to support shared management with the support of a health professional in early identification and intervention, treatment and relapse prevention.

In general, this study showed that the use of the internet by Transitioned ADF and 2015 Regular ADF was high and that use of new and emerging technologies to monitor and manage health and wellbeing suggests further potential in relation to the use of apps and wearable technology in self-management. That said, use of the internet for one's own mental health was low and only a small proportion of the Transitioned ADF and Regular ADF talked online with peers, family or friends, used a blog or chatroom, or spoke to a professional. When use of the internet was examined for those with a probable mental disorder, use of Defence, DVA and civilian mental health websites was generally high. Interestingly, self-stigma and barriers to care did not seem to influence help seeking online. The results are not clear-cut about the benefits and use of technology in self-management or shared management, and more work needs to be done to understand what role technology can play in a healthcare model that supports an empowered, educated and aware service user. This report (and the complex data relating to those with probable and subsyndromal disorders and their use of mental health websites) also presents an opportunity to support Defence and DVA to continue to focus on a proactive strengths-based model focused on keeping people mentally fit, healthy and well – with an emphasis on the value of both mental and physical fitness in the communities in which people live, work and play.

For this approach to be successful, digital health literacy, with an emphasis on how technology can be used to support good mental health, is critical, and this requires focused attention on both the users of the system (that is, the Transitioned and Regular ADF members, their families, peers and colleagues) and the multidisciplinary professionals that provide services to them. Increasingly websites are shifting from static information portals to dynamic interactive communities that rely on shared information, the collation of digital content and, where possible, the customisation of information tailored to the individual's needs. For policy makers seeking to create a seamless system of care across all stages of a military career, including the transition to civilian life, it may be worth considering how website content, interfaces and communities can be built that facilitate information sharing across multiple platforms, including social media platforms, face-to-face and online telephone and teleweb services.

The desire among respondents to 'manage myself' or 'solve my own problems' was evident in this study, with both Transitioned ADF and 2015 Regular ADF using technologies to support positive behaviours known to promote good mental health, such as physical activity, diet and sleep, and also, importantly, using technology to connect socially. This approach is useful for self-management but is equally important in the shared management of care with a professional. Data from apps and wearable technologies could be used to discuss progress in treatment or responses to medication or evidence-based care, such as cognitive behavioural therapy (CBT), and, when in recovery, potentially to identify early warning signs of relapse such as sleep

disturbance, lack of social engagement or a reduction in physical activity. The use of data to self-monitor could be supported by the chain of command and primary health care providers promoting a regular check-in with their teams, focused on wellbeing or mental fitness rather than mental health specifically. Likewise, following a potentially stressful life event such as deployment, marriage breakdown, death of a loved one, diagnosis of an illness or transition out of the military, proactive management of mental health concerns could be supported through technologies that monitor early symptoms of distress.

A consideration for policy makers will be how to support and guide the implementation of apps and the use of technology, such as wearable technologies or biometrics, to measure outcomes and promote self-monitoring and shared evaluation within the serving and ex-serving communities. In the US, this challenge has been addressed by the development of Mobile Health Practice Guidelines and an app store accessible through the US Department of Veterans Affairs highlighting defence- and veteran-specific apps (https://mobile.va.gov) (Armstrong et al., 2017).

This report suggests that serving and ex-serving ADF members are open to exploring alternative models of service provision, including services provided online or enhanced through apps and wearable technologies or biometric devices, and careful consideration should be given to the integration of online services with face-to-face care. An integrated model of stepped care coupled with clinical staging, focused on the 'right care at the right time', delivered by the right person and in a mode that suits the individual, is worth exploring as an integrated service model. Stepped care focuses on the pathways to care and stepping individuals up or down, whereas clinical staging focuses on the intensity of intervention and the tailoring of a solution based on needs and recovery (O'Donnell, Lockwood, Varker, & Dell, 2014). Customised care using a clinical staging model makes clear distinctions between the individual's needs based on a holistic mental health assessment and their risk and protective factor profile and the availability and quality of services.

Another relevant finding for practitioners and policy makers is that 30% of Transitioned ADF and 2015 Regular ADF would like to receive their services online. This approach has usually been put forward as a cost-efficient means of delivering services but it is clear from the data that it is also seen as convenient and non-stigmatising and therefore an opportunity to provide choice about how and where the service is delivered. This result is quite profound when coupled with other evidence of the effectiveness of videoconferencing (Chipps, Brysiewicz, & Mars, 2012; Hilty et al., 2013) and the potential to reach those who are geographically or socially isolated. Despite concerns that videoconferencing may have a negative impact on the therapeutic alliance, research suggests that this is not the case (Chipps et al., 2012; Hilty et al., 2013; Mohr, Cheung, Schueller, Brown, & Duan, 2013).

Finally, a body of literature is growing around the important role that peers can play in supporting mental health and wellbeing. This role can be formal – that is, as a part of a shared management, multidisciplinary team – as is the case with the peer-to-peer support network trial being conducted by Open Arms – Veterans and Families Counselling in Townsville, with early promising results. Peer support networks can also be informal, through social networks that allow people to connect and communicate. Increasingly defence- and veteran-specific forums are providing opportunities for online chats. However, they tend to be unmoderated (without facilitation and rules for engagement). Structured forums with peer facilitation, guided safety recommendations and principles of engagement are another area of support that could be explored further.

13.1 Areas for future research

This study examined the use of technology among Transitioned ADF members and 2015 Regular ADF members. While it provides some very interesting findings and baseline data, the most promising opportunities and areas requiring more exploration are:

- How can technologies be included in both face-to-face and online services and what education and training are required to ensure that digital tools and resources are used to support self-management and shared management for transitioned and currently serving ADF?

- How can a Defence and DVA suite of apps and e-tools and potentially data from wearable technology be used to facilitate early help seeking and to support continuous improvement in service provision?
- How can the transition from the military to civilian life be better supported through the use of technologies that promote self-management and promote and build peer-to-peer support networks?
- How can choice for the consumer be built into holistic models of health care? In particular, how can services make better use of videoconferencing, is there a role for biometrics and apps, and what digitised psycho-education material can be provided consistently across services to improve the use of digital resources to enhance care?
- How can continuous innovation and improvement be embedded into service provision so that new technologies can be rapidly and safely tested?
- How can technologies be used to promote self-management with an emphasis on sleep, stress management, diet and exercise, and what do models of shared management using technologies look like?

Glossary of terms

12-month prevalence. Meeting diagnostic criteria for a lifetime ICD-10 mental disorder and then having reported symptoms in the 12 months before the interview.

Affective disorders. Affective disorders is a class of mental health disorders. The Mental Health and Wellbeing Transition Study examined three types of affective disorder: depressive episodes, dysthymia and bipolar affective disorder. A key feature of these mental disorders is mood disturbance.

Alcohol Use Disorders Identification Test (AUDIT). Alcohol consumption and problem drinking were examined using the Alcohol Use Disorders Identification Test (Saunders et al., 1993), a brief self-report screening instrument developed by the World Health Organization. This instrument consists of 10 questions to examine the quantity and frequency of alcohol consumption, possible symptoms of dependence, and reactions or problems related to alcohol. The AUDIT is widely used in epidemiological and clinical practice for defining at-risk patterns of drinking.

Anxiety disorders. A class of mental health disorder. This class of disorder involves the experience of intense and debilitating anxiety. The anxiety disorders covered in the survey were panic attacks, panic disorder, social phobia, specific phobia, agoraphobia, generalised anxiety disorder, posttraumatic stress disorder and obsessive-compulsive disorder.

Australian Bureau of Statistics (ABS). Australia's national statistical agency, providing trusted official statistics on a wide range of economic, social, population and environmental matters of importance to Australia. To enable comparison of estimates in the Transitioned ADF with an Australian community population, direct standardisation was applied to estimates in the 2014 – 2015 ABS National Health Survey (NHS) data. The NHS is the most recent in a series of Australia-wide ABS health surveys, assessing various aspects of the health of Australians, including long-term health conditions, health risk factors and health service use.

Australian Defence Force (ADF). The ADF is constituted under the *Defence Act 1903* (Cth) and, together with the Department of Defence, is collectively known as Defence. Defence's mission is to defend Australia and its national interests. In fulfilling this mission, Defence serves the government of the day and is accountable to the Australian Parliament, which represents the Australian people to efficiently and effectively carry out the government's defence policy. The current program of research aims to examine the mental, physical and social health of serving and ex-serving ADF members, and their families. It builds on previous research to inform effective and evidence-based health service provision for contemporary service members and veterans.

Australian Institute of Health and Welfare (AIHW). Australia's national agency for health and welfare statistics and information. It was used in this Programme to develop a Study Roll by integrating contact information from various sources and databases.

Centre for Traumatic Stress Studies (CTSS). This centre at the University of Adelaide seeks to improve evidence-based practice by informing and applying scientific knowledge in the field of trauma, mental disorder and wellbeing in at-risk populations. The Programme was conducted by a consortium of Australia's leading research institutions, led by the CTSS and the Australian Institute of Family Studies.

Chain of command. A line of authority and responsibility along which orders are passed within a military unit and between different units.

Class of mental disorder. Mental disorders are grouped into classes of disorder that share common features. Three classes of mental disorders were included in the survey. These were affective disorders, anxiety disorders and alcohol disorders.

Composite International Diagnostic Interview (CIDI). The World Mental Health Survey Initiative version of the World Health Organization's Composite International Diagnostic Interview, version 3 (WMH-CIDI 3.0) (Kessler & Ustun, 2004) provides an assessment of mental disorders based on the definitions and criteria of two classification systems: the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) and the World Health Organization International Classification of Diseases, 10th revision (ICD-10) (World Health Organization, 1994). This instrument was utilised in phase 2 of the current research Programme.

Confidence interval (CI). This measurement gives an estimated range of values that is likely to include an unknown population parameter: the estimated range being calculated from a given set of sample data.

Department of Veterans' Affairs (DVA). The Department delivers government programs for war veterans, and members of the ADF and the Australian Federal Police and their dependants. In 2014, DVA, in collaboration with the Department of Defence, commissioned the Transition and Wellbeing Research Programme, one of the largest and most comprehensive military research projects undertaken in Australia.

Depressive episodes. Characteristic of a major depressive disorder, an episode requires that an individual has suffered from depressed mood lasting a minimum of two weeks, with associated symptoms or feelings of worthlessness, lack of appetite, difficulty with memory, reduction in energy, low self-esteem, concentration problems and suicidal thoughts. Depressive episodes can be mild, moderate or severe. All three are included under the same heading. Hierarchy rules were applied to depressive episodes, such that a person could not have met the criteria for either a hypomanic or manic episode.

Diagnostic criteria. The survey was designed to estimate the prevalence of common mental health disorders defined according to clinical diagnostic criteria, as directed by the International Classification of Diseases 10th Revision (ICD-10). Diagnostic criteria for a disorder usually involve specification of:

- the nature, number and combination of symptoms
- the period over which the symptoms have been continuously experienced
- the level of distress or impairment experienced
- the circumstances for exclusion of a diagnosis, such as it being due to a general medical condition or the symptoms being associated with another mental disorder.

DVA client. A term used when referring to DVA clients for the purpose of analyses.

In constructing the DVA dataset for the Military and Veteran Research Study Roll, DVA created an indicator for assessing confidence in the accuracy of veterans' address details, based on the level of DVA's interaction with each veteran. Each of the following groups were considered a DVA client:

- High – where a veteran is in receipt of a fortnightly payment (such as income support or compensation pension) from DVA, it was a sign of regular ongoing contact with the client and therefore DVA would have a high level of confidence that their address would be up to date and correct.
- Medium – where a veteran holds only a treatment card (i.e., does not also have an ongoing payment) there is a lower level of ongoing contact with the Department and therefore the level of confidence that DVA can assign to the accuracy of the client's address is lower.

- Low – not all veterans who have their illness/injury liability claim accepted as service-related by DVA automatically receive a treatment card or pension payment; however they would still be considered DVA clients.

For the purposes of this report, any individual in the study population who met the criteria above was flagged as a 'DVA Client'. Those with this flag were compared against those without this flag.

Ex-service organisation (ESO). Organisations that provide assistance to current and former ADF members. Services can include but are not necessarily limited to welfare support, help with DVA claims and employment programs and social support.

Generalised anxiety disorder (GAD). A generalised and persistent worry, anxiety or apprehension about everyday events and activities lasting a minimum of six months that is accompanied by anxiety symptoms. Other symptoms may include symptoms of tension, such as inability to relax and muscle tension, and other non-specific symptoms, such as irritability and difficulty in concentrating.

Generalised Anxiety Disorder 7-item Scale (GAD-7). A brief seven-item screening measure based on the *Diagnostic and Statistical Manual of Mental Disorders* – Fourth Edition (DSM-IV) criteria for generalised anxiety disorder. Originally validated for use in primary care, the GAD-7 performs well in detecting probable cases of the disorder, with a sensitivity of 89% and a specificity of 82%.

Gold Card. A DVA health card for all conditions. Gold Card holders are entitled to DVA funding for services for all clinically necessary healthcare needs and all health conditions, whether or not they are related to war service. The card holder may be a veteran or the widow/widower or dependant of a veteran. Only the person named on the card is covered.

Hypomanic episodes. Episodes that last at least four consecutive days and are considered abnormal to the individual. These episodes are characterised by increased activity, talkativeness, elevated mood, disrupted concentration, decreased need for sleep and disrupted judgment, manifesting as risk-taking (for example, mild spending sprees). In a subgroup of people, these disorders are particularly characterised by irritability. To meet criteria for the 'with hierarchy' version, the person cannot have met the criteria for an episode of mania.

Kessler Psychological Distress Scale (K10). A short 10-item screening questionnaire that yields a global measure of psychological distress based on symptoms of anxiety and depression experienced in the most recent four-week period. Items are scored from 1 to 5 and are summed to give a total score between 10 and 50. Various methods have been used to stratify the scores of the K10. The categories of low (10–15), moderate (16–21), high (22–29) and very high (30–50) that are used in this report are derived from the cut-offs of the K10 that were used in the 2007 Australian Bureau of Statistics National Survey of Mental Health and Wellbeing (Slade et al., 2009).

Lifetime prevalence. A prevalence that meets diagnostic criteria for a mental disorder at any point in the respondent's lifetime.

Mania. Similar to hypomania but more severe in nature. Lasting slightly longer (a minimum of a week), these episodes often lead to severe interference with personal functioning. In addition to the symptoms outlined under 'hypomania', mania is often associated with feelings of grandiosity, marked sexual indiscretions and racing thoughts.

Medical fitness. A status defined as:

- **Fit:** Those who are categorised as fully employable and deployable, or deployable with restrictions. Participants are classified as 'fit' if they fall into MEC 1 or 2 as described above, or are assigned a perturbed MEC value of 'fit'.

- **Unfit:** Those not fit for deployment, their original occupation and/or further service. This can include those undergoing rehabilitation or transitioning to alternative return to work arrangements or in the process of medically separating from the ADF. Participants were classified as 'unfit' if they fell into MEC 3 or 4 as described above OR were assigned a perturbed MEC value of Unfitu.

Medical discharge. The involuntary termination of the client's employment by the ADF on the grounds of permanent or at least long-term unfitness to serve, or unfitness for deployment to operational (war-like) service.

Mental disorders. Defined according to the detailed diagnostic criteria within the World Health Organization International Classification of Diseases. This publication reports data for ICD-10 criteria.

Mental Health Prevalence and Wellbeing Study (MHPWS). The 2010 study is part of the Military Health Outcomes Program (MilHOP), the first comprehensive investigation of the mental health of serving ADF members.

Military Health Outcomes Program (MilHOP). MilHOP detailed the prevalence of mental disorders among serving ADF members in 2010 as well as deployment-related health issues for those deployed to the Middle East Area of Operations. The Transition and Wellbeing Research Programme will address a number of gaps identified following MilHOP, including the mental health of Reservists, ex-serving members and ADF members in high-risk roles, as well as the trajectory of disorder and pathways to care for individuals previously identified with a mental disorder in 2010.

National Health and Medical Research Council (NHMRC). Australia's peak funding body for medical research. The NHMRC has funded previous investigations undertaken by the Centre for Traumatic Stress Studies.

National Health Survey (NHS). The 2014–15 National Health Survey is the most recent in a series of Australia-wide ABS health surveys, assessing various aspects of the health of Australians, including long-term health conditions, health risk factors, and health service use.

Optimal epidemiological cut-off. The value that brings the number of false positives (mistaken identifications of a disorder) and false negatives (missed identifications of a disorder) closest together, thereby counterbalancing these sources of error most accurately. Therefore, this cut-off would give the closest estimate to the true prevalence of a 30-day ICD-10 disorder as measured by the CIDI and should be used to monitor disorder trends.

Optimal screening cut-off. The value that maximises the sum of the sensitivity and specificity (the proportion of those with and without a disease who are correctly classified). This cut-off can be used to identify individuals who might need further care.

Panic attack. Sudden onset of extreme fear or anxiety, often accompanied by palpitations, chest pain, choking sensations, dizziness, and sometimes feelings of unreality, fear of dying, losing control or going mad.

Panic disorder. Recurrent panic attacks that are unpredictable in nature.

Patient Health Questionnaire-9 (PHQ-9). Self-reported depression was examined using the Patient Health Questionnaire – 9 (PHQ9). The nine items of the PHQ9 are scored from 0 to 3 and summed to give a total score between 0 and 27. The PHQ9 provides various levels of diagnostic severity with higher scores indicating higher levels of depression symptoms.

Posttraumatic stress disorder (PTSD). A stress reaction to an exceptionally threatening or traumatic event that would cause pervasive distress in almost anyone. Symptoms are categorised into three groups: re-experiencing memories or flashbacks, avoidance symptoms and either hyperarousal symptoms (increased arousal and sensitivity to cues) or inability to recall important parts of the experience.

The Posttraumatic Stress Disorder Checklist – civilian version (PCL-C). A 17-item self-report measure designed to assess the symptomatic criteria of PTSD according to the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition (DSM-IV). The 17 questions of the PCL-C are scored from 1 to 5 and are summed to give a total symptom severity score of between 17 and 85. An additional four items from the newly released PCL-5 were also included, giving researchers flexibility to also measure PTSD symptoms according to the most recent definitional criteria.

Prevalence of mental disorders. The proportion of people in a given population who meet diagnostic criteria for any mental disorder in a given time frame. (See also '12-month prevalence' and 'lifetime prevalence'.)

Probable mental disorder. Where probable rates of mental health disorder are presented, these are based on self-report epidemiological cut-offs.

Reason for discharge. The reason for transitioning out of the ADF. In the Programme, the reason for discharge was derived from responses on the self-report survey, and classified accordingly:

- **Medical discharge:** Involuntary termination of the client's employment by the ADF on the grounds of permanent or at least long-term unfitness to serve, or unfitness for deployment to operational (war-like) service
- **Other:** All other types of discharge including compulsory age retirement, resignation at own request, assessed as unsuitable for further training, end of fixed-period engagement, end of initial enlistment period or return of service obligation, end of limited-tenure appointment, not offered re-engagement, accepted voluntary redundancy, compassionate grounds, and non-voluntary administrative discharge.

Social phobia. The marked fear or avoidance of being the centre of attention or in situations where it is possible to behave in a humiliating or embarrassing way, accompanied by anxiety symptoms, as well as either blushing, fear of vomiting, or fear of defecation or micturition.

Specific phobia. The marked fear or avoidance of a specific object or situation such as animals, birds, insects, heights, thunder, flying, small enclosed spaces, sight of blood or injury, injections, dentists or hospitals, and accompanied by anxiety symptoms.

Stratification. Grouping outcomes by variables of interest. In Report 1 (*Mental Health Prevalence*), 12-month diagnosable mental disorder and self-reported suicidality were stratified by age, sex, rank, service, years of service in the Regular ADF, deployment status, transition status, years since transition, reason for transition and DVA client status.

Study Roll. Participants' contact details and demographic information were obtained via the creation of a study roll by the Australian Institute of Health and Welfare. This process involved integrating contact information from the following sources:

- Defence Personnel Management Key Solution database
- DVA client databases
- National Death Index
- ComSuper member database
- Military Health Outcomes Program (MilHOP) dataset.

Suicidal ideation. Serious thoughts about taking one's own life.

Suicidality. Suicidal ideation (serious thoughts about taking one's own life), suicide plans and attempts.

Subsyndromal disorder. Characterised by or exhibiting symptoms that are not severe enough for diagnosis as a clinically recognised syndrome.

Transitioned ADF/ADF members. ADF members who have left military service. For the purpose of the current study, this included all ADF members who transitioned from the Regular ADF between 2010 and 2014, including those who transitioned into the Active Reserve and Inactive Reserve.

Transitioned status. Transitioned ADF members were categorised into one of three groups, which broadly represented their level of continued association and contact with Defence and their potential access to support services provided by Defence:

- **Ex-serving:** A person who was a Regular ADF member before 2010, has since transitioned out of the ADF and is no longer engaged with Defence in a Reservist role. The individual is classified as discharged from Defence
- **Inactive Reservist:** A person who was a Regular ADF member before 2010, but has since transitioned into an Inactive Reservist role
- **Active Reservist:** A person who was a Regular ADF member before 2010, but has since transitioned into an Active Reservist role.

Two-phase design. A well-accepted epidemiological approach to investigating the prevalence of mental disorders. In the first phase, participants completed a screening questionnaire, which was generally economical in terms of time and resources. Based on the results of this screening and the demographic information provided, certain participants were selected for a more accurate but costly formal diagnostic interview.

Veterans' health cards. DVA, on behalf of the Australian Government, uses the health cards as a convenient method for veterans, war widows and their eligible dependants to access health and other care services. Arrangements are based on providing access to clinically appropriate treatment that is evidence-based. There are Gold, White and Orange health cards.

Weighting. Allowing for the inference of results for the entire population. Weighting involved allocating a representative value or 'weight' to the data for each responder, based on key variables. The weight indicated how many individuals in the entire population were represented by each responder. Weighting was applied to:

- correct for differential non-response
- adjust for any systematic biases in the responders (for example, oversampling of high scorers for the CIDI).

White Card. A DVA health card for specific conditions. A White Card entitles the holder to care and treatment for:

- injuries or conditions that are accepted as being caused by war or service-related
- malignant cancer, pulmonary tuberculosis, posttraumatic stress disorder, anxiety and/or depression, whether or not it was caused by war
- symptoms of unidentifiable conditions that arise within 15 years of service (other than peacetime service).

Services covered by a White Card are the same as those for a Gold Card, but must be for treatment of conditions that are accepted as being caused by war or service-related.

World Mental Health Survey Initiative Version of the World Health Organization Composite International Diagnostic Interview – version 3 (CIDI). The CIDI (Kessler & Ustun, 2004) provides an assessment of mental

disorders based on the definitions and criteria of two classification systems: the *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition (DSM-IV) and the International Statistical Classification of Diseases and Related Health Problems – 10th Revision (ICD-10) (World Health Organization, 1994). This instrument was used in phase 2 of the Programme.

Years since transition. To ascertain the number of years since transition from Regular Service, participants were asked to indicate what year they transitioned to Active Reserves, Inactive Reserves or were discharged out of the service (ex-serving). Options included: zero, one, two, three, four or five years.

Years of regular service. The following categories were used in the Mental Health and Wellbeing Transition Study to define the number of years of regular service: 3 months – 3.9 years, 4–7.9 years, 8–11.9 years, 12–15.9 years, 16–19.9 years and 20+ years.

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TRANSITION AND WELLBEING RESEARCH PROGRAMME

MENTAL HEALTH AND WELLBEING TRANSITION STUDY

Technology Use and Wellbeing

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Key findings

The *Technology Use and Wellbeing Report* is one of the first studies worldwide to investigate the use of the internet and new and emerging programs and technologies that support the wellbeing and mental health of serving and ex-serving military members.

This report is part of the Transition and Wellbeing Research Programme (Programme), which is the most comprehensive study undertaken in Australia on the impact of military service on the mental, physical and social health of serving and ex-serving ADF members and their families. The Programme is made up of three studies, with this report forming part of the Mental Health and Transition Study. The other two studies are Impact of Combat and Family Wellbeing.

Specifically, this report investigates technology and its use for physical and mental health programs, including implications for future health-service delivery in the ADF and veteran community. The study populations for this report are:

- ADF members who transitioned from the Regular ADF between 2010 and 2014 (including Ex-Serving, Active and Inactive Reservists)
- a random sample of Regular ADF members serving in 2015
- 2015 Regular ADF and Transitioned ADF members who participated in the 2010 Military Health Outcomes Program or MilHOP.

Comparisons are also made between the Transitioned and the 2015 Regular ADF and the broader Australian community using Young and Well National Survey data. These comparisons aimed to situate the Transitioned ADF in the context of the civilian population.

Building on the results of the first two Transition and Wellbeing Research Programme reports (Van Hooff et al., 2018a; Forbes et al., 2018) this *Technology Use and Wellbeing Report* found that:

- the Transitioned ADF and 2015 Regular ADF were high users of the internet
- they were also were high users of apps
- one third of them used wearable devices that enabled them to monitor and manage their health and wellbeing.

These findings suggest that further potential exists for the use of evidenced-based new and emerging technologies for the self-management of serving and ex-serving ADF members' wellbeing and mental health.

Further results are summarised in the key findings below. When reading these findings it is important to remember that references to the 'last 12 months' refer to the 12 months before the date of participation in the study, with all data collection having been undertaken between 1 June and 31 December 2015. Please refer to the glossary for definitions of key terms.

Demographic characteristics of the Transitioned ADF and 2015 Regular ADF

- More than half of Transitioned ADF members remained in the ADF as Reservists (55.8%). Of Transitioned ADF, 25.7% were Active Reservists.
- Just over one fifth of the Transitioned ADF were estimated to have been medically discharged.
- The most commonly reported reasons for transition were 'impact of service life on family' (10.2%), 'better employment prospects in civilian life' (7.2%), 'mental health problems' (6.5%) and 'physical health problems' (4.3%).
- Approximately 84% of the Transitioned ADF were either working or engaged in some purposeful activity, with 62.8% being employed. Just over 5.5% of the Transitioned ADF had retired.
- More than 43% of Transitioned ADF members reported accessing DVA-funded treatment through either a DVA White Card (39.4%) or DVA Gold Card (4.2%).
- Just over 40% of the Transitioned ADF and 36% of the 2015 Regular ADF reported having a diploma or university qualification.
- There were no significant differences in housing stability between the Transitioned ADF and the 2015 Regular ADF, with more than 93% estimated to have been in stable housing in the previous two months.
- Twice as many members of the Transitioned ADF were classified as medically unfit compared to the 2015 Regular ADF.

Internet use and attitudes to using the internet in Transitioned ADF and 2015 Regular ADF

Frequency, duration and timing of internet use

- Internet use among Transitioned ADF and 2015 Regular ADF was high, with over 95% using the internet at least every day.
- Approximately half of the Transitioned ADF and 2015 Regular ADF reported using the internet 1–2 hours daily, while approximately a quarter used it 3–4 hours daily.
- Use of the internet after 11 pm was common in one third of the Transitioned ADF and one quarter of the 2015 Regular ADF.

Attitudes to using the internet

- One in four Transitioned ADF and 2015 Regular ADF reported that they talked about different things with people online than face to face, and that they went online when going through a difficult time.
- One in five Transitioned ADF and 2015 Regular ADF reported that going online when going through a difficult time made them feel better.

Probable 30-day disorder and duration and timing of internet use

- Transitioned ADF and 2015 Regular ADF with a probable disorder spent more hours on the internet than those without a probable disorder.
- Among the Transitioned ADF, those with a probable disorder were significantly more likely to report using the internet after 11 pm compared to those without a probable disorder (45.1% vs 28.4%).

Probable 30-day disorder and attitudes to using the internet

- For the Transitioned ADF and Regular ADF, those with a probable disorder were significantly more likely than those without a probable disorder to report that it was easier to be themselves online, and they talked about private things when online.
- Transitioned ADF with a probable disorder were significantly more likely than those without a probable disorder to report that they talked about different things with people online, they went online more often when going through a difficult time, and when they are going through a difficult time and they went online it made them feel better.

Use of new and emerging technology in Transitioned ADF and 2015 Regular ADF

Use of apps and wearable devices

- Half of the Transitioned ADF and 2015 Regular ADF reported using new and emerging technologies. Of these, over 80% used apps, while almost a third used wearable devices.
- Of those who did not use new and emerging technologies, about three quarters did not use them because they had 'no need or interest', it was 'too expensive' or it was a 'privacy issue'.
- Of the Transitioned ADF and 2015 Regular ADF who used apps and wearable devices, just under half reported using them to improve their health and wellbeing.
- A quarter of the Transitioned ADF and 2015 Regular ADF who used apps and wearable devices for health and wellbeing used them to 'improve sleep'.

Probable 30-day disorder and use of new and emerging technology

Among those who reported using new or emerging technologies for the purpose of improving health and wellbeing:

- 20.9% of Transitioned ADF and 7.8% of 2015 Regular ADF met the criteria for a probable disorder.
- Transitioned ADF with a probable disorder were significantly more likely to use new or emerging technologies to improve their mood and less likely to use them to improve their fitness than those without a probable disorder.

Among those who reported using new or emerging technologies for reasons other than to improve health and wellbeing:

- 25.2% of the Transitioned ADF and 14.1% of the 2015 Regular ADF met the criteria for a probable disorder.
- Transitioned ADF with a probable disorder were significantly less likely to use them for fun and recreation compared to Transitioned ADF with no probable disorder.

Use of the internet to seek mental health information or help (for self or other)

Use of the internet to seek help or information for, or to manage, mental health issues

- One in four Transitioned ADF and one in six 2015 Regular ADF used the internet to seek help or information for, or to manage, mental health issues.
- A higher proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder reported using the internet to seek help or information or to manage mental health issues than those without a probable disorder.
- Among those with a probable 30-day disorder, Transitioned ADF were more likely than 2015 Regular ADF to report using the internet to seek information on mental health issues.

Suitability, usefulness and level of satisfaction with using the internet to seek help or information, or to manage mental health

- The majority of Transitioned ADF and 2015 Regular ADF who used the internet to seek information about mental health reported that they received the kind of information they required.
- The majority of Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information or to manage mental health reported the internet helped them either a little or a lot.
- Almost 18% of Transitioned ADF and 13.2% of 2015 Regular ADF reported being dissatisfied with the information they received.

Use of the internet for one's own mental health

Frequency and timing of seeking help or information about their *own* mental health

- Among those who reported using the internet to seek help or information or manage mental health issues, almost 30% of the Transitioned ADF (29.1%) and 19.8% of the 2015 Regular ADF used the internet to seek help or access information about their own mental health at least once per month.
- While frequent use (at least once a month) was more common among Transitioned ADF with a probable disorder than those without (42.5% and 18.4%), the majority of the Transitioned ADF and 2015 Regular ADF used the internet infrequently (less than once per month) for their own mental health (52.3% and 68.8%), if at all (3.7% and 2.1%).

Talking online to peers, family or friends about one's *own* mental health

- Almost one in three Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information or manage mental health issues reported talking online to a peer, family member or friend about their *own* mental health (33.4% and 30.6% respectively), with the majority finding this helpful (63.3% and 75.2% respectively).
- Approximately one third of the Transitioned ADF and 2015 Regular ADF with a probable disorder who used the internet to manage their mental health reported talking online with a peer, family member or friend about their mental health (37.2% and 37.0% respectively).
- In general, younger Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information or manage mental health issues were most likely to talk online to a peer, family member or friend, with nearly half of those aged 18–27 endorsing this.

Talking online to other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) about one's *own* mental health

- Just under 20% (17.4%) of the Transitioned ADF and just over 5% of the 2015 Regular ADF (6.2%) with a probable disorder and who used the internet to manage mental health, reported talking to others on the internet about their own mental health.
- Among the Transitioned ADF, a greater proportion of those with a probable disorder than those without reported talking to others on the internet about their own mental health (17.4% vs 8.4%).
- Among the 2015 Regular ADF, there was little difference in the proportion of those with a probable disorder compared to those without a probable disorder who reported talking to others on the internet about their own mental health (6.2% vs 8.1%).

Talking online to a psychologist or other mental health professional about one's *own* mental health

- Almost one in 10 Transitioned ADF and 2015 Regular ADF who used the internet to manage mental health reported talking online to a psychologist or other mental health professional about their mental health (7.9% and 9.5%), with the majority finding this helpful (65.3% and 59.7%).
- Among those who used the internet to manage mental health who had a probable 30-day disorder, an estimated 7.2% of Transitioned ADF and an estimated 3.7% of 2015 Regular ADF reported using the internet to talk to a psychologist or other health professional about their own mental health.
- Transitioned ADF in the 18–27 age band (9.8%) and 2015 Regular ADF aged 28–37 (17.1%) were most likely to talk online to a psychologist or other mental health professional about their own mental health, followed by those aged 58+ (13.4%).

Barriers to talking online about one's own mental health in the Transitioned ADF and 2015 Regular ADF

Barriers to talking online about one's own mental health

- Among the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information or manage mental health issues, but reported they did NOT talk to someone online about their own mental health, the main barriers were a preference for face-to-face contact (59.0% and 70.2% respectively), concerns about lack of privacy and confidentiality (50.4% and 63.3% respectively) and concerns about lack of website security (41.2% and 45.7%). Concerns about the validity of information online was also a factor (36.5% and 35.8%).
- Transitioned ADF were significantly less likely than 2015 Regular ADF to report concerns about a lack of privacy/confidentiality as a barrier to talking about their mental health issues online.
- Transitioned ADF were significantly more likely than 2015 Regular ADF to report unaffordable technology as a barrier preventing them from talking about their mental health issues online.

Mental health status and the use of mental health websites by Transitioned ADF and 2015 Regular ADF

Use of the internet to seek help or information for, or manage mental health issues

- Overall, about 40% of the Transitioned ADF and 20–40% of the 2015 Regular ADF with a 30-day probable disorder (including PTSD, anxiety/depression and alcohol use) and /or 12-month suicidal ideation and behaviour used the internet to seek help or information for or manage mental health issues.
- Of those with subsyndromal disorder, approximately 30% of the Transitioned ADF and 16–30% of the 2015 Regular ADF used the internet to seek help or information for or manage mental health issues.
- Internet use to seek help, information or manage mental health issues was generally higher in those with more mental health symptoms.
- There was no association between self-reported stigma and perceived barriers to care and use of the internet to seek help, information or to manage mental health issues among Transitioned ADF and 2015 Regular ADF members with probable PTSD, alcohol disorder or 12-month suicidal ideation and behaviour.

- Among those with probable anxiety/depression or depressive episodes, Transitioned ADF reporting at least one mental health stigma or at least one perceived barrier were more likely to use the internet to seek help or information or manage mental health issues than those with no stigma or barriers.
- Among those with probable anxiety/depression or probable generalised anxiety disorder and no barriers, Transitioned ADF members (30.5%) were more likely to use the internet to seek help or information for or manage mental health issues than the 2015 Regular ADF (8.6%).

Technology use and psychological distress in Transitioned ADF members aged 18–25: Comparison with young adults aged 18–25 in the Australian community

Frequency and duration of internet use

- A significantly greater proportion of Transitioned ADF young adults reported using the internet every day or almost every day (98.5%) compared to the Young and Well cohort (91.2%).
- Transitioned ADF young adults (27.2%) were significantly more likely to report that they used the internet for 5 to 9 hours on a week day compared to the Young and Well cohort (15.9%).

Internet use after 11 pm

- Transitioned ADF young adults (46.8%) were significantly less likely to use the internet after 11 pm compared to the Young and Well Cohort (66.0%).

Use of internet for mental health

- The Transitioned ADF young adults (27.4%) were significantly less likely to report using the internet to seek help for or manage mental health issues than the Young and Well Cohort (41.5%).
- Of those who indicated they had used the internet for mental health issues, the Transitioned ADF young adults were:
  - significantly less likely to find it helpful for getting the kind of information they needed in relation to mental health compared to the Young and Well cohort (very helpful: 7.7% vs 41.2%; not at all helpful: 15.4% vs 1.2%).
  - significantly less likely to report it helped them deal more effectively with mental health problems compared to the Young and Well cohort (helped a little 30.9% vs 53.9%; helped a lot: 6.4% vs 26.2%).

- significantly more likely to endorse being 'somewhat dissatisfied' (20.5% vs 4.2%) and significantly less likely to endorse being 'very satisfied' (7.1% vs 20.7%) with the information they received on the internet in relation to mental health compared to the Young and Well cohort.

Psychological distress and internet use

- Levels of psychological distress were significantly higher in the Transitioned ADF young adults than in young adults in the Australian community (18.6% vs 5.4%).
- Of those with moderate/high levels of psychological distress:
  - the Transitioned ADF young adults reported using the internet for a longer duration (5–10+ hours) (38.7%) compared to the Young and Well cohort (20.1%).
  - the Transitioned ADF young adults (50.1%) were significantly less likely to use the internet after 11 pm compared to the Young and Well cohort (70.7%).

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Acknowledgements

Study participants

First and foremost, we acknowledge all current and ex-serving ADF personnel who generously gave their time to complete the study. This research was only made possible by their efforts and commitment to the study. Other key individuals include:

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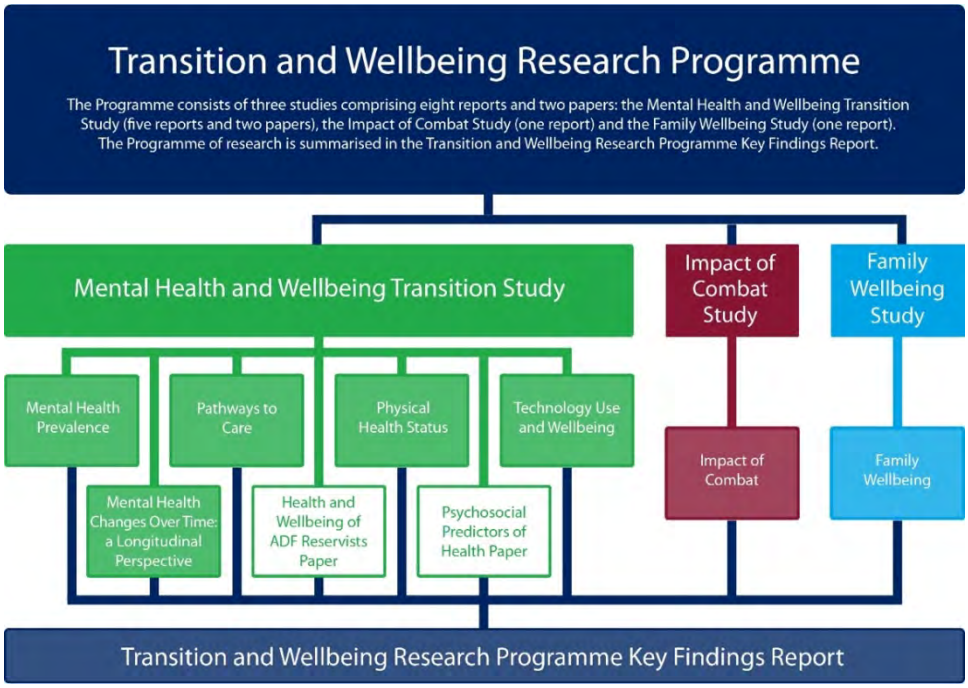
Other key organisation

Australia Post

Transition and Wellbeing Research Programme – an overview



The Transition and Wellbeing Research Programme (Programme) is the most comprehensive study undertaken in Australia that examines the impact of military service on the mental, physical and social health of:

- serving and ex-serving Australian Defence Force (ADF) members including those who have been deployed in contemporary conflicts, and
- their families.

This research further extends and builds on the findings of the world-leading research conducted with current serving members of the ADF in the 2010 Military Health Outcomes Program (MilHOP).

This current research, conducted in 2015, arises from the collaborative partnership between the Department of Veterans' Affairs (DVA) and Department of Defence (Defence). It aims to implement the Government's goal of ensuring that current and

future policy, programs and services are responsive to the current and emerging health and wellbeing needs of serving and ex-serving ADF members and their families before, during and after transition from military life.

Ten objectives were developed to guide the Programme. The objectives were realised through three studies comprising eight reports: the Mental Health and Wellbeing Transition Study (five reports and two papers), the Impact of Combat Study (one report), the Family Wellbeing Study (one report) and the *Transition and Wellbeing Research Programme Key Findings Report*, which summarises the research, as the diagram above shows. The table below shows which reports delivered on the objectives. This present report, *Technology Use and Wellbeing*, addresses the fifth research objective, which was to investigate technology and its utility for health and mental health programmes, including implications for future health service delivery.

Programme objectives	Corresponding reports and papers
1. Determine the prevalence of mental disorders among ADF members who have transitioned from Regular ADF service between 2010 and 2014. 2. Examine self-reported mental health status of Transitioned ADF and the 2015 Regular ADF.	*Mental Health Prevalence Report*
3. Assess pathways to care for Transitioned ADF and the 2015 Regular ADF, including those with a probable 30-day mental disorder.	*Pathways to Care Report*
4. Examine the physical health status of Transitioned ADF and the 2015 Regular ADF.	*Physical Health Status Report*
5. Investigate technology and its utility for health and mental health programmes, including implications for future health service delivery.	*Technology Use and Wellbeing Report*
6. Conduct predictive modelling of the trajectory of mental health symptoms/disorder of Transitioned ADF and the 2015 Regular ADF, removing the need to rely on estimated rates.	*Mental Health Changes Over Time: a Longitudinal Perspective Report*
7. Investigate the mental health and wellbeing of currently serving 2015 Ab-initio Reservists.	*The Health and Wellbeing of ADF Reservists Paper*
8. Examine the factors that contribute to the wellbeing of Transitioned ADF and the 2015 Regular ADF.	*Psychosocial Predictors of Health Paper*
9. Follow up on the mental, physical and neurocognitive health and wellbeing of participants who deployed to the Middle East Area of Operations between 2010 and 2012.	*Impact of Combat Report*
10. Investigate the impact of ADF service on the health and wellbeing of the families of Transitioned ADF and the 2015 Regular ADF.	*Family Wellbeing Study*
All objectives	*Transition and Wellbeing Research Programme Key Findings Report*

Two eminent Australian research institutions, one specialising in trauma and the other in families, have led the research programme. The Centre for Traumatic Stress Studies at the University of Adelaide is conducting the Mental Health and Wellbeing Transition Study and the Impact of Combat Study, and the Australian Institute of Family Studies is conducting the Family and Wellbeing Study.

Their research expertise is enhanced through partner institutions from Monash University, the University of New South Wales, Phoenix Australia Centre for

Posttraumatic Mental Health and, until June 2016, the Young and Well Cooperative Research Centre, the work of which is being continued at the University of Sydney.

Through surveys and interviews, the researchers engaged with a range of ex-serving and serving ADF members including:

- ADF members who transitioned from the Regular ADF between 2010 and 2014 (including Ex-Serving, Active and Inactive Reservists)
- a random sample of Regular ADF members serving in 2015
- a sample of Ab-initio Reservists serving in 2015 (who have never been full-time ADF members)
- 2015 Regular ADF and Transitioned ADF members who participated in MilHOP
- family members nominated by the above.

DVA and Defence thank the current and ex-serving ADF members and their families who participated in this research, for sharing your experiences and insights. Your efforts will help inform and assist the ways you, your colleagues, friends and families, as well as those who come after you, can best be supported during and after your military career.

1 Introduction

1.1 Background to the current report

The Australian Government has prioritised technology with the establishment of a Digital Transformation Agency responsible for cross-portfolio collaboration, while the Australian Digital Health Agency is tasked with delivering the My Health Record. In 2017, Australia's National Digital Health Strategy – Safe, Seamless and Secure was approved by the Council of Australian Governments (COAG) Health Council, putting the consumer at the centre of their health care. It aims to provide choice, control and transparency (Australian Government Digital Health Agency, 2018a; Burns, 2018). Similarly, the Defence Mental Health and Wellbeing Strategy 2018–2023 and the 2016 Department of Veterans Affairs' Strategy position the person at the centre of system reform, with considerable investment to date in technology solutions made by Defence and DVA (see section 1.2 for more detail).

These advances in digital health solutions in mental health care create unique opportunities to improve services available for military personnel. The *Mental Health Prevalence Report* (Van Hooff et al., 2018a) and the *Pathways to Care Report* (Forbes et al. 2018) have provided an interesting picture of help seeking and technology use and tell us that:

- While the majority of Transitioned ADF and 2015 Regular ADF access care, challenges still exist in relation to the time it takes to seek care, stigma and perceived barriers to care and continuity of care, suggesting that there is still unmet mental health need.
- Among those concerned with their mental health who had a probable disorder and did not seek help, almost 70% of the Transitioned ADF and 60% of the 2015 Regular ADF reported that they would prefer to self-manage, with 60% believing that they could still function.
- Approximately 30% of Transitioned ADF and 2015 Regular ADF were happy to receive their services via the internet.
- Approximately 20% of the Transitioned ADF and 11% of 2015 Regular ADF used other internet resources in the last 12 months to inform or assess their mental health. Social media was the most common internet resource, with 18.1% of Transitioned ADF and 9.9% of 2015 Regular ADF using it, and approximately 55% of them finding it helpful.

- The Transitioned ADF and 2015 Regular ADF were more likely to access face-to-face and online services that are tailored for the military.
- Despite significant effort across Defence and DVA to develop online resources and apps, such as High Res and PTSD Coach, utilisation was relatively low.

These reports are the first of their kind to provide baseline data on how recently transitioned ADF members used technology compared to those serving in the Regular ADF in 2015 and the implications this has for the mental health and wellbeing of Australian military personnel.

In this report we specifically explore the context of military life and the transition to civilian life and how technology can impact on serving and ex-serving communities. The report explores how military populations interact with health care in the context of self-management and early help seeking and shared care. Where available, we critique the literature for both current and ex-serving military populations that highlights some of the opportunities, challenges and ongoing research questions that require further investigation.

In 2013, The Young and Well Cooperative Research Centre published results from the 'Young and Well National Survey', and provided significant insight into the state of young men's overall wellbeing, their mental health, and their use of technology in Australia (Burns et al., 2013). Despite reporting generally good health, 42% of young men aged 16 to 25 reported moderate to very high psychological distress. When they were asked about the use of new and emerging technologies it was found:

- Young men with moderate to high psychological distress spent longer on the internet than those with low distress.
- Thirteen per cent of young men with moderate to very high levels of distress spent more than 10 hours per day on the internet.
- Thirty-three per cent of young men with moderate to very high levels of psychological distress accessed the internet after 11 pm six to seven times a week.
- Young men who reported higher levels of psychological distress were more likely to access health information, listen to music and play games with others.
- Despite moderate to high levels of psychological distress, online or email counselling was rare.

- Young men with moderate to high levels of psychological distress were more likely to:
  - talk about problems on the internet, with 60% finding it helpful
  - use the internet to find information for a mental health, alcohol or substance misuse problem
  - recommend the internet if a friend were in need of similar information (78%).
- Ninety-five per cent were somewhat to very satisfied with the information they received.

Because of the large number of young men in the military, the mental health challenges associated with transition for young men under the age of 30 and the potential opportunities that technology provides in supporting early help seeking, a key purpose in designing the Transition and Wellbeing Research Programme has been to see how true the Young and Well results are for Australian military personnel. However, the limitations of comparing data captured at different times should be noted, given the pace at which technology uptake occurs.

1.2 The DVA and Defence healthcare contexts

As described in the *Pathways to Care Report* (Forbes et al. 2018), current serving ADF members and Transitioned ADF members have access to mental health treatment through a general practitioner model of care. Joint Health Command provides health and mental health services for current serving ADF members while DVA is responsible for the needs of those who have served. Specialist mental health services or inpatient care are accessed via referral by a GP or through Open Arms – Veterans and Families Counselling (formerly the Veterans and Veterans Families Counselling Service, VVCS). Open Arms is a nationally accredited (against the National Standards for Mental Health Services), military-aware, mental health service.

In 2009, Professor David Dunt was asked to conduct an Independent review, titled 'Review of Mental Health Care in the Australian Defence Force and Transition Through Discharge' (Dunt, 2009). He argued that the establishment of the Mental Health Strategy by the ADF in 2002 was far-sighted and compared favourably with mental health strategies in other Australian workplaces. Having made this fundamental point he then considered the problems with and barriers to the full success of the Mental Health Strategy and made several recommendations which were adopted by Defence and DVA and prioritised the mental health and wellbeing of serving and ex-serving personnel. More recently, the adoption of e-mental health has been prioritised as a key pillar of both the ADF and DVA Mental Health Strategies (Australian Government

Department of Veterans' Affairs, 2016; Australian Government Department of Veterans' Affairs, 2013; Australian Government Department of Defence, 2017).

Currently Defence and DVA use electronic health record systems, with the introduction of the Defence e-Health System (DeHS) in 2014 and, at Open Arms, the Veteran Electronic Record Application (VERA). While beyond the scope of this report, a systematic review and meta-analysis of 47 articles conducted by Campanella et al. (2015) showed several benefits of electronic health records, including higher guideline adherence, a lower number of medication errors and adverse drug effects and a reduction in time spent on administration, including inefficient billing, duplication of effort and record keeping.

In addition to DeHS and VERA, significant investment has been made by Defence and the DVA, including Open Arms, in developing a suite of online tools and resources. These included:

- Fighting Fit, developed by Joint Health Command, which is a health and wellbeing portal with direct links to services, including the 1800IMSICK number and mental health services (http://www.defence.gov.au/Health/HealthPortal/)
- Engage, developed by Defence as an online portal that current, transitioning and former ADF members, their families, and/or those involved in their support can use to locate support service in the community (https://engage.forcenet.gov.au/)
- Defence Community Organisation programs and services to help Defence families manage military life, including a toll-free number and website (http://www.defence.gov.au/DCO/)
- At Ease, a suite of resilience and strength-based resources for serving and ex-serving ADF members, developed by DVA (http://at-ease.dva.gov.au/) in consultation with Defence, which includes:
  - High Res (https://at-ease.dva.gov.au/highres), a website supported by an app, designed to create a toolbox to manage stress, build resilience and optimise performance, including making an action plan
  - Operation Life, an app to support the management of suicidal thoughts, to be used with a clinician
  - PTSD Coach Australia, designed as an educational tool with practical approaches to the management of symptoms that commonly occur after trauma

  - ON TRACK with The Right Mix, a website and app (https://www.therightmix.gov.au/) that help with the management of alcohol consumption

- the Open Arms website, (https://www.openarms.gov.au/about/vvcs-now-open-arms-veterans-families-counselling) including, digital content and a toll-free number

- a variety of psycho-educational materials, including fact sheets, videos and booklets that are increasingly being promoted through social media channels such as Twitter, Facebook and Linked In.

Work has also been done recently to link these resources to the national digital Mental Health Portal maintained by the Department of Health, or the 'Head to Health' site, which includes a veteran-specific section (https://headtohealth.gov.au/supporting-yourself/support-for/veterans).

1.3 The use of technology

The Australian Bureau of Statistics (ABS) reported that there were around 13.5 million internet subscribers at the beginning of 2017 – a 4.7% increase on the previous year. In 2016–17, 87% of Australians were internet users (persons aged 15 years and over who accessed the internet in the last three months). Australians aged 15 to 17 years were the group with the highest proportion of internet users (98%) while the older age group (65 years and over) had the lowest proportion of internet users (55%). The three most popular online activities were entertainment, social networking and banking (all 80%). The proportion of Australian internet users accessing the internet for health services or health research increased from 22% of internet users in 2014–15 to 46% in 2016–17 (Australian Bureau of Statistics, 2018).

While considerable information is available about the use of technology in civilian populations, less is known about the use of technologies by military populations. A US study conducted by Edwards-Stewart (2016) explored the technology use of 1101 active duty service members and 45 behavioural health care providers at a large military installation. Compared with providers, service members reported higher rates of smart phone ownership (89% versus 56%), were more likely to own Android smart phones than iPhones, and spent more time gaming. Both groups spent a comparable amount of time using social media. With the exception of gaming, however, differences between service members and providers were not statistically significant when demographics were matched and controlled. Among service members, younger respondents (18–34) were statistically more likely than older respondents (35–58+) to own smart phones, spend time gaming, and engage in social media. In a survey of 331 active army service members in the US, rates of personal technology use by service

members at home across all popular electronic media were high. Soldiers at home resembled civilians in their use of popular technologies. Some technologies, including the internet, gaming and TV, were widespread on deployment. Others, most notably the use of mobile phones, were more restricted by availability, connectivity, opportunity and military regulation in the warzone (Bush, Bosmajian, Fairall, McCann & Ciulla, 2011).

Whealin and colleagues (2016) conducted a study of how Iraq, Afghanistan and other veterans with posttraumatic stress disorder (PTSD) and comorbid chronic medical conditions (CMCs) used technology to self-manage their needs and identify technologies that they felt would empower them to manage their health care (Whealin et al., 2016; Whealin et al., 2017; Whealin et al., 2015). Overall, 119 veterans with PTSD participated in the study, which included a survey about preferences related to the use of technology followed by two focus groups to explore how veterans with PTSD used technology to support their complex healthcare needs. Participants in this study were older, with a mean age of 64, 85% were male, 72% were white, and 63% had an annual household income of less than US$50,000. Of this sample, 45% used health-related technology one to three times per month and 21% used technology less than once per month. Veterans reported using technology most often to search for health information (79%), communicate with providers (71%) and track medications (65%). Five major themes emerged that describe how technology influences veterans with PTSD and comorbid CMCs: (1) interactions with social support, (2) condition management, (3) access to and communication with providers, (4) information access, and (5) coordination of care (Whealin et al., 2016).

In further work, 47 ethnically and racially diverse US veterans residing in the rural Pacific Islands participated in a study that explored whether they would find the delivery of evidence-based treatment for PTSD via health tablet devices useful and helpful (Whealin et al., 2017). Clinicians located in a central urban location delivered cognitive processing therapy for PTSD directly into patients' homes via a tablet device and secure wi-fi connection. Ratings on measures of home health comfort, satisfaction with care and usability were uniformly positive. Veterans were equally open to receiving mental health services at home or in the clinic. In the case of services for a physical problem, however, veterans preferred in-clinic care. Following treatment, veterans' attitudinal scores increased on items such as ‘There is enough therapist contact in home health interventions.’ However, a small portion of veterans (7%) reported having technical or privacy concerns. The authors concluded that the provision of evidence-based PTSD treatment directly into the patients' homes proved feasible and was well received by the large majority of rural ethnically/racially diverse veterans (Whealin et al., 2017).

In a study that sought to understand willingness to use e-mental health among a diverse group of veterans residing in Hawaii, mailed surveys were completed by 600 Operation Iraqi Freedom/Operation Enduring Freedom veterans and National Guard members. Results suggested that overall willingness to use e-mental health ranged from 32.2% to 56.7% depending on modality type. Importantly, veterans who screened positive for PTSD were significantly less likely to report willingness to use each e-mental health modality than their peers without PTSD, despite their greater desire for mental health services. These results suggest that, despite solutions to logistical barriers afforded by e-mental health services, certain barriers to mental health care may persist, especially among veterans who screen positive for PTSD (Whealin et al., 2015).

In the Australian context, results from the *Pathways to Care Report* showed that, while overall technology use is high among both Transitioned ADF and 2015 Regular ADF (with more than 95% using the internet at least every day), the proportion of respondents using any health website was 30.1% for Transitioned ADF and 25.0% for Regular ADF (Forbes et al. 2018).

1.4 The use of technology to support mental health and wellbeing

As illustrated in the above sections, there is a considerable opportunity to explore how technologies can be used to support the mental health and wellbeing of military personnel. In the Transition and Wellbeing Research Programme we explore the use of technologies in the context of preferences, barriers and stigmas to care and the types of new and emerging technologies that Transitioned ADF and 2015 Regular ADF use. These different approaches and the current evidence for their use are discussed below.

1.4.1 Telehealth

The concept of telehealth as 'the use of telecommunication techniques for the purpose of providing telemedicine, medical education, and health education over a distance' is well embedded in the Australian healthcare system (Australian Government Department of Health and Ageing, 2012). Telehealth consultations, conducted by telephone or videoconferencing, have traditionally been delivered in clinical settings but are increasingly gaining support in relation to home-based implementation (Gros et al., 2011). Randomised controlled clinical trials have found comparable treatment outcomes for patients who received treatment via videoconference compared to those receiving in-person delivery (Chipps, Brysiewicz, & Mars, 2012; Hilty et al., 2013), with comparable results for complex mental health conditions, including PTSD (Gros et al., 2011; Strachan et al., 2012).

Telehealth focused specifically on mental health can encompass a range of services, including psychological and neuropsychological assessment and diagnosis. Diagnoses

can be made reliably for children, adolescents and adults, and a wide range of assessment scales have been shown to be reliable and valid when administered via synchronous telehealth systems. Telehealth in the provision of both psychological and psychiatric services has demonstrated feasibility and acceptability across populations, with enhancement of care through telehealth observed in subgroups of users (Chipps et al., 2012).

International reviews of the literature provide strong evidence for the use of videoconferencing for evaluation and treatment of a wide range of mental health concerns in various populations (Chipps et al., 2012; Hilty et al., 2013; Mohr, Cheung, Schueller, Brown, & Duan, 2013). In treatment this can include care plan development, medication management, psychological treatment, general guidance, psycho-education and referral, and management of psychiatric emergencies. When appropriate to aid in medication management, mental health consultations can be conducted in conjunction with a local general practitioner (Gros et al., 2011).

Notably, satisfaction and the quality of care using videoconference-delivered treatment have generally been on par with face-to-face treatment (Gros et al., 2011). For populations that are reluctant to seek help, such as college students, teleconferencing can be an effective means of outreach (Haas et al., 2008). Evidence exists for the feasibility, reliability, and validity of asynchronous telehealth, whereby video and patient histories are uploaded for review by a remote psychiatrist who provides evaluation and recommendations to the primary care provider managing the patient's care (Odor et al., 2011). Finally, there is support for therapy delivered entirely via telephone and there are numerous examples of programs that combine computer-guided interventions over the telephone (Mohr et al., 2013).

In military populations, the feasibility of telehealth has been demonstrated in the United States of America (Gros et al., 2011) and with active-duty military populations in Australia (Wallace & Rayner, 2013). Having repeatedly demonstrated viability and acceptability, telehealth is increasingly being utilised by population management healthcare systems around the world to extend quality care to areas where it would otherwise not be available. Provision of mental health services to ethnically and culturally diverse populations can be a particular challenge. Telehealth can help to overcome language and cultural barriers by enabling provision of culturally sensitive services in a person's native language. In the US, cultural adaptations of remote monitoring systems for veterans with PTSD have been successfully deployed with Native Americans in remote locations (Brooks, Manson, Bair, Dailey, & Shore, 2012). Likewise, telehealth has been shown to be a feasible means of addressing the mental health needs of Indigenous people in Australia (Alexander & Lattanzio, 2009).

In a US qualitative study in which 40 key leadership and clinical stakeholders at Veterans Affairs medical centres and associated outpatient clinics were interviewed, telehealth was perceived to increase access to mental health care, including same-gender care and access to providers with specialised training, especially for rural women and those with other limiting circumstances. Respondents saw women veterans as being particularly poised to benefit from telehealth, owing to responsibilities associated with childcare, spousal care and elder caregiving. Interviewees expressed enthusiasm for the potential of telehealth and were eager to expand services, including women-only mental health groups. The authors suggested that these findings could help to inform gender-tailored expansion of telehealth within and outside Veterans Affairs (Moreau et al., 2018).

1.4.2 Websites and telephone helplines

A rapid review conducted by Lal & Adair (2014) of 115 e-mental health articles identified key strengths and concerns relating to e-mental health which can impact integration to service systems and have relevance for transitioned and current serving defence personnel. Strengths included improved accessibility, reduced costs, flexibility, interactivity and the potential to reach populations at greatest risk, including those living in regional, rural and remote locations, people living with a disability or chronic health condition and those experiencing stigma. Concerns that need to be considered include medical, legal and ethical issues, a lack of quality control or standards, a reluctance to use technology by healthcare professionals and worries by healthcare professionals that conventional services would be completely replaced (Lal & Adair, 2014).

Despite these concerns, there is good evidence to support the use of technologies for promotion, prevention, early intervention and treatment (Burns, Liacos, & Green, 2015), demonstrating that technologies can be used effectively in improving mental health and wellbeing (Cuijpers, Van Straten, & Andersson, 2008; Griffiths, Farrer, & Christensen, 2010). More recently, multimodal e-mental health interventions are being designed to enhance adherence and outcomes for depression. The interventions include a combination of a website, self-monitoring and feedback, personal email support from a professional and brief telephone support. The initial outcomes have been mixed, with some trials showing limited additional advantages of telephone support (Farrer et al., 2013). Other studies, however, showed significantly lower attrition rates as a result of integrating web-based interventions with telephone support (as compared with either web-based studies or trials of face-to-face interventions), and depression outcomes were significantly better (Mohr et al., 2013).

In the military context, ‘afterdeployment’ was developed as a resource for US soldiers and their families returning from Iraq and Afghanistan and as a tool for healthcare professionals supporting veterans. The website is organised into 18 topic areas,

including posttraumatic stress and other symptoms commonly experienced by soldiers returning home. Associated assessments, workshops, videos, exercises and additional resources are provided in relation to each of the topics. These resources provide both educational material and behaviour-change tools based on the principles of cognitive behavioural therapy (CBT). Users can access any of the materials at any time and the site offers no set course. Although intended for US soldiers, the website is open to the public (Bush et al., 2011; Ruzek et al., 2011; Ruzek et al., 2012).

Open Arms – Veterans and Families Counselling is a mental health service for serving and ex-serving personnel and their families funded by DVA. It provides face-to-face and outreach services but also has a free 24/7 telephone counselling service coupled with community webinars and online communities via Facebook, Twitter and LinkedIn. It promotes the use of both Defence and DVA resources through online linkage to the Engage website, At Ease resources and apps and e-tools. Similarly, Defence has multi-modal systems of delivery for its health information, ranging from online portals to apps and e-tools.

Data summarised in the *Pathways to Care Report* indicated that approximately one quarter of Transitioned ADF and 2015 Regular ADF personnel used websites to inform or assess their mental health and were most likely to access websites designed by DVA or Defence (Forbes et al. 2018). While satisfaction with the Defence and DVA websites was at reasonable levels, the proportions accessing them were low. About 10% of both Transitioned and 2015 Regular ADF members used a veteran or military helpline, and these rates doubled for those with a probable current mental disorder.

Online Cognitive Behaviour Therapy

In 2014, a rapid review was conducted and a paper was prepared for the Mental Health Commission of NSW to support the development of the Strategic Plan for Mental Health in NSW 2014 – 2024. This paper reviewed the evidence relating to 'Strategies for adopting and strengthening e-mental health' (Mental Health Commission of New South Wales, 2014). The research collated in this paper clearly shows that, at a population and an individual level, either self-directed or with the support of a therapist, online cognitive behavioural therapy (CBT) can promote better mental health and deliver enhanced mental health care (Christensen & Petrie, 2013; Griffiths, 2013; Proudfoot, 2013).

Strong evidence exists for programs such as MoodGym, Anxiety Online, This Way Up, e-Couch and a variety of other computerised CBT (cCBT) programs targeting specific conditions such as depression, anxiety, drug and alcohol problems and PTSD. In an effort to coordinate online resources, the Beacon Portal collates online behavioural interventions across more than 40 conditions, including mental and physical conditions, and provides a free guide to the content and effectiveness of online

behavioural interventions, mobile apps and internet support groups worldwide. Developed and maintained by the Australian National University, Beacon systematically reviews the scientific evidence underpinning every application according to best practice principles and uses a rating system to provide users with a guide to what works. Beacon also summarises the content, type and length of each intervention, its intended audience, whether it is free or fee-based, the languages in which it is available and the findings of the research trials that have investigated whether it works. A search of 'CBT' on the Beacon website produced 98 results and 10 pages of online CBT programs, many of which also include other therapies such as dialectical behaviour therapy, interpersonal behaviour therapy and mindfulness therapy.

In military populations, brief online self-guided telehealth interventions for PTSD look promising and appear to be both safe and feasible to implement. In a small pilot study of US combat veterans 'Written Emotional Disclosure' delivered over the internet showed symptom reductions for PTSD, although follow-up assessments did not reveal significant group differences in PTSD symptoms (Possemato, 2011). DESTRESS-PC, a web-based cognitive-behavioural intervention, is showing promising results in the treatment of PTSD for US female veterans (Lehavot et al., 2017). However, while DESTRESS-PC showed a significantly greater decrease in PTSD symptoms compared to usual care, the effect was largest at the 12-week assessment, with the treatment effect disappearing by the 18-week follow-up. Other promising online cCBT programs or apps that appeared in a search of the Beacon website included PTSD Coach and Mission Reconnect.

Specific to the needs of the veteran and military audience, Moving Forward: Overcoming Life's Challenges is an online course based on an evidence-based treatment for depression using problem-solving therapy (Nezu & Nezu, 2016). The online course normalises the experience of feeling overwhelmed or stuck when facing obstacles or stressful problems. It teaches users how to successfully overcome life's challenges by applying basic problem-solving skills. The Moving Forward program includes a free companion mobile app that allows users to practise and apply the tools and skills taught in the course. Although the app was designed as an adjunct to the online course, it can also be used as a standalone tool (Ray, Kemp, Hubbard, & Cucciare, 2017). Ray et al. (2017) also explored peer support using the Moving Forward suite of resources and tools. The authors concluded that the findings extend the literature on online, patient-facing mental health protocols by identifying emotional support and 'real life' skills application as veteran-preferred components of a peer-support protocol designed to enhance use of and engagement in cCBT for depression and anxiety (Ray et al., 2017).

The *Pathways to Care Report* (Forbes et al. 2018) indicated that current use of online interventions for those experiencing mental health issues is low. Internet treatments such as MoodGYM and e-couch were used by only approximately 2% of both the Transitioned ADF and 2015 Regular ADF.

1.4.3 Mobile applications

Eighty-six per cent of Australians have access to the internet at home, and in March 2018 mobile or smart phones were used by 91% of connected households (Australian Bureau of Statistics, 2018). The Deloitte *Digital Mobile Consumer Survey 2016* found that 84% of Australians owned a smart phone. One in three Australians had a fingerprint scanner on their phone, with 70% actively using it. Fitness band adoption was high and apps were dominant in gaming (88%), listening to music (83%), social networking (79%), shopping (70%) and hotel bookings (70%) (Deloitte, 2016).

Aligned to the growing use of mobile phones to access the internet, is the rapid development and use of apps. Originally apps were small individual software units with limited functionality. Later, mHealth, or mobile health – defined as 'medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants (PDAs), and other wireless devices' – was playing a significant role in public health interventions (World Health Organization, 2011). Apps have evolved to include augmented and virtual reality, multifunctioning wearable tech, on-demand and instant apps and cloud-based apps with a focus on data security. The US Food and Drug Administration (FDA) estimated that roughly 500 million people globally are already using personal healthcare apps, with more than 165,000 dedicated to improving health and fitness (Grady et al., 2018). Health professionals and peak bodies have increasingly raised concerns regarding the quality of evidence for and effectiveness of apps and biometrics and the UK National Health Service and US National Health Institute have funded online libraries of evidence-based and publicly endorsed health apps.

Globally it is predicted that by 2020 75% of the world's population – or 5.7 billion people – will own a smart phone because of increased affordability and deeper network coverage (GSMA, 2018). Smart phone adoption is expected to plateau at around 80% in the developed world, and rise to 63% in developing markets, by 2020 – with most running on broadband networks (GSMA, 2018).

In the context of military mental health, a review of the literature showed promising approaches to the use of apps for mental health (Shore et al., 2014), which included three military programs from the United States:

- The Telemedicine and Advanced Technology Research Center (TATRC) has established a mobile Health Applications Laboratory (mHAL) to develop new

mHealth technology, integrate new and existing technologies with electronic and personal health records, and support mobile development standards.

- The Military Operational Medicine Research Program (MOMRP) funds and oversees studies in collaboration with military, university and industry laboratories to evaluate effectiveness of mHealth technologies, including those designed to address mental health.

- The National Centre for Telehealth and Technology (T2) is developing a variety of mHealth applications focused on psychological health and traumatic brain injury.

The United States Department of Veterans Affairs (VA) and the United States Department of Defense (DOD) have created the Mobile Health Practice Guide, arguing that mobile health can improve clinical outcomes and improve efficiency and efficacy of the delivery of patient care in the US Military (Armstrong et al., 2017). The practice guidelines support the use of evidence-based apps and suggest that, when using an app, clinicians should determine whether the content is consistent with known interventions, the available studies have evaluated the app in controlled settings or aggregated evidence supports the use of mobile health as a best-practice method. The authors argued that, increasingly, studies are showing that mobile health is providing positive clinical outcomes, and in the guidelines they provided levels of evidence for the mobile apps appropriate for PTSD (PTSD Coach, PE Coach, CPT Coach), for mood monitoring and the development of tools in the treatment of depression and anxiety (T2 Mood Tracker, Virtual Hope Box, Positive Activity Jackpot).

The practice guidelines argue that the benefits of using mobile health in clinical care are:

- **Access** – Reduces barriers to accessing care

- **Extension of care** – Expands health care beyond face-to-face visits

- **Efficiency** – Improves efficiency of care

- **Compliance** – Increases patient compliance and engagement with care

- **Geographic** – Supplements medical care, especially for geographically dispersed patients

- **Cost** – Provides potential for significant cost reduction through leveraging mobile technologies across a range of health care activities

- **Data quality** – Can improve the validity of patient reports through real-time symptom tracking

- **Reach** – Has the potential to reach those who do not seek face-to-face care due to concerns about confidentiality and perceived stigma

- **Best practice** – Has been identified as a best practice by front-line clinicians.

The United States VA mobile app store (https://mobile.va.gov) provides a description of each app, links it to information sheets and video content and where appropriate provides linkage to existing VA services. The guidelines specifically focus on clinical integration and suggest that apps can be used to support evidence-based treatment, including cognitive processing therapy (CPT) and prolonged exposure (PE) therapy. They also suggest that apps can be used to support individual and group therapy during and between sessions. The guidelines examine key steps in clinical integration, cover security and privacy and take into account cultural considerations (Armstrong et al., 2017).

1.4.4 Wearables and biometric devices

A biometric device is any device that measures a biological function or trait. Also called wearables, these devices tend to operate in one of two main ways: verification or identification. Wearable technology can take the form of a commercially available wrist band tracker or medical grade devices that have been used in the treatment of diabetes and cardiovascular disease. While there is debate about the validity and reliability of the data and the utilisation of the bands and the apps, evidence shows that they can provide important baseline data on heart rate, sleep, brain function and blood glucose levels. In the context of the military, this data, captured through a secure and encrypted data base, could be extremely useful, as it can be used to self-monitor and demonstrate the important relationships between certain variables such as sleep, exercise and mood. At the same time, in shared management, data can be used to determine the responsiveness to an intervention or to flag the worsening of conditions – such as chronic sleep deprivation – or for early identification of risk based on galvanic skin response to a potential trigger. The Society for Participatory Medicine and a growing number of authors are looking at the effectiveness of this approach, including the use of biometrics and online social networking platforms to showcase behaviour change in chronic conditions. In the United States, the Veterans Health Administration introduced a home telehealth program that demonstrated high patient satisfaction, a 25% reduction in bed days of care, and a 19% reduction in hospital admissions (Iglehart, 2014). In Australia, the best example of this approach working in practice is a trial of Patients Know Best (www.patientsknowbest.com) at the Alfred Hospital, an integrated patient-portal which integrates more than 100 devices and apps capturing data such as blood pressure, fitness and activities, weight, sleep and medication adherence.

1.4.5 Peer networks and social networking services

A social networking service is a platform that enables individuals or businesses to build social networks and relationships between people who share common interests, activities, backgrounds and real-life connections. Social networks are internet-based services that allow individuals to create a public profile and build a network of users with whom to share and view information. Social network sites are varied and they incorporate new information and communication tools such as mobile connectivity, photo/video sharing and blogging. Popular platforms include Facebook, LinkedIn, Twitter, Pinterest and Instagram.

Online peer-to-peer support is the opportunity to seek and obtain support from others facing similar problems. The advantages of doing this online are the opportunities to meet a significant number of people and tap into crowd sourcing. Examples of this in mental health include the ReachOut.com facilitated forum (Webb, Burns & Collin, 2008) and Big White Wall (bigwhitewall.com), which is an anonymous online service for people in psychological distress. It offers support for self-management of mental health issues, information, and online therapy using a webcam and audio or instant messaging.

An evidence-based literature review of more than 50 studies examining young people's use of social networking showed significant benefits to young people's mental health, including delivering educational outcomes, facilitating supportive relationships, identity formation and promoting a sense of belonging and self-esteem. Collin, Rahilly, Richardson, & Third (2011) further argued that the '... strong sense of community and belonging fostered by SNS (social networking services) has the potential to promote resilience, which helps young people to successfully adapt to change and stressful events' (Collin et al., 2011). For those wishing to improve their overall wellbeing, technologies can assist in promoting social inclusion, access to material resources and freedom from discrimination and violence (Burns, Durkin, & Nicholas, 2009). A recent 2014 study by van der Krieke and colleagues, 'E-mental health self-management for psychotic disorders: State of the art and future perspectives' (van Der Krieke, Wunderink, Emerencia, De Jonge, & Sytema, 2014) suggested that e-mental health services were at least as effective as care as usual.

Results from the *Pathways to Care Report* showed that 18.1% of Transitioned ADF and 9.9% of 2015 Regular ADF members reported using social media to inform or assess their mental health. Given that social networks are based on the support of peers and information sharing, this is an area that requires further investigation (Van Hooff et al., 2018b).

1.5 What does this mean for service design and digital health?

The National Mental Health Commission presents a model of stepped care that takes an overall population level approach to mental health management. This approach is consistent with the Defence and Veterans Mental Health and Wellbeing strategy and argues that the intensity of support should match the complexity of the symptoms and functional impairment being experienced by the individual. In most stepped-care models, the focus is on entry into the health system at sub-clinical thresholds or early in the development of a mental health problem. This model of 'watchful waiting' is at odds with a population-health approach to health promotion and prevention that aims to support self-management and step in and step out of services on the basis of need.

1.5.1 The empowered consumer

The Ernst and Young Report, *Health Reimagined: a new participatory health paradigm*, suggests a major paradigm shift whereby individuals take active responsibility for their health (Ernst & Young, 2016). In this new, reimagined model of health care, individuals pro-actively draw on technology and their peer and social networks to support self-management through actively monitoring outcomes and building social communities that support wellbeing. Participatory health argues that individuals act as an equal partner in shared clinical decision making. This new health 'digisphere' is defined as a complex, borderless, interconnected community (virtual as well as real) formed around an individual and advancing lifelong health. The 'digisphere', defined in this context, is a digital ecosystem that reshapes health systems and redefines them as globally connected but locally relevant.

The opportunities afforded by e-mental health have typically been framed in one of two ways: the potential for efficiencies and greater value for investment in terms of reach and access; or the potential to improve outcomes through enhancing access and self-efficacy. For example, a 2013 briefing paper from the United Kingdom's National Health Service (NHS) captures this dual focus:

> Digital technology has revolutionised the way we conduct our everyday lives. The expectations service users and their families have of mental health services, and how they interact with them, are also changing rapidly … [it] could help us address resource challenges … and also has the potential to support cultural transformation and a move towards a social model of health, by empowering service users to exercise greater choice and control and to manage their own conditions more effectively. (Mental Health Network NHS Confederation, 2013)

Similarly, a rapid review of the e-mental health literature (Lal & Adair, 2014) concluded:

> Many believe that e-mental health has enormous potential to address the gap between the identified need for services and the limited capacity and resources to provide conventional treatment. Strengths of e-mental health initiatives noted

in the literature include improved accessibility, reduced costs (although start-up and research and development costs are necessary), flexibility in terms of standardization and personalisation, interactivity, and consumer engagement.

Internationally there is a proliferation of digital solutions focused on wellness platforms, health and mental health applications and online technology solutions. In the *Health Reimagined* report the authors argued that 'Connected Health' lies at the intersection of telemedicine technologies (the use of technologies to remotely deliver health services) and telehealth technologies (consumer-oriented personal health technologies including remote monitoring, mobile health, wearables and personal devices) (Ernst & Young, 2016).

The potential benefits for stakeholders that have been discussed in relation to participatory health approaches are set out below.

People	Practitioners	Policy makers
Own their own data and use it to self-manage health care. Overcome traditional barriers that limit access to mental health services (community, organisational and self-stigma, cost, geography, transport difficulties, social isolation, a lack of services). Provide immediate, convenient and flexible services available 24/7. Deliver confidential autonomous care. Provide easy access to personally controlled care. Empower people to choose care that meets their needs, and enable them to set the pace of their care and journey to recovery. Provide coordinated and customised treatment for people experiencing multiple mental health conditions. Deliver high-quality care that is in line with best practice guidelines.	Reduced administrative burden on the mental health workforce. Correct allocation and utilisation of multidisciplinary skills for more complex care. Stepped-care models to ensure the effectiveness and efficiency of face-to-face services and the role of technologies as an adjunct to care. Potential provision of a pathway to face-to-face care (and therefore a reduction in the reliance on crisis services). Utilisation of e-learning tools and the availability of clinical practice guidelines to promote psycho-education. Improved access to professional education and support resources, including peer-to-peer professional support networks.	Data collection to ensure measurement of both efficiency and efficacy of this mode of service delivery. Reduction in inequities in health, by targeting population groups that currently do not receive treatment, and may most benefit from services. Improved population health planning and service delivery as a result of online data collection and information management. Large-scale naturalistic studies to ensure implementation support of a public health intervention on a mass scale.

1.5.2 From self-management to shared care

Technologies are likely to have maximum impact in the next decade in mental health reform if attention is given to both empowering individuals to use technologies to manage their own mental health and wellbeing and integrating digital health solutions (including online interventions) with face-to-face services in system-wide reform. Most of the literature in peer-reviewed publications describes the development, implementation and evaluation of single interventions in isolation. One very important question, and an opportunity for military-specific services, is: How can e-mental health interventions be integrated into current services? Given the challenges, particularly in relation to transition from the ADF to civilian life, the seamless management of health

care between and across Joint Health Command, Open Arms – Veterans and Families Counselling and DVA provides an opportunity to implement evidence-based digital health solutions, and to test those innovations that could make participatory health a reality for current and ex-serving personnel.

1.6 The current study

Highlighting the investment currently underway by Defence and DVA in developing digital technology, the Transition and Wellbeing Research Programme sought to gather baseline data on technology use alongside prevalence data to investigate the extent to which current and ex-serving ADF members are already utilising technology to support their health. More specifically, the study sought to investigate technology and its utility for health and mental health programs, including implications for future health service delivery in the ADF and veteran community.

The *Pathways to Care Report* presented a very interesting picture in relation to models of service delivery. Both Transitioned ADF and the 2015 Regular ADF reported an interest in, and for 30% a preference for, services delivered online. Telephone hotlines were not a preferred model of service delivery. Generally, Transitioned ADF and 2015 Regular ADF were satisfied with the DVA and ADF websites, with utilisation rates of around 40%. However, this use was about the same for other community-based websites. Specific tailored interventions that were not defence- or veteran-specific were poorly used. The reported use of mobile phone applications by those with a probable 30-day mental health disorder was low (Forbes et al. 2018). This is surprising given that adoption of technology within the Australian community and worldwide is high and growing every year.

This report therefore explores in more detail the use of technology and its role in supporting mental health and wellbeing, ranging from information provision right through to its role in supporting care. We aim to use the Transition and Wellbeing Research Programme data to inform policy and the ongoing development of programs and practice, as well as ensuring that gains can be made by leveraging this rapidly developing medium. It is worth stating again that the data in this report was collected in 2015.

1.6.1 Outline and interpretation of this report

Following this introductory chapter, a short summary of the methodology specific to the current report is provided (Chapter 2). Chapter 3 describes the demographic characteristics of the populations included in the subsequent analyses – the Transitioned ADF and the 2015 Regular ADF – followed by a summary of key circumstances surrounding transition for the Transitioned ADF only.

Chapter 4 describes and compares internet usage patterns and attitudes towards online communication, and explores the relationship between internet use, attitudes and probable disorder.

Chapter 5 describes the use of new and emerging technologies among the Transitioned ADF and the 2015 Regular ADF. Chapter 5 also breaks down these factors by probable disorder (and no probable disorder) for the two populations.

Chapter 6 examines the estimated proportion of Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help, look for information or manage mental health issues more broadly – not necessarily in relation to their own mental health.

Chapter 7 explores the use of the internet specifically for one's *own* mental health among those who reported using the internet to seek help or assistance for mental health more broadly.

Chapter 8 explores barriers that may exist in relation to talking about mental health online for Transitioned ADF and 2015 Regular ADF.

Chapter 9 examines the use of the internet in general, as well as specific Defence and DVA websites and helplines, to assist in the management of mental health among Transitioned ADF and 2015 Regular ADF. First, their use is considered in relation to probable 30-day mental disorder, subsyndromal mental health symptoms and no disorder/symptoms, using a range of measures including posttraumatic stress disorder, psychological distress, alcohol use, depression, suicide and anxiety. This is followed by a focused examination of their use among those with a probable mental disorder, according to the presence or absence of stigmas and barriers to care.

Finally, Chapter 10 examines the use of technologies for mental health support for Transitioned ADF compared to a younger civilian cohort.

How to interpret and discuss the findings in this report

Weighted prevalence estimates:

- Where the report talks about prevalence estimates, it is referring to the *estimated* rates of a particular outcome within the entire population or subpopulation. It is important to understand that these are estimates. These estimates represent the proportion of cases we would predict to observe in the total population, based on the proportion of actual cases detected in the subpopulation who completed the outcome measure.
- When considering prevalence estimates, estimated proportions are more informative than estimated numbers.
- While results in this report were weighted to represent the total population, this weighting was performed on the basis of four key variables: sex, rank, service (Navy, Army or Air Force) and medical fitness. This assumes a general consistency across individuals with each combination of these characteristics (strata) and does not account for individual differences or other factors that may influence the outcomes of interest.
- The relatively low response rates observed in the study mean that the weighted estimates presented may have a lower level of accuracy, with estimates more highly dependent on the characteristics used for weighting.
- Estimates for subpopulations (strata) with higher response rates more accurately represent those subpopulations than those with lower response rates.
- The subpopulations (strata) used for weighting in this report are presented in Tables C.2, C.3 and C.4. These tables show how many individuals within the population each responder represents for each stratum. The higher this number, the more caution should be applied in interpreting the associated estimates.
- Where an outcome is relatively rare and is detected at a high rate in individuals who share characteristics with a large proportion of the population (such as Other Ranks), the estimated proportion of the entire population predicted to have achieved that outcome should be greater than the proportion of cases detected.
- Where an outcome is relatively common and is detected at a high rate in those who share characteristics with a small proportion of the population, the estimated proportion of the total population predicted to have achieved that outcome should be lower than the proportion of cases detected.
- To interpret the precision or imprecision of a given estimate, readers might consider additional information supplied with the estimates, such as confidence intervals.

Confidence intervals: These represent the possible range of values within which the presented estimate falls. Where the value of interest is a prevalence estimate, confidence intervals show the range of error in the estimate. In general, confidence intervals that are very close to the estimate value indicate that the estimate is more precise, while very wide confidence intervals suggest that the estimate is imprecise. Where there are wide confidence intervals, associated

estimates should be interpreted cautiously, and the upper and lower limits should be considered the top and bottom range of possible precise values.

Standard errors: Like confidence intervals, standard errors indicate the range of error in an average score.

Between-group comparisons: Where comparing prevalence estimates between groups, the overlap in confidence intervals provides an indication of between-group differences. Where there is significant overlap, any apparent difference in estimates is more likely to reflect an error in measurement or estimate. In general, the smaller the subpopulation of interest the greater the error, so where a stratification variable has a very small number in some categories, estimates are likely to have large associated confidence intervals or standard errors.

Using mean differences in proportions for between-group comparisons (for Chapter 10): Within Chapter 10, where standardised estimates for a younger civilian cohort were compared with Transitioned ADF estimates, the mean differences in proportions (along with their associated standard error and confidence intervals) were calculated. Significant differences were identified by mean difference confidence intervals that did not span zero (i.e. due to measurement and/or sampling error, the mean difference in proportions between the two groups could plausibly be zero).

Odds ratios (ORs): When estimating the prevalence of a particular health outcome there could be differences in the prevalence rates between two groups (for example, between 2015 Regular ADF and Transitioned ADF). This could be due to differences in factors other than transition status – such as sex, age, service or rank – across the comparison groups, particularly if these other factors are associated with the health outcome. If this is true, these factors potentially confound the findings. One way to address this is to employ a logistic regression model that controls (adjusts for) these factors. The statistical output from a logistic regression model is an odds ratio (OR), which denotes the odds of a particular group (such as Transitioned ADF) having a particular health outcome compared to a reference group (such as 2015 Regular ADF).

An OR of greater than one indicates increased odds of having the outcome compared to the reference group, whereas an OR of less than one suggests less likelihood of having the particular health outcome compared to the reference group. For example, an OR of 1.7 for the Transitioned ADF (compared to 2015 Regular ADF) suggests that the Transitioned ADF members have 70% increased odds of having that particular health outcome. Conversely, an OR of 0.70 suggests that the Transitioned ADF members are 30% less likely to have the particular health outcome compared to the 2015 Regular ADF. When an OR is greater than two, we can then say that the Transitioned ADF are twice as likely to have the particular health outcome compared to the 2015 Regular ADF. Similarly, if the OR is greater than three, they would be three times as likely to have the particular health outcome, and so forth.

Significance: Where the text describes a between-group difference as significant, this means that the difference between groups was statistically tested then adjusted for sex, age and service, and there was no overlap in the associated confidence intervals between groups.

Further caveats to be considered when reading and discussing the findings from this study:

- The overall response rate for the study was low, particularly among Transitioned ADF. While responder data could be statistically weighted up to the total population, the lower the number of responders, the less accurate the resulting weighted-population estimates.
- Response rate data show that some subpopulations had substantially lower response rates, which affects the accuracy of the associated estimates. In particular, Officers and Non-Commissioned Officers were over-represented among responders, while Other Ranks were highly under-represented, despite accounting for the largest proportion of the total population.[1] Therefore, any estimates stratified by rank should be interpreted with a degree of caution.
- A large proportion of this study relates to self-reporting measures, which are subject to potential biases, including recall bias. The collection of diagnostic mental disorder data allows for corroboration of findings, although these potential biases should be noted.

Glossary: refer to the Glossary of terms for definitions of key terms.

[1] An examination of the distribution of age, sex and service characteristics for each rank category in the population, and among responders, showed that for Officers the two oldest age categories were over-represented and the two youngest age groups were under-represented. There was a similar pattern for Non-Commissioned Officers. For Other Ranks, there was a slightly different pattern: while the youngest age category was under-represented, all other age categories were somewhat over-represented. The distribution of sex among the rank categories was similar for responders and the population, with a slightly inflated proportion of female responders. Similarly, the distribution of Service across the rank categories for responders was largely reflective of the population distribution. Therefore, while Other Ranks were under-represented, the characteristics of those who responded were broadly similar to the total Other Rank population.

2 Methodology

Study design

- In phase 1 of the Mental Health and Wellbeing Transition Study, participants were asked about their use of technology as part of a 60-minute self-report questionnaire. The questionnaire also included questions on demographics, service and deployment history, physical health and psychological health.

Study populations

- The Transitioned ADF population comprised 24,932 ADF members who transitioned from the Regular ADF between 2010 and 2014 (included Active and Inactive Reservists and Ex-Serving ADF members).
- The 2015 Regular ADF population comprised the entire Regular serving ADF population in 2015 (n = 52,500).
- One population comparison group was used:
  - The 2012 Young and Well National Sample – socio-demographically matched data were drawn from this assessment of young people's use of technologies, as well as their overall health and wellbeing, to compare equivalent questions about technology use.

Survey completion rate

- Of those invited, 18% (n = 4326) of the Transitioned ADF population and 42.3% (n = 8480) of the 2015 Regular ADF population completed the survey.

Weighting

- All survey data for the Transitioned ADF were weighted using distinct strata for sex, service, rank and medical fitness.
- All survey data for the 2015 Regular ADF were weighted using distinct strata for sex, service, rank, medical fitness, and whether the individual completed a study as part of MilHOP.

Analysis

- All analyses were conducted in Stata version 13.1 or SAS version 9.2, and used weighted estimates of totals, means and proportions.
- All regressions included the co-variates for age, sex, service and rank.

Glossary: refer to the Glossary of terms for definitions of key terms.

Chapter 2 outlines the methodology for the current report. For the full methodology, including a comprehensive description of all the measures used in the survey, refer to Annex A.

2.1 Study design

In phase 1 of the Mental Health and Wellbeing Transition Study, Transitioned ADF and 2015 Regular ADF members were assessed for mental health problems, psychological distress, physical health problems, wellbeing factors, pathways to care and occupational exposures. This assessment was conducted using a 60-minute self-reporting questionnaire, which participants completed either online or in hard copy. Each participating sample received a slightly different questionnaire relevant to their current ADF status – Transitioned ADF member, 2015 Regular ADF member or Ab-initio Reservist – and in regard to demographics, service and deployment history. However, the core validated measures of psychological and physical health remained the same and replicated where possible the measures previously administered as part of the 2010 ADF Mental Health Prevalence and Wellbeing Study (MHPWS). This component of the design is critical to the longitudinal comparisons across time, and highlights the importance of a consistent approach to overseeing research design for military and veteran populations over time.

Further details of the self-reporting survey measures investigated in this report are provided in section 2.6 below.

2.2 Samples

This report uses two of the Programme's six overlapping samples. A detailed description of all six samples used in the broader Programme can be viewed in Annex A: Methodology.

Sample 1: Transitioned ADF – This sample comprised all ADF members who transitioned from Regular ADF between 2010 and 2014 and included those who transitioned into the Active Reserves and Inactive Reserves as well as those who were discharged completely from the Regular ADF (Ex-Serving members).

Sample 2: 2015 Regular ADF – This sample comprised three separate groups of Regular ADF members in 2015 who were invited to participate in the study: those who participated in the 2010 MHPWS and remained a Regular ADF member in 2015; those who participated in the Middle East Area of Operations (MEAO) Health Study: Prospective Study (MEAO Protective Health Study) between 2010 and 2012, and remained a Regular ADF member in 2015; and a stratified random sample of Regular ADF members from 2015 who were not part of the 2010 MHPWS or the MEAO

Prospective Health Study. Combined results from these three groups were weighted to represent the entire Regular ADF in 2015.

Of the Transitioned ADF population of 24,932, 96% (23,974) were invited to participate. Those not invited were those who may have opted out of the study or did not have any usable contact information. Thirty-eight per cent (20,031) of the total 2015 Regular ADF population (52,500) were invited to participate.

The samples were taken from a Military and Veteran Research Study Roll (Study Roll) generated specifically for this Programme and were held at the Australian Institute of Health and Welfare (AIHW). The Study Roll was generated from Defence personnel data, DVA contact data and ComSuper contact details, and cross-referenced against the National Death Index. For all individuals in the Transitioned ADF and the 2015 Regular ADF populations, basic demographic characteristics used for weighting were held by the AIHW until the conclusion of data collection, at which time this data was provided to the researchers in an identified or de-identified form, depending on participation and consent status.

2.3 Population comparison samples

2.3.1 Young and Well National Survey (2012)

The Young and Well National Survey (Burns et al., 2013) aimed to assess young people's use of technologies, as well as their overall health and wellbeing. The first survey included questions relating to demographics, general health, mental health and wellbeing, health perceptions of Australian youth, use of the internet, online and communication risks, digital literacy and safety skills.

A cross-sectional CATI (computer-assisted telephone interview) methodology was used to conduct a survey of 1400 participants across Australia. Participants were randomly selected using random-digit dialling. Participants included 700 young men and 700 young women aged 16 to 25 years (note: existing protocols for telephone interviews with people aged below 18 years of age were used). Depending on participant answers, the survey took 10 to 20 minutes to complete. Participants were excluded if they had English language difficulties or if they were uncomfortable with the interview being conducted in English. Stratification ensured that the sample was representative of the normal population in terms of age, gender and geographic location across all Australian states by selecting respondents to match the current Australian Bureau of Statistics records for age, gender and geographic location (see abs.gov.au). While the survey was designed by the investigators, the telephone interviews were conducted by an independent company, The Social Research Centre (Melbourne, Victoria).

2.4 Mental Health and Wellbeing Transition Study Survey response rates

Table 2.1 and Figure 2.1 show the total populations for the Transitioned ADF and the 2015 Regular ADF; the number from each population invited to participate in the study; and the proportion of those invited who responded.

Of the Transitioned ADF population of 24,932, 96% (23,974) were invited to participate. Those not invited represented those individuals who may have opted out of the study or did not have any usable contact information. Thirty-eight per cent (20,031) of the 2015 Regular ADF population (52,500) were invited to participate. The sample of 2015 Regular ADF invited to participate included a stratified random sample of 5040 full-time members in 2015 as well as those who had participated in the Military Health Outcomes Program (MilHOP) between 2010 and 2012 and who were still serving in 2015. Of those invited, 18% (n = 4326) of the Transitioned ADF population and 42.3% (n = 8480) of the 2015 ADF population completed the survey.

Figure 2.1 summarises the breakdown of Transitioned ADF and 2015 Regular ADF members who provided enough data to be included in the survey. Table 2.2 presents the unweighted demographic characteristics of Transitioned ADF and 2015 Regular ADF survey respondents.

Table 2.1 Survey response rates, by service for the Transitioned ADF and the 2015 Regular ADF

	Transitioned ADF N = 24,932				2015 Regular ADF N = 52,500			
	Population	Invited	Responders	Response rate (%)	Population	Invited	Responders	Response rate (%)
Service								
Navy	5671	5495	863	15.7	13,282	5113	2040	39.9
Army	15,038	14,465	2463	17.0	25,798	8067	3500	43.4
Air Force	4223	4014	1000	24.9	13,420	6851	2940	42.9
Sex								
Male	21,671	20,713	3646	17.6	47,645	15,176	6693	44.1
Female	3261	3261	380	20.9	4855	4855	1787	36.8
Rank								
OFFR	4063	3939	1259	32.0	13,444	7847	3538	45.1
NCO	7866	7393	2097	28.4	17,491	9117	4336	47.6
Other Ranks	13,003	12,642	970	7.7	21,565	3067	606	19.7
Medical fitness								
Fit	18,273	17,525	2981	17.0	46,022	17,097	7116	41.6
Unfit	6659	6449	1345	20.9	6478	2934	1364	46.5
Total	24,932	23,974	4326	18.0	52,500	20,031	8480	42.3

Notes
Unweighted data
Response rates presented in the table above are calculated as the proportion of those invited to participate in the study
OFFR: Officer, NCO: Non-Commissioned Officer

Figure 2.1 Survey response rates for Transitioned ADF and the 2015 Regular ADF

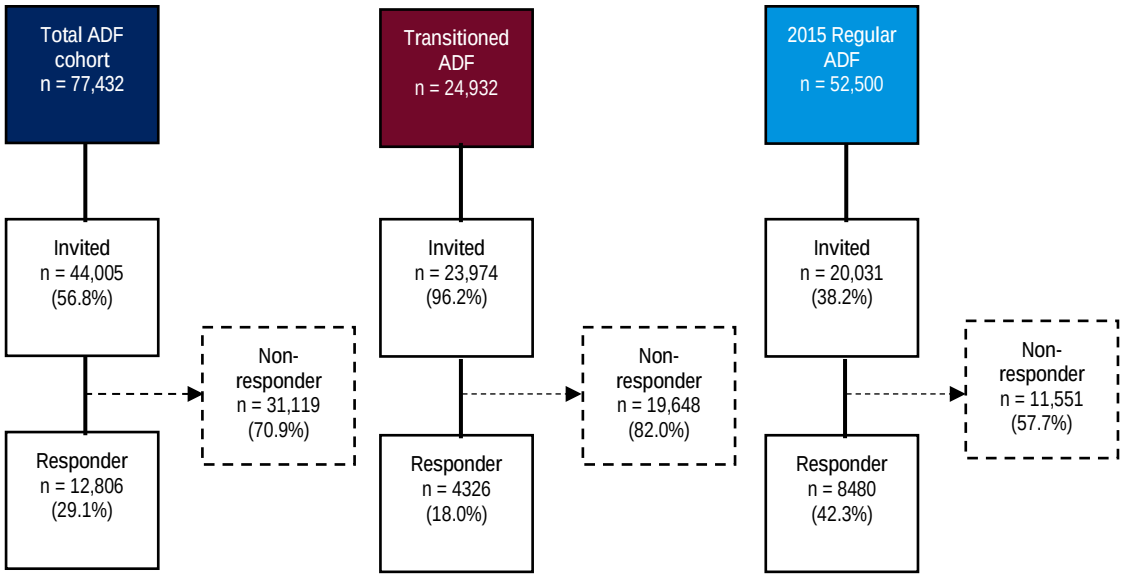


Table 2.2 Unweighted demographic characteristics of Transitioned ADF and 2015 Regular ADF responders

	Transitioned ADF n=4326			2015 Regular ADF n=8480		
	n	%	95% CI	n	%	95% CI
Age (M, SE)	41.9	0.2		41.1	0.1	
Age group						
18–27	471	10.9	(10.0, 11.9)	602	7.1	(6.6, 7.7)
28–37	1262	29.2	(27.8, 30.5)	2484	29.3	(28.3, 30.3)
38–47	1119	25.9	(24.6, 27.2)	2976	35.1	(34.1, 36.1)
48–57	871	20.1	(19.0, 1.4)	2069	24.4	(23.5, 25.3)
58+	548	12.7	(11.7, 13.7)	201	2.4	(2.1, 2.7)
Sex						
Male	3646	84.3	(83.2, 85.3)	6693	78.9	(78.0, 79.8)
Female	680	15.7	(14.7, 16.8)	1787	21.1	(20.2, 22.0)
Rank						
OFFR	1259	29.1	(27.8, 30.5)	3538	41.7	(40.7, 42.8)
NCO	2097	48.5	(47.0, 50.0)	4336	51.1	(50.1, 52.2)
Other Ranks	970	22.4	(21.2, 23.7)	606	7.2	(6.6, 7.7)
Service						
Navy	863	19.9	(18.8, 21.2)	2940	34.7	(33.7, 35.7)
Army	2463	56.9	(55.5, 58.4)	3500	41.3	(40.2, 42.3)
Air Force	1000	23.1	(21.9, 24.4)	2040	24.1	(23.2, 25.0)
Medical fitness						
Fit	2981	68.9	(67.5, 70.3)	7116	83.9	(83.1, 84.7)
Unfit	1345	31.1	(29.7, 32.5)	1364	16.1	(15.3, 16.9)

Notes
Response rate denominator: Those who were invited and responded to the survey.
Unweighted data.
95% CI: 95% confidence interval.
Mean (M), Standard Error (SE).

The characteristics of survey respondents were as follows:

Age – Transitioned ADF survey responders (mean age 41.9 [SE 0.2]) were of a similar age to the 2015 Regular ADF responders (mean age 41.1 [SE 0.1]).

Sex – Consistent with the Transitioned ADF population, the sample was predominantly male, with transitioned females significantly more likely to respond than transitioned males. In the 2015 Regular ADF, females were less likely to respond than males.

Rank – Survey responders from the Transitioned ADF comprised 29.1% Officers, 48.5% Non-Commissioned Officers and 22.4% Other Ranks. In the 2015 Regular ADF, there was a similar distribution, with 41.7% Officers, 51.1% Non-Commissioned Officers and 7.2% Other Ranks. The Transitioned ADF population had significantly lower response rates for Officers and Non-Commissioned Officers, but significantly higher response

rates in Other Ranks compared to the 2015 Regular ADF. In both groups, the lower ranks exhibited the smallest response rates.

Service – In the Transitioned ADF, 19.9% of survey responders were Navy, 56.9% were Army and 23.1% were Air Force. However, for the 2015 Regular ADF, 34.7% of survey responders were Navy, 41.3% were Army and 24.1% were Air Force. When response rates in the different services were compared, Transitioned Air Force members were most likely to respond, whereas Transitioned Army and Navy members were least likely to respond. In the 2015 Regular ADF, Army had the highest response rate at 41.3%.

Medical fitness – Not surprisingly, Transitioned ADF were significantly more likely to be unfit on transition from Regular ADF (31.1%) compared to the 2015 Regular ADF population (16.1%). Transitioned ADF who were unfit had a response rate of 20.9% compared to 46.5% in the 2015 Regular ADF.

2.5 Statistical analysis

Analyses were conducted in Stata version 13.1 or SAS version 9.2. All analyses were conducted using weighted estimates of totals, means and proportions, except where specified otherwise. Standard errors were estimated using linearisation, except where specified otherwise.

For the self-report measures, the proportion (n%) of ADF members in each subgroup is presented. Comparisons between the mean total scores among subgroups were also analysed where appropriate, using weighted multiple linear regressions. All regressions included the covariates of age, sex, service and rank. Refer to Annex B for a detailed description of the strength of each association and individual odds ratios.

2.6 Weighting

The statistical weighting process used in the Mental Health and Wellbeing Transition Study replicated that used in the 2010 Mental Health Prevalence Wellbeing Study (MHPWS) and allowed for the inference of results for the entire Transitioned ADF and 2015 Regular ADF populations.

Survey responder weights were used to correct for differential non-response to the survey by Transitioned ADF and 2015 Regular ADF. The weighting procedure involves allocating a representative value or 'weight' to the data for each responder, based on key variables that are known for the entire population (including responders and non-responders). This weight indicates how many individuals in the entire population each actual responder represents. Weighting data allows for the inference of results for an entire population – in this case, the Transitioned ADF – by assigning a representative

value to each 'actual' case (responder) in the data. If a case has a weight of 4, it means that case counts in the data as four identical cases. By using known characteristics about each individual within the population (in this case sex, rank and medical fitness), the weight assigned to responders indicates how many 'like' individuals in the entire population (based on those characteristics) each responder represents.

Weighting is used to correct for differential non-response and to account for systematic biases that may be present in study responders. This methodology provides representative weights for the population to improve the accuracy of the estimated data, and requires that every individual within the population has actual data on the key variables that determine representativeness.

The Transitioned ADF weights were derived from the distinct strata of sex, service, rank, and medical fitness, a dichotomous variable derived from Medical Employment Classification (MEC) status. There were 313 (1.2%) of the total Transitioned ADF population with missing information on the strata variables and therefore the final weighted population for analyses was 24,932.

The 2015 Regular ADF weights were derived from the distinct strata of sex, service, rank, medical fitness, and whether the individual completed a study as part of the Military Health Outcomes Program (MilHOP). The inclusion of this additional stratification variable was to account for the targeted sampling of the MilHOP cohort, who were then over-represented within the current serving responders. A MilHOP flag variable (yes/no = 1/0) was created and used in the weighting process in order to reduce this bias. There were 192 (0.4%) 2015 Regular ADF with missing information on the strata variables, which reduced the final weighted population for analysis to 52,500. Tables C.2, C.3, C.4 in Annex C present the study population and responders within each stratum used for weighting, and show approximately how many individuals within each subpopulation each study responder represents.

2.6.1 Estimates from survey

To maximise the actual data available for analysis, survey weights were calculated for each separate section of the survey. This addressed the issue of differential responses to various sections of the survey, where individuals potentially completed some but not all parts of the survey. A 'survey section responder' was defined as anyone who answered at least one question in that particular section of the survey. There was a total of 29 section responder weight variables. For the purpose of analysis, the weights used were always for the primary outcome variable of interest.

2.7 Measures used in the current report

2.7.1 Self-report survey

Outcome variables

The following measures were used in the self-report survey to examine technology use.

Internet usage

This section of the survey aimed to ascertain what role the internet played in improving the mental health and wellbeing of participants. Items looking at internet usage were taken from the Young and Well National Survey (Burns et al., 2013) and looked specifically at internet usage patterns, means of accessing the internet, the use of the internet for social support, the use of the internet for obtaining information relating to mental health, the use of the internet for managing mental health, barriers to using the internet for mental health and the efficacy of the internet in meeting needs. A more detailed description of the individual items used is outlined in each chapter.

Emerging technologies

The use of new and emerging technologies for health and wellbeing was assessed using a series of items developed by Young and Well Co-operative Research Centre (Burns et al., 2013; Young and Well Cooperative Research Centre, 2013). Questions looked at participants' current usage of new and emerging technologies, barriers to usage, types of new and emerging technologies utilised, the use of new and emerging technologies for health and wellbeing improvement, reasons for using new and emerging technologies for health and wellbeing, other reasons for using new and emerging technologies, the types of new and emerging technologies participants would utilise if money was not a factor, and, finally, the early adoption of new technologies. A more detailed description of the individual items used is outlined in each chapter.

12-month use of the internet and Defence/DVA/and other websites to seek help or information for, or manage, mental health issues

12-month use of the internet for mental health was examined using the following question: 'Do you use the internet to seek help or information for, or manage mental health issues'. Questions relating to the use of Defence/DVA or other websites in the last 12 months to inform about or assess the participant's mental health were drawn from the pathways to care section of the survey. A more detailed description of the individual items used is outlined in Chapter 8.

Stratification variables

Barriers and stigmas to care

Participants were asked to rate the degree to which a list of 'concerns' might affect their decision to seek help on a 5-point scale. Anchors ranged from 'strongly disagree' to 'strongly agree'. Responses were then dichotomised to 'agree' vs 'uncertain/disagree' and summed to create a stigma count variable. Items in this section were taken from the 2010 Mental Health Prevalence Wellbeing Study (McFarlane, Lawrence-Wood, Van Hooff, Malhi, & Yehuda, 2011), the Canadian Air Forces Recruit Mental Health Service Use Questionnaire (Fikretoglu, Blais, & Lam, 2014), and the Solider Wellbeing Survey (Riviere, Kendall-Robbins, McGurk, Castro, & Hoge, 2011; Thomas, 2010), with several additions by investigators. For the purpose of the current report, participants were categorised as having no barriers/no stigmas, or one or more barrier/stigma from the following list, which was then used as a stratification variable.

Stigmas

Respondents were asked about the following stigmas that they may hold towards seeking help for a mental health condition:

- I feel they wouldn't understand problems related to my veteran and military experience.
- Most of what would happen if I sought treatment for a mental health issue would be beyond my control.
- I would feel inadequate if I went to a mental health professional for psychological help.
- I would feel embarrassed if I had a mental health problem.
- I would feel worse about myself if I could not solve my own problems.
- People with a mental health problem could snap out of it if they wanted to.
- If I sought mental health treatment from a professional, I might feel worse.
- I would worry that seeking treatment might lead to me losing control of my emotions or reactions.
- People would treat me differently.
- I would be seen as weak.
- People might have less confidence in me.
- I don't trust Mental Health Professionals.

Barriers

Respondents were also asked about the following barriers that they may hold towards seeking help for a mental health condition:

- It is too expensive.
- I wouldn't know where to get help.
- I would have difficulty getting time off work.
- It would harm my career/career prospects.
- It would stop me from being deployed.
- It would be difficult to get an appointment.

Probable disorder

Posttraumatic Stress Disorder Checklist – civilian version (PCL-C)

The Posttraumatic Stress Disorder Checklist – Civilian version (PCL-C) (Weathers, Litz, Herman, Huska, & Keane, 1993) was used to examine symptoms of posttraumatic stress in the past month. The PCL-C is a 17-item self-report measure designed to assess the symptomatic criteria of PTSD according to the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV). The 17 questions of the PCL-C are scored from 1 to 5 and are summed to give a total symptom severity score of between 17 and 85. An additional four items from the newly released PCL-5 were also included. For the purpose of this report an optimal screening cut-off of 29 (subsyndromal disorder) and an optimal epidemiological cut-off of 53 (probable disorder) were used. These cut-offs were derived from the 2010 Regular ADF Mental Health Prevalence and Wellbeing Study.

The Kessler Psychological Distress Scale (K10)

The Kessler Psychological Distress Scale (K10) (Kessler et al., 2002) was used to measure psychological distress. The K10 (Kessler et al., 2002) is a short 10-item screening questionnaire that yields a global measure of psychological distress based on symptoms of anxiety and depression experienced in the most recent four-week period. Items are scored from 1 to 5 and are summed to give a total score between 10 and 50. Two sets of cut-offs derived from the 2010 Regular ADF Mental Health Prevalence and Wellbeing study were utilised in this section of the report.

Psychometric analysis of the K10 indicated different optimal screening cut-offs for affective disorder (19) and anxiety disorder (17) (McFarlane et al., 2011). To effectively capture both disorders, the conservative optimal screening cut-off of 17 was used. This cut-off can be used to identify individuals who might need care (subsyndromal disorder). To ascertain the level of probable affective and/or anxiety disorder in the

population, a more stringent epidemiological cut-off of 25 was applied (probable disorder).

Alcohol Use Disorders Identification Test (AUDIT)

The Alcohol Use Disorders Identification Test (AUDIT) (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) was used to examine at-risk patterns of drinking. The AUDIT is a brief self-report screening instrument developed by the World Health Organization. This instrument consists of 10 questions to examine the quantity and frequency of alcohol consumption, possible symptoms of dependence and reactions or problems related to alcohol. The AUDIT is widely used in epidemiological and clinical practice for defining at-risk patterns of drinking (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). Two additional supplementary items of the AUDIT were also included in the questionnaire as well as additional items on consumption to ensure comparability with the Australian National Health Survey 2011–2012 (Australian Bureau of Statistics, 2012). In this chapter the optimal screening cut-off of 8 (subsyndromal disorder) and the optimal epidemiological cut-off of 20 (probable disorder) were used. These cut-offs were derived from the 2010 Regular ADF Mental Health Prevalence and Wellbeing Study.

Patient Health Questionnaire-9 (PHQ-9)

Self-reported depression was examined using the Patient Health Questionnaire-9 (PHQ-9) (Kroenke, Spitzer, & Williams, 2001). The nine items of the PHQ-9 are scored from 0 to 3 and summed to give a total score between 0 and 27. The PHQ-9 provides various levels of diagnostic severity, with higher scores indicating higher levels of depression symptoms. Two sets of cut-off values derived from the 2010 Regular ADF Mental Health Prevalence and Wellbeing study were used in this section of the report: an optimal epidemiological cut-off of 18 (probable disorder) and an optimal screening cut-off of 6 (subsyndromal disorder).

Generalised Anxiety Disorder –7 (GAD-7)

Self-reported generalised anxiety disorder was examined using the Generalised Anxiety Disorder 7 (GAD-7) scale (Spitzer, Kroenke, Williams, & Lowe, 2006). The GAD-7 is a brief 7-item screening measure based on the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV) criteria for GAD. Originally validated for use in primary care, the GAD-7 performs well in detecting probable cases of GAD, with a sensitivity of 89% and a specificity of 82%. Furthermore, increasing scores of generalised anxiety symptoms are associated with multiple types of functional impairment and self-reported disability days; therefore, high scores are strongly indicative of anxiety severity. Respondents were instructed to rate the amount of time they experienced each of the seven symptoms in the past two weeks, and questions were scored 0–3. Respondents used one of the following response options: ‘not at all (0)’, ‘several days’ (1), ‘more than half the days’ (2) and ‘nearly every day’ (3). Scores

for the seven questions were then added up to give a total score of 0–21. The standard cut-off of 10 was used to denote probable generalised anxiety disorder.

Suicide

12-month suicidal ideation and behaviour was assessed using four items that looked specifically at suicidal thoughts, plans and attempts. Three of the items in this section were adapted from the National Survey of Mental Health and Wellbeing (Australian Bureau of Statistics, 2008) and the final item was devised by researchers for use in the current study.

For the full methodology, including a comprehensive description of all the measures utilised in the survey, refer to Annex A or to individual chapters within the report.

3 Demographic characteristics in Transitioned ADF and 2015 Regular ADF

Transitioned ADF

- More than half of Transitioned ADF members remained in the ADF as Reservists (55.8%). Active Reservists made up 25.7%.
- The majority of Transitioned ADF members had left full-time service between one and three years prior, with the smallest proportion leaving less than 12 months prior.
- The most commonly reported reason for leaving was 'own request', which was the case for more than 60% of the Transitioned ADF.
- Just over one-fifth of the Transitioned ADF were estimated to have been medically discharged.
- The most commonly reported reasons for transition were 'impact of service life on family' (10.2%), 'better employment prospects in civilian life' (7.2%), 'mental health problems' (6.5%) and 'physical health problems' (4.3%).
- Almost two-thirds of the Transitioned ADF reported being engaged in civilian employment (62.8%). For those individuals, the most common industries of employment were government administration and Defence (16.8%), mining (9.9%), construction (8.8%) and transport and storage (8.6%).
- Of those who reported not being engaged in civilian employment, a considerable proportion reported a period of three months or longer in which they were unemployed (43.7%) since transitioning from the Regular ADF.
- More than 43% of Transitioned ADF members reported accessing DVA-funded treatment through either a DVA White Card (39.4%) or DVA Gold Card (4.2%).
- Among the Transitioned ADF, approximately one in four reported joining an ex-service organisation.
- Among the Transitioned ADF, small proportions reported having been arrested (2.9%), convicted (2.1%) and imprisoned since transition.

Transitioned ADF compared to 2015 Regular ADF

- Transitioned ADF and 2015 Regular ADF were equally likely to be aged 18–27. However, compared to the 2015 Regular ADF, there were more Transitioned ADF aged 58+.
- There were more females among the Transitioned ADF than the 2015 Regular ADF.

- Transitioned ADF members were less likely to be 'in a relationship but not living together' compared to the 2015 Regular ADF.
- Just over 40% of the Transitioned ADF and 36% of the 2015 Regular ADF reported having a diploma or university qualification.
- There were no significant differences in housing stability between the Transitioned ADF and the 2015 Regular ADF, with more than 93% estimated to have been in stable housing in the previous two months.
- Transitioned ADF members were more likely to come from the lower ranks compared to 2015 Regular ADF members.
- A greater proportion of the Transitioned ADF were from the Army compared to the 2015 Regular ADF.
- Twice as many members of the Transitioned ADF were classified as medically unfit compared to the 2015 Regular ADF.
- Transitioned ADF members were more likely to report having less than eight years of service compared to the 2015 Regular ADF.

Glossary: refer to the Glossary of terms for definitions of key terms.

Chapter 3 provides a detailed summary of the demographic characteristics of Transitioned ADF members, including an examination of the differences between Transitioned ADF and 2015 Regular ADF members. Outcomes are weighted up to the entire population using the technique described in Chapter 2 of this report, and so represent weighted estimates of these characteristics within the Transitioned ADF and 2015 Regular ADF cohorts. Refer to the Glossary of terms for definitions of key terms in this section.

3.1 Demographic characteristics of Transitioned ADF and 2015 Regular ADF

Table 3.1 describes the demographic characteristics of Transitioned ADF and 2015 Regular ADF members.

The age distribution across the two groups was significantly different. Transitioned ADF had more elderly (58+ age group) and fewer middle-aged (38–47 age group) members, based on 95% confidence intervals, while the younger age groups were similar for Transitioned ADF and 2015 Regular ADF members. There were more female members in the Transitioned ADF group (13.1% vs 9.2% for the 2015 Regular ADF group). Based on 95% confidence intervals, there were no significant differences between the two groups for 'Not in a relationship' or 'In a relationship and living together', although Transitioned ADF members were significantly less likely to be 'In a relationship not

living together'. There were differences in the highest education categories. Transitioned ADF members were significantly more likely to report a diploma (20.9% vs 14.8%) and significantly less likely to report a university qualification than the 2015 Regular ADF (20.4% vs 22.9%). There were no differences in whether the respondents reported having stable housing over the past two months.

Table 3.1 Weighted demographic characteristics of Transitioned ADF and 2015 Regular ADF members

	Transitioned ADF (n=24,932)			2015 Regular ADF (n=52,500)		
	n	Weighted n	% (95% CI)	n	Weighted n	% (95% CI)
Age group[a]						
18–27	471	5195	20.8 (19.3, 22.5)	602	10,319	19.7 (16.4, 23.3)
28–37	1262	8808	35.3 (33.6, 37.1)	2484	17,472	33.3 (29.9, 36.9)
38–47	1119	5215	20.9 (19.7, 22.2)	2976	14,185	27.0 (24.5, 29.7)
48–57	871	3389	13.6 (12.8, 14.5)	2069	8019	15.3 (14.3, 16.4)
58+	548	1937	7.8 (7.2, 8.4)	201	721	1.4 (1.1, 1.7)
Sex[*]						
Male	3646	21,671	86.9	6693	47,645	90.8
Female	680	3261	13.1	1787	4855	9.2
Relationship status						
In a relationship and living together	3121	16,453	65.9 (64.2, 67.7)	5964	33433	63.7 (60.1, 67.2)
In a relationship not living together	301	2182	8.8 (7.7, 9.9)	1100	8294	15.8 (13.1, 18.9)
Not in a relationship	821	5738	23.0 (21.5, 24.7)	1263	9847	18.8 (15.9, 22.0)
Education						
Primary/ secondary school	1007	7062	28.3 (26.7, 30.0)	1996	15,269	29.1 (25.8, 32.6)
Certificate	975	7200	28.9 (27.2, 30.6)	1723	16,508	31.4 (28.1, 35.0)
Diploma	1063	5229	20.9 (19.7, 22.3)	1601	7787	14.8 (13.0, 16.9)
University	1221	5078	20.4 (19.3, 21.5)	3015	12,025	22.9 (21.6, 24.2)
Employment status						
Full/part time paid work	2909	17,063	68.4 (66.8, 70.0)	8480	52,500	100.0
Unpaid work	151	777	3.1 (2.6, 3.7)	–	–	–
Unemployed/ looking for work	199	1289	5.2 (4.4, 6.1)	–	–	–
Unemployed – sickness allowance/ disability support pension	412	2224	8.9 (8.1, 9.9)	–	–	–
Student	206	1728	6.9 (5.9, 8.1)	–	–	–
Retired	377	1373	5.5 (5.0, 6.0)	–	–	–

	Transitioned ADF (n=24,932)			2015 Regular ADF (n=52,500)		
	n	Weighted n	% (95% CI)	n	Weighted n	% (95% CI)
Main source of income						
Wage/salary/own business/partnership	2590	16,024	64.3 (62.7, 65.8)	8480	52,500	100.0
Age pension	263	911	3.7 (3.3,4.1)	–	–	–
Invalidity service pension	262	1322	5.3 (4.7, 6.0)	–	–	–
VEA/SRCA/MRCA compensation	195	1114	4.5 (3.8, 5.2)	–	–	–
Dividends/interest/investments	27	153	0.6 (0.4, 0.9)	–	–	–
Other pension/ benefit/allowance	183	1342	5.4 (4.6, 6.4)	–	–	–
Superannuation	404	1590	6.4 (5.8, 7.0)			
Other	301	1795	7.2 (6.3, 8.2)	–	–	–
Stable housing						
No	129	852	3.4 (2.8, 4.2)	233	2287	4.4 (2.9,6.4)
Yes	4089	23,378	93.8 (92.8, 94.6)	8043	48,851	93.1 (90.7,94.9)

*No CIs are provided for Sex, Rank, Service and Medical fitness as these variables were used to create strata for weighting.
Notes: Missing: 2015 Regular ADF: Age group: 148 (3.4%), Relationship status 153 (1.7%), Education 145 (1.7%) Stable Housing 204 (2.6%); Transitioned ADF: Age group: 55 (1.6%), Relationship status 83 (2.2%), Education 60 (1.5%), Employment 72 (1.9%), Main income 101 (2.7%), Stable Housing 108 (2.8%). 95%CI = 95% confidence interval.

Table 3.2 describes the service characteristics of Transitioned ADF and 2015 Regular ADF members. In the Transitioned ADF group, there were fewer Officers (16.3% of Transitioned ADF vs 25.6% of 2015 Regular ADF) and more Other Ranks (52.2% Transitioned ADF vs 41.1% 2015 Regular ADF). The service distribution also significantly varied between the two groups; there were more Army and fewer Air Force members in the Transitioned ADF group. Significantly more Transitioned ADF members (26.7%) were classified as being medically unfit compared to the 2015 Regular ADF group (12.3%).

Table 3.2 Weighted service characteristics in Transitioned ADF and 2015 Regular ADF

	Transitioned ADF (n=24,932)			2015 Regular ADF (n=52,500)		
	n	Weighted n	% (95% CI)	n	Weighted n	% (95% CI)
Rank*†						
OFFR	1259	4063	16.3	3538	13,444	25.6
NCO	2097	7866	31.6	4336	17,491	33.3
Other Ranks	970	13,003	52.2	606	21,565	41.1
Service*†						
Army	2463	15,038	60.3 (60.3, 60.3)	3500	25,798	49.1
Navy	863	5671	22.8 (22.8, 22.8)	2040	13,282	25.3
Air Force	1000	4223	16.9 (16.9, 16.9)	2940	13,420	25.6
Medical fitness*						
Fit	2981	18,273	73.3	7116	46,022	87.7
Unfit	1345	6659	26.7	1364	6478	12.3
Time in Regular ADF						
1 months – 3.9 years	316	2934	11.8 (10.5, 13.1)	263	6141	11.7 (8.9, 15.1)
4–7.9 years	966	9015	36.2 (34.5, 37.9)	840	9710	18.5 (15.4, 22.0)
8–11.9 years	613	3295	13.2 (12.1, 14.4)	1436	10,362	19.7 (16.9, 22.9)
12–15.9 years	478	2086	8.4 (7.6, 9.2)	1389	7568	14.4 (12.4, 16.8)
16–19.9 years	265	967	3.9 (3.5, 4.3)	994	4143	7.9 (7.1, 8.8)
20+ years	1580	5772	23.2 (22.4, 23.9)	3413	13,651	26.0 (24.4, 27.7)

* No CIs are provided for Sex, Rank, Service and Medical fitness as these variables were used to create strata for weighting.
† Either 2015 Regular ADF or on discharge from Regular ADF service.
Notes
95%CI = 95% confidence interval.
Missing: 2015 Regular ADF: Time in Regular ADF: 145 (1.7%), Transitioned: Time in Regular ADF: 108 (3.4%).

3.2 Demographic characteristics of the Transitioned ADF

As seen in Table 3.3, more than half (55.8%) of Transitioned ADF members remained in the ADF as Reservists. Of these, just under a half were Active Reservists. Regardless of Reservist status, the majority reported transitioning between one and three years ago. The most common type of discharge or resignation reported was ‘own request’, which was the case for more than half (53.7%) of Transitioned ADF members, and this percentage increased to over 60% when including ‘end of fixed period’ (2.1%) and ‘end of initial enlistment period’ (5.2%). The second most common type of discharge was ‘medical discharge’, with approximately one-fifth (20.4%) of Transitioned ADF members reporting this type of discharge. The most commonly reported reasons for transition were ‘impact of service life on family’ (10.2%), ‘better employment prospects in civilian life’ (7.2%), ‘mental health problems’ (6.5%) and ‘physical health problems’ (4.3%). A large proportion of Transitioned ADF members did not report their main reason for transition (39.5%).

Table 3.3 Weighted transition characteristics in Transitioned ADF

Characteristic	Transitioned ADF (n=24,932)		
	n	Weighted n	% (95% CI)
Serving status			
Ex-Serving	1675	10,902	43.3 (42.1, 45.4)
Reservist			
Active Reservist	1398	6398	25.7 (24.4, 26.9)
Inactive Reservist	1232	7502	30.1 (28.5, 31.8)
Years since transitioned			
0	376	1945	7.8 (6.9, 8.8)
1	852	4874	19.6 (18.2, 21.0)
2	810	4944	19.8 (18.4, 21.3)
3	876	5233	20.9 (19.5, 22.5)
4	663	3582	14.4 (13.2, 15.6)
5+	503	2785	11.2 (10.1, 12.3)
Type of discharge/resignation			
Compulsory age	177	612	2.5 (2.2, 2.8)
Own request	2408	13383	53.7 (52.0, 55.3)
Unsuitable for further training	45	485	1.9 (1.4, 2.7)
End of fixed period	80	532	2.1 (1.6, 2.8)
End of initial enlistment period/return of service obligation	113	1293	5.2 (4.3, 6.3)
Limited tenured appointment (Officers)	22	85	0.3 (0.2, 0.6)
Not offered re-engagement	9	83	0.3 (0.2, 0.7)
Accepted voluntary redundancy	150	533	2.1 (1.9, 2.5)
Compassionate grounds	26	150	0.6 (0.4, 0.9)
Non-voluntary discharge – administrative	77	757	3.0 (2.4, 3.9)
Medical discharge	911	5082	20.4 (19.4, 21.4)
Other	208	1242	4.9 (4.2, 5.9)
Main reason for transition			
Better employment prospects in civilian life	285	1800	7.2 (6.3, 8.3)
Lack of promotion prospects	127	688	2.8 (2.2, 3.4)
Inability to plan life outside of work	82	646	2.6 (2.0, 3.3)
Impact of service life on family	457	2546	10.2 (9.2, 11.3)
Pressure from family	46	228	0.9 (0.7, 1.3)
Didn't want to be away from home	101	586	2.4 (1.9, 2.9)
Pregnancy	7	39	0.2 (0.1, 0.4)
Posting issues (i.e. unhappy with location or nature of postings)	224	1061	4.3 (3.7, 4.9)
Too many deployments	#	–	–
Not enough deployments	41	341	1.4 (0.9, 1.9)
Because of my experiences on deployment	44	336	1.4 (0.9, 1.9)
Work not exciting or challenging enough	93	724	2.9 (2.3, 3.7)
Dissatisfaction with pay	31	168	0.7 (0.4, 1.0)
Personal experience of harassment/ bullying/ discrimination in the ADF	157	916	3.7 (3.1, 4.4)
Personal experience of violence in the ADF	#	–	–
Disciplinary action or criminal offence	8	74	0.3 (0.1, 0.7)

Characteristic	Transitioned ADF (n=24,932)		
	n	Weighted n	% (95% CI)
My service was terminated	106	677	2.7 (2.2, 3.4)
Physical health problems	178	1079	4.3 (3.6, 5.2)
Mental health problems	281	1616	6.5 (5.7, 7.4)
Other	178	1079	4.3 (3.6, 5.2)

Notes
95%CI = 95% confidence interval.
Missing: Years since transition: 246 (6.3%), Type of discharge: 100 (2.8%), Main reason 1776 (39.5%).
= Cell size too small to be reported.

Table 3.4 summarises employment and DVA support characteristics for Transitioned ADF members. Almost two thirds (62.8%) of the Transitioned ADF group reported being engaged in civilian employment. For those individuals, the most common industries of employment were government administration and Defence (16.8%), mining (9.9%), construction (8.8%), and transport and storage (8.6%). Of those employed, 1.3% did not report which industry they were employed in. Of those who were not engaged in civilian employment, a considerable proportion (43.7%) reported a period of three months or longer in which they had been unemployed since transitioning from Regular ADF. More than 43% of Transitioned ADF members reported accessing DVA-funded treatment using a DVA White Card (39.4%) or DVA Gold Card (4.2%).

Table 3.4 Weighted civilian employment and DVA support among Transitioned ADF members

Characteristic	Transitioned ADF (n=24,932)		
	n	Weighted n	% (95%CI)
Civilian employment			
Employed	2516	15,664	62.8 (61.2, 64.4)
Not employed	1735	8771	35.2 (33.6, 36.8)
Hours worked in past week*			
0–20 hours	250	1652	10.6 (9.1, 12.2)
21–40 hours	1199	7311	46.7 (44.3, 49.1)
41–60 hours	790	4949	31.6 (29.4, 33.9)
61–80 hours	94	576	3.7 (2.9, 4.7)
80 plus hours	112	790	5.0 (4.0, 6.3)
Civilian employment industry*			
Agriculture, forestry and fishing	53	380	2.4 (1.7, 3.4)
Mining	221	1557	9.9 (8.5, 11.6)
Manufacturing	92	751	4.8 (3.8, 6.1)
Electricity, gas and water supply	71	504	3.2 (2.4, 4.2)
Construction	162	1375	8.8 (7.4, 10.4)
Wholesale trade	23	188	1.2 (0.8, 1.9)
Retail trade	116	1058	6.8 (5.5, 8.3)
Accommodation, cafes and restaurants	54	420	2.7 (1.9, 3.7)
Transport and storage	230	1340	8.6 (7.3, 9.9)
Communication services	96	666	4.3 (3.4,5.4)
Finance and insurance	35	216	1.4 (0.9, 2.1)
Property and business services	63	407	2.6 (1.9, 3.5)
Government administration and Defence	589	2637	16.8 (15.4, 18.4)
Education	119	598	3.8 (3.1, 4.8)
Health and community services	226	1210	7.7 (6.6, 9.0)
Cultural and recreational services	30	201	1.3 (0.8, 1.9)
Personal and other services	149	908	5.8 (4.8, 7.0)
Emergency services	153	1044	6.7 (5.5, 8.1)
Unemployment: at least 3-month period since transition			
Yes	1762	10,906	43.7 (42.0, 45.5)
No	2455	13,359	53.6 (51.8, 55.3)
DVA support since transition			
Treatment support (white or gold card)	1773	10,879	43.6 (41.8, 45.5)
White card	1565	9834	39.4 (37.6,41.3)
Gold card	211	1057	4.2 (3.6, 4.9)

* Proportion of Employed Transition ADF only.
Notes
95%CI = 95% confidence interval.
Missing: Civilian employment: 75 (2.0%), Hours worked 71 (2.5%) Industry 34 (1.3%), Unemployment 109 (2.7%).

As seen in Table 3.5, approximately 30% of the Transitioned ADF group reported joining an ex-service organisation or voluntary group. A small proportion of the Transitioned ADF group reported having been arrested (2.9%), convicted (2.1%) or imprisoned since transitioning from Regular ADF service.

Table 3.5 Weighted ex-service organisation engagement and incarceration among Transitioned ADF members

	Transitioned ADF (n=24,932)		
Characteristic	n	Weighted n	% (95%CI)
No. of ex-service organisations joined			
None	2358	17,359	69.6 (67.7, 71.5)
1	834	5060	20.3 (18.8, 21.9)
2	228	1347	5.4 (4.6, 6.3)
3	63	374	1.5 (1.1, 2.0)
4	17	82	0.3 (0.2, 0.6)
5 plus	11	47	0.2 (0.1, 0.3)
No. of other voluntary groups joined			
None	2204	16,202	64.9 (63.0, 66.9)
1	732	4610	18.5 (17.0, 20.1)
2	345	1961	7.9 (6.9, 8.9)
3	133	854	3.4 (2.8, 4.3)
4	36	208	0.8 (0.6, 1.2)
5 plus	27	160	0.6 (0.4, 1.1)
Criminal behaviour since transition			
Arrested	72	746	2.9 (2.3,3.9)
Conviction	47	516	2.1 (1.5, 2.9)
Imprisoned	#	–	–

Notes
95%CI = 95% confidence interval.
Missing: Ex-service organisations: 60 (2.7%), other organisations 94 (3.8%).
= Cell size too small to be reported.

4 Internet use and attitudes to using the internet in Transitioned and 2015 Regular ADF

Frequency, duration and timing of internet use

- Internet use among Transitioned ADF and 2015 Regular ADF was high, with more than 95% using the internet at least every day.
- Approximately half of the Transitioned ADF and 2015 Regular ADF reported using the internet 1–2 hours daily, while approximately a quarter used it 3–4 hours daily.
- Use of the internet after 11 pm was common in one third of the Transitioned ADF and one quarter of the 2015 Regular ADF.

Attitudes to using the internet

- One in four Transitioned ADF reported that they found it easier to be themselves online, that they talked about different things with people online than face to face, and that they went online when going through a difficult time.
- One in five 2015 Regular ADF reported that they found it easier to be themselves online, while one in four reported that they talked about different things with people online than face to face, and that they went online when going through a difficult time.
- One in five Transitioned ADF and 2015 Regular ADF reported that going online when going through a difficult time made them feel better.

Probable 30-day disorder and duration and timing of internet use

- Transitioned ADF and 2015 Regular ADF with a probable disorder spent more hours on the internet than those without.
- Among the Transitioned ADF, a significantly larger proportion of those with than without a probable disorder reported internet use after 11 pm (45.1% vs 28.4%).

Probable 30-day disorder and attitudes to using the internet

- Transitioned ADF and 2015 Regular ADF with a probable disorder reported different attitudes to using technology from those without a probable disorder.
- For both the Transitioned ADF and Regular ADF, those with a probable disorder were significantly more likely than those without a probable disorder to report that:
  - it was easier to be themselves online

  - they talked about private things when online.
- Additionally, Transitioned ADF with a probable disorder were significantly more likely than those without a probable disorder to report that:
  - they talked about different things with people online
  - they went online more often when going through a difficult time
  - when they are going through a difficult time and they went online, it made them feel better.

Glossary: refer to the Glossary of terms for definitions of key terms.

4.1 Introduction

The following chapter describes internet use and attitudes towards using the internet in the Transitioned ADF and the 2015 Regular ADF. The chapter ends with a breakdown of these factors by probable disorder and no probable disorder among the Transitioned and 2015 Regular ADF. The key research questions this chapter explores are:

- How do the Transitioned and 2015 Regular ADF use the internet and what are their attitudes towards using the internet?
- Do patterns of internet use and attitudes towards the use of the internet differ depending on the presence or absence of probable 30-day disorder in the Transitioned and 2015 Regular ADF?

Frequency, duration, timing and methods of searching online were examined using the following questions:

1. How often do you use the internet?
2. When searching for information on the internet, how would you usually begin?
3. Approximately how much time would you spend using the internet on a normal work day?
4. Do you use the internet after 11 pm at night?

Attitudes and patterns of online communication in the Transitioned and 2015 Regular ADF were examined using six statements:

1. I find it easier to be myself when online than when I am with people face to face.
2. I talk about different things with people when online than I do when face to face.
3. When I am online, I talk about private things that I do not share with people face to face.
4. I go online much more on the weekends than I do on a regular work day.
5. When I am going through a difficult time, I go online more often.
6. When I am going through a difficult time, going online makes me feel better.

All respondents were asked to indicate how true the statements were for them using three response options: not true, a bit true, very true. Responses were then dichotomised into two categories: 'true' (either a bit true or very true) and 'not true'.

All outcomes measures in this chapter (as described above) were stratified by transition status (according to whether they were transitioned or remained in the Regular ADF in 2015) and probable 30-day disorder (according to whether or not they met the criteria for a probable disorder).

The presence of a probable 30-day disorder was determined based on scores on the K10 and PCL. The K10 is a 10-item screening questionnaire for psychological distress that was developed for use in the United States National Health Interview Survey (US=NHIS) (Kessler et al., 2002). Originally designed as a short, easily administered screen for psychological distress, the K10 is typically used to inform and complement clinical interviews and to quantify levels of distress in those who are in particular need of treatment. The PCL is a 17-item measure used to measure symptoms of PTSD.

Participants were deemed to have a probable 30-day disorder if they scored above the optimal epidemiological cut-off (25 on the K10, 53 on the PCL) on either measure. Epidemiological cut-offs were derived from the 2010 MHPWS and give the closest estimate to the true prevalence of 30-day ICD-10 (International Statistical Classification of Diseases and Related Health Problems – 10th Revision) affective and anxiety, disorder and PTSD as measured by the World Mental Health Survey Initiative Version of the World Health Organization Composite Diagnostic Interview-Version 3.0 (WMH-CIDI).

Logistic regression models performed on selected collapsed (dichotomous) grouping variables were adjusted for sex and age.

4.2 Frequency, duration and timing of internet use

4.2.1 Frequency of internet use

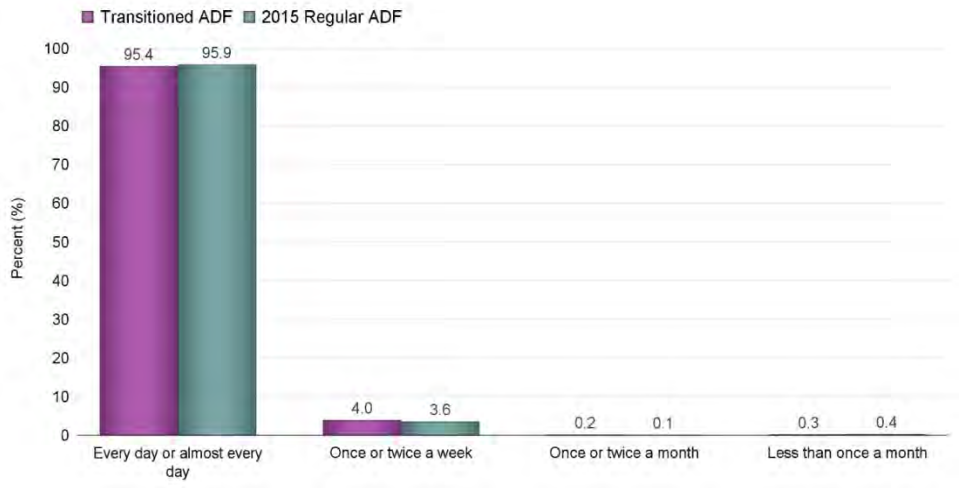
Table 4.1 and Figure 4.1 describe the frequency with which the Transitioned ADF and 2015 Regular ADF used the internet. More than 95% of the Transitioned ADF and 2015 Regular ADF reported using the internet at least every day.

Table 4.1 Frequency of internet use in Transitioned ADF and 2015 Regular ADF

	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
Frequency of internet use	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Every day or almost every day	3372	23,788	95.4 (94.5, 96.2)	7071	50,337	95.9 (93.5, 97.4)
Once or twice a week	146	993	4.0 (3.2, 4.9)	227	1871	3.6 (2.1, 6.0)
Once or twice a month	9	52	0.2 (0.1, 0.4)	23	74	0.1 (0.1, 0.2)
Less than once a month	13	68	0.3 (0.2, 0.5)	16	187	0.4 (0.1, 1.3)

Notes
Denominator: Entire cohort.
Based on weighted counts, 32 (0.1%) Transitioned ADF and 31 (0.1%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 4.1 Frequency of internet use in Transitioned ADF and 2015 Regular ADF



4.2.2 Methods used to search for information on the internet

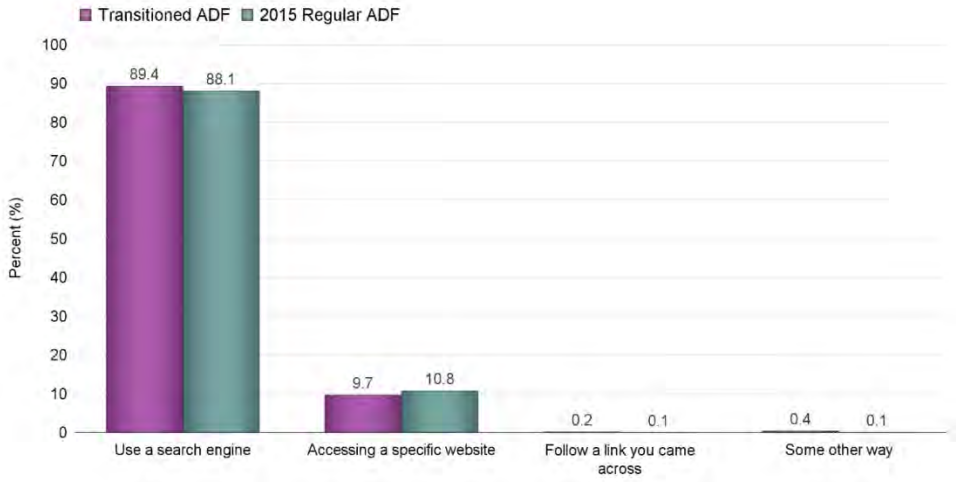
The majority of the Transitioned ADF (89.4%) and the 2015 Regular ADF (88.1%) reported using a search engine to search for information on the internet. Approximately 10% of both groups (Transitioned ADF 9.7% vs 2015 Regular ADF 10.8%) deliberately accessed a specific website (Table 4.2 and Figure 4.2).

Table 4.2 Methods used to begin searching for information on the internet in Transitioned ADF and 2015 Regular ADF

	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
Search strategy	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Use a search engine (e.g. Google, Yahoo)	3161	22,287	89.4 (88.0, 90.6)	6484	46,271	88.1 (85.5, 90.3)
Deliberately accessing a specific website	346	2422	9.7 (8.5, 11.1)	812	5665	10.8 (8.7, 13.3)
Follow a link you accidentally came across	9	45	0.2 (0.1, 0.4)	7	32	0.1 (0.0, 0.1)
Some other way	13	101	0.4 (0.2, 0.8)	10	39	0.1 (0.0, 0.2)

Notes
Denominator: Entire cohort.
Based on weighted counts, 76 (0.3%) Transitioned ADF and 492 (0.9%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 4.2 Methods used to begin searching for information on the internet in Transitioned ADF and 2015 Regular ADF



4.2.3 Duration of internet use on a normal work day

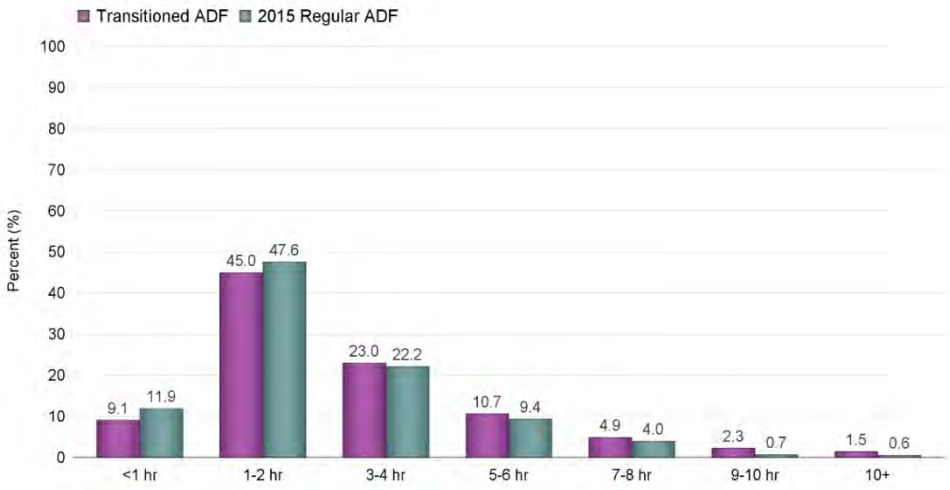
The majority of the Transitioned ADF and 2015 Regular ADF spent 1–2 hours per day using the internet (Transitioned ADF 45.0%, 2015 Regular ADF 47.6%) (Table 4.3 and Figure 4.3).

Table 4.3 Duration of internet usage on a normal work day among Transitioned ADF and 2015 Regular ADF

	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
Duration	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
<1 hour	338	2275	9.1 (8.0, 10.4)	907	6268	11.9 (9.6, 14.8)
1–2 hours	1673	11,210	45.0 (42.9, 47.0)	3979	24,990	47.6 (43.6, 51.7)
3–4 hours	824	5742	23.0 (21.3, 24.8)	1492	11,641	22.2 (18.8, 25.9)
5–6 hours	351	2664	10.7 (9.4, 12.1)	548	4945	9.4 (7.0, 12.6)
7–8 hours	143	1224	4.9 (4.0, 6.0)	191	2091	4.0 (2.7, 5.9)
9–10 hours	62	580	2.3 (1.7, 3.2)	78	383	0.7 (0.6, 1.0)
> 10 hours	45	373	1.5 (1.1, 2.1)	47	308	0.6 (0.3, 1.1)

Notes
Denominator: Entire cohort.
Based on weighted counts, 864 (3.5%) Transitioned ADF and 1874 (3.6%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 4.3 Duration of internet usage on a normal work day among Transitioned ADF and 2015 Regular ADF



4.2.4 Internet use after 11 pm

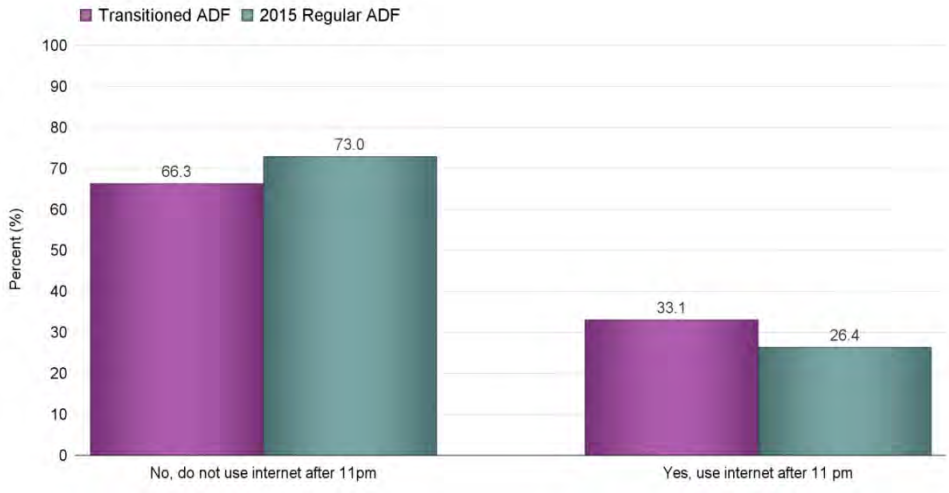
Table 4.4 and Figure 4.4 present the proportion of Transitioned ADF and 2015 Regular ADF who used the internet after 11 pm. The Transitioned ADF were significantly more likely to use the internet after 11 pm compared to the 2015 Regular ADF (33.1% vs 26.4%; OR 1.5, 95% CI 1.1,1.9).

Table 4.4 Estimated proportion of Transitioned ADF and 2015 Regular ADF using the internet after 11 pm

	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No, do not use internet after 11 pm	2510	16,542	66.3 (64.3, 68.3)	5721	38,300	73.0 (68.9, 76.7)
Yes, use internet after 11 pm	1016	8260	33.1 (31.1, 35.2)	1587	13,882	26.4 (22.7, 30.5)

Notes
Denominator: Entire cohort.
Based on weighted counts, 130 (0.5%) Transitioned ADF and 318 (0.6%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 4.4 Estimated proportions of internet usage after 11 pm in Transitioned ADF and 2015 Regular ADF



4.3 Attitudes to using the internet in Transitioned ADF and 2015 Regular ADF

4.3.1 Easier to be myself online than face to face

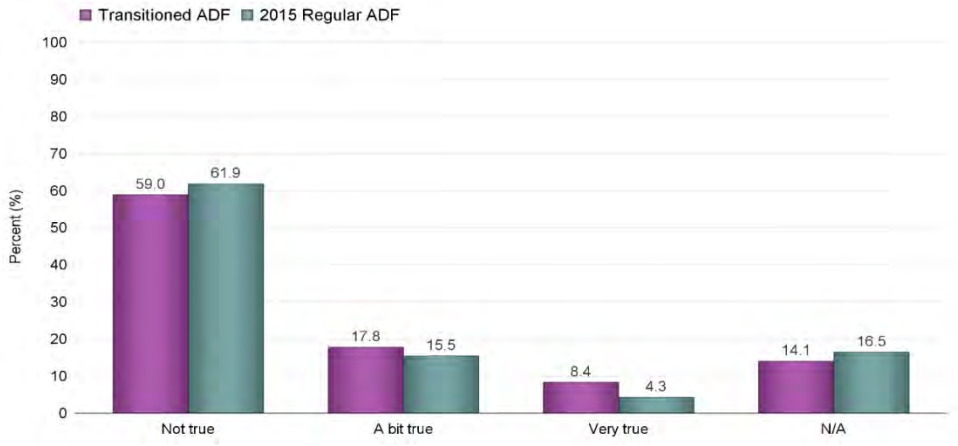
Approximately 20–25% of the Transitioned ADF and 2015 Regular ADF indicated they found it easier to be themselves when they were online than when they were with people face to face (Table 4.5 and Figure 4.5). Transitioned ADF were significantly more likely to report that they found it easier to be themselves when they were online than when they were with people face to face compared to the 2015 Regular ADF (26.2% vs 19.9%; OR 1.4, 95% CI 1.1, 1.9).

Table 4.5 Estimated proportion of Transitioned ADF and 2015 Regular ADF who reported that they found it easier to be themselves online than when they were face to face with people

I find it easier to be myself when online than when I am with people face to face.	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Not true	2127	14,703	59.0 (56.9, 61.0)	4976	32,488	61.9 (57.7, 65.9)
A bit true	551	4447	17.8 (16.2, 19.6)	931	8154	15.5 (12.5, 19.1)
Very true	258	2097	8.4 (7.3, 9.7)	263	2278	4.3 (2.9, 6.6)
N/A	582	3515	14.1 (12.8, 15.5)	1133	8683	16.5 (13.5, 20.1)
Collapsed categories						
N/A	582	3515	14.1 (12.8, 15.5)	1133	8683	16.5 (13.5, 20.1)
Not true	2127	14,703	59.0 (56.9, 61.0)	4976	32,488	61.9 (57.7, 65.9)
True (A bit true/very true)	809	6544	26.2 (24.4, 28.2)	1194	10,432	19.9 (16.5, 23.7)

Notes
Denominator: Entire cohort.
Based on weighted counts, 170 (0.7%) Transitioned ADF and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 4.5 Estimated proportion of Transitioned ADF and 2015 Regular ADF who reported that it was easier to be themselves online than when they were face to face with people



4.3.2 Talked about different things online than when face to face

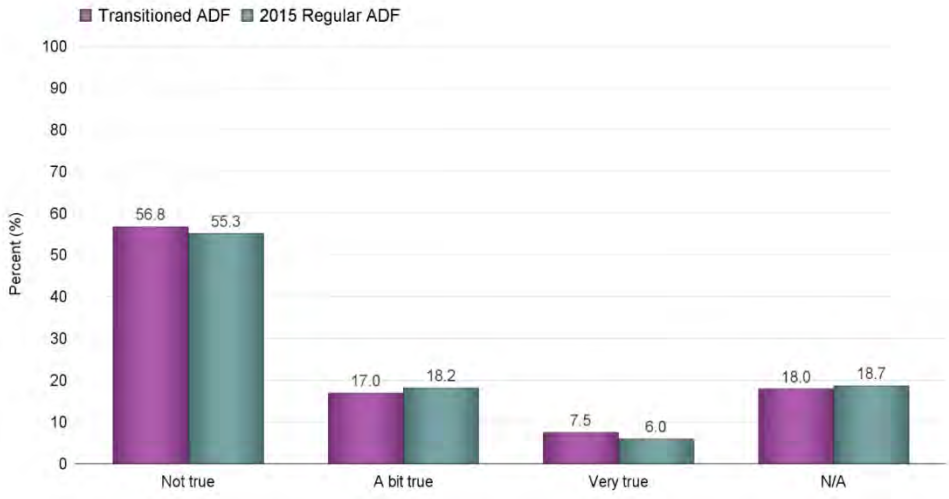
Approximately one quarter of the Transitioned ADF (24.5%) and 2015 Regular ADF (24.2%) reported that they talked about different things with people online than when they were with people face to face (Table 4.6 and Figure 4.6). There were no differences between the Transitioned ADF and the 2015 Regular ADF.

Table 4.6 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated they talked about different things with people online than when they were with people face to face

I talk about different things with people when online than I do when face to face.	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Not true	2030	14,166	56.8 (54.7, 58.9)	4594	29,008	55.3 (51.2, 59.3)
A bit true	513	4235	17.0 (15.4, 18.7)	945	9567	18.2 (14.8, 22.2)
Very true	214	1871	7.5 (6.4, 8.8)	297	3154	6.0 (4.1, 8.7)
N/A	761	4489	18.0 (16.6, 19.5)	1460	9840	18.7 (15.7, 22.2)
Collapsed categories						
N/A	761	4489	18.0 (16.6, 19.5)	1460	9840	18.7 (15.7, 22.2)
Not true	2030	14,166	56.8 (54.7, 58.9)	4594	29,008	55.3 (51.2, 59.3)
True (A bit true/very true)	727	6106	24.5 (22.6, 26.4)	1242	12721	24.2 (20.5, 28.4)

Notes
Denominator: Entire cohort.
Based on weighted counts, 171 (0.7%) Transitioned ADF and 931 (1.8%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 4.6 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated they talked about different things with people online than when they were with people face to face



4.3.3 Talked about private things online that were not shared with people face to face

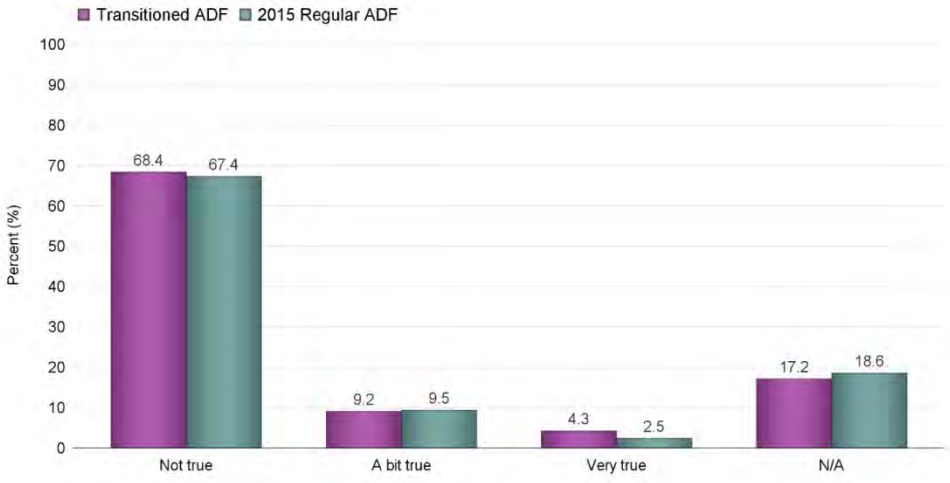
Just over 10% of the Transitioned ADF and 2015 Regular ADF reported that they talked about private things with people online which they did not share with people face to face (13.5% and 12.0% respectively) (Table 4.7 and Figure 4.7). There were no differences between the Transitioned ADF and the 2015 Regular ADF.

Table 4.7 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated that they talked about private things with people online which they did not share with people face to face

When I am online, I talk about private things that I do not share with people face to face.	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Not true	2365	17,066	68.4 (66.5, 70.3)	5250	35,365	67.4 (63.2, 71.3)
A bit true	282	2284	9.2 (8.0, 10.5)	479	4980	9.5 (6.9, 12.9)
Very true	118	1084	4.3 (3.5, 5.4)	108	1328	2.5 (1.4, 4.6)
N/A	744	4289	17.2 (15.8, 18.7)	1453	9787	18.6 (15.6, 22.1)
Collapsed categories						
N/A	744	4289	17.2 (15.8, 18.7)	1453	9787	18.6 (15.6, 22.1)
Not true	2365	17,066	68.4 (66.5, 70.3)	5250	35,365	67.4 (63.2, 71.3)
True (A bit true/very true)	400	3368	13.5 (12.1, 15.1)	587	6308	12.0 (9.2, 15.6)

Notes
Denominator: Entire cohort.
Based on weighted counts, 170 (0.7%) Transitioned ADF, and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 4.7 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated that they talked about private things with people online which they did not share with people face to face



4.3.4 Went online more often on weekends than on a regular work day

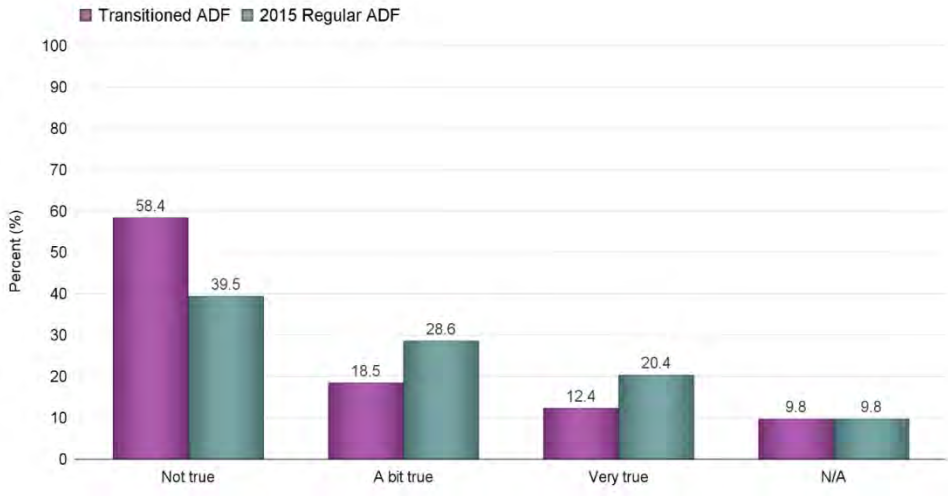
Transitioned ADF were significantly less likely to go online more often on weekends than on a regular work day compared to the 2015 Regular ADF (30.9% vs 49.0%, OR 0.47, 95% CI 0.37, 0.60) (Table 4.8 and Figure 4.8).

Table 4.8 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated that they went online more often on weekends than on a regular work day

I go online much more on the weekends than I do on a regular work day.	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Not true	2105	14,572	58.4 (56.4, 60.5)	3290	20713	39.5 (35.8, 43.2)
A bit true	627	4605	18.5 (16.9, 20.2)	2111	15,023	28.6 (25.0, 32.5)
Very true	378	3093	12.4 (11.0, 14.0)	1303	10,703	20.4 (17.1, 24.1)
N/A	405	2435	9.8 (8.7, 11.0)	595	5147	9.8 (7.2, 13.2)
Collapsed categories						
N/A	405	2435	9.8 (8.7, 11.0)	595	5147	9.8 (7.2, 13.2)
Not true	2105	14,572	58.4 (56.4, 60.5)	3290	20,713	39.5 (35.8, 43.2)
True (A bit true/very true)	1005	7698	30.9 (28.9, 32.9)	3414	25,726	49.0 (44.8, 53.2)

Notes
Denominator: Entire cohort.
Based on weighted counts, 170 (0.7%) Transitioned ADF, and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
Note: For a full description of odds ratios, interpretation and strength of association please refer to Table B.1 in Annex B, Odds ratio table.

Figure 4.8 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated that they went online more often on weekends than on a regular work day



4.3.5 Went online more often when going through a difficult time

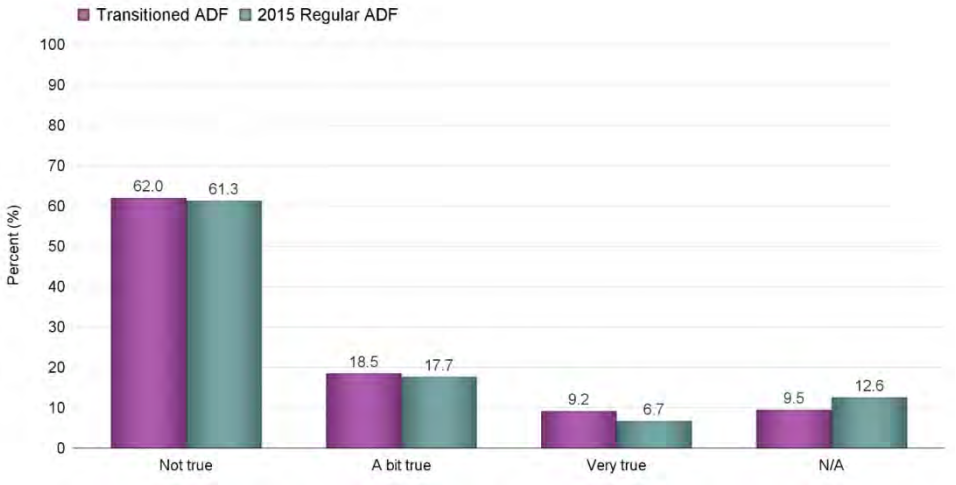
Approximately one quarter of the Transitioned ADF (27.7%) and 2015 Regular ADF (24.3%) reported that they went online more often when they were going through a difficult time (Table 4.9 and Figure 4.9). There were no significant differences between the Transitioned ADF and the 2015 Regular ADF.

Table 4.9 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated that they went online more often when going through a difficult time

When I am going through a difficult time, I go online more often.	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Not true	2258	15,453	62.0 (59.9, 64.0)	5121	32,158	61.3 (57.2, 65.2)
A bit true	589	4619	18.5 (16.9, 20.3)	1027	9283	17.7 (14.3, 21.6)
Very true	254	2282	9.2 (7.9, 10.5)	365	3499	6.7 (4.7, 9.3)
N/A	410	2359	9.5 (8.4, 10.6)	780	6593	12.6 (9.8, 16.0)
Collapsed categories						
N/A	410	2359	9.5 (8.4, 10.6)	780	6593	12.6 (9.8, 16.0)
Not true	2258	15,453	62.0 (59.9, 64.0)	5121	32,158	61.3 (57.2, 65.2)
True (A bit true/very true)	843	6900	27.7 (25.8, 29.7)	1392	12782	24.3 (20.6, 28.5)

Notes
Denominator: Entire cohort.
Note: Based on weighted counts, 170 (0.7%) Transitioned ADF and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 4.9 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated that they went online more often when going through a difficult time



4.3.6 Going online when going through a difficult time makes me feel better

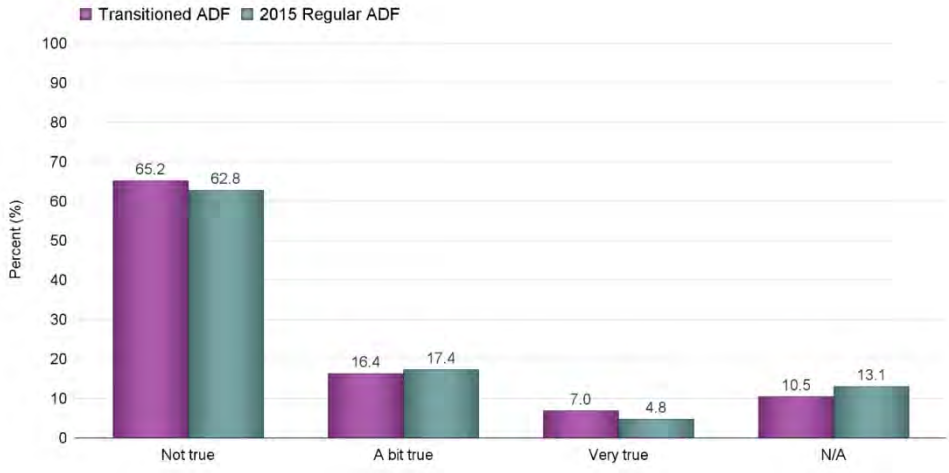
A quarter of the Transitioned ADF and 2015 Regular ADF indicated that when they were going through a difficult time, going online made them feel better (Table 4.10 and Figure 4.10). There were no significant differences between the Transitioned ADF and the 2015 Regular ADF.

Table 4.10 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated that when they were going through a difficult time, going online made them feel better

When I am going through a difficult time, going online makes me feel better.	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Not true	2336	16,264	65.2 (63.2, 67.2)	5222	32,980	62.8 (58.6, 66.9)
A bit true	534	4087	16.4 (14.9, 18.1)	964	9129	17.4 (14.1, 21.3)
Very true	192	1735	7.0 (5.9, 8.2)	242	2534	4.8 (3.2, 7.1)
N/A	448	2623	10.5 (9.4, 11.7)	861	6864	13.1 (10.3, 16.5)
Collapsed categories						
N/A	448	2623	10.5 (9.4, 11.7)	861	6864	13.1 (10.3, 16.5)
Not true	2336	16,264	65.2 (63.2, 67.2)	5222	32,980	62.8 (58.6, 66.9)
True (A bit true/very true)	726	5822	23.4 (21.6, 25.2)	1206	11663	22.2 (18.6, 26.3)

Notes
Denominator: Entire cohort.
Based on weighted counts, 170 (0.7%) Transitioned ADF and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 4.10 Estimated proportion of Transitioned ADF and 2015 Regular ADF who indicated that when they were going through a difficult time, going online made them feel better



4.4 Probable disorder and its relationship with internet use and attitudes towards using the internet

4.4.1 Frequency, duration and timing of internet use in Transitioned ADF and 2015 Regular ADF with and without probable disorder

Table 4.11 presents internet use among Transitioned ADF and 2015 Regular ADF with and without a probable disorder. The vast majority of both Transitioned ADF and 2015 Regular ADF reported using the internet every day or almost every day, regardless of probable disorder status.

In relation to the hours spent on the internet on a typical work day, among both the Transitioned ADF and the 2015 Regular ADF there was a general pattern whereby those with a probable disorder spent more hours on the internet than those without. Just under 50% of the Transitioned ADF (49.5%) and just over 50% of the 2015 Regular ADF (52.2%) with a probable disorder reported that they spent three or more hours on the internet each day compared to 39.7% of the Transitioned ADF and 34.2% of the 2015 Regular ADF with no disorder.

Among the Transitioned ADF, a significantly larger proportion of those with than without a probable disorder reported internet use after 11 pm (45.1% vs 28.4%; OR 2.0, 95% CI 1.6, 2.5). No significant differences were observed on this item among 2015 Regular ADF with and without a probable disorder (32.7% vs 25.3%, respectively).

4.4.2 Attitudes towards internet use among Transitioned ADF and 2015 Regular ADF with and without probable disorder

Table 4.12 presents attitudes towards the internet among Transitioned ADF and 2015 Regular ADF with and without a probable disorder.

Transitioned ADF with a probable disorder were significantly more likely than those without a probable disorder to report all but one of the items presented. That is, those with a probable disorder were more likely to report that it was 'easier to be myself online' (42.2% vs 19.9%; OR 2.8, 95% CI 2.3, 3.5), 'I talk about different things with people online' (34.9% vs 20.4%; OR 2.1, 95% CI 1.7, 2.6), 'when online I talk about private things' (21.0% vs 10.6%; OR 2.2, 95% CI 1.6, 2.9), 'when I am going through a difficult time, I go online more often' (42.6% vs 21.8%; OR 2.6, 95% CI 2.1, 3.2) and 'when I am going through a difficult time, going online makes me feel better' (34.2% vs 19.1%; OR 2.2, 95% CI 1.7, 2.7). All were moderate associations. The only item that did not show a difference was 'I go online much more on weekends' (28.6% vs 31.8%).

For 2015 Regular ADF, those with a probable disorder were significantly more likely to report that it was 'easier to be myself online' (33.4% vs 17.5%; OR 2.4, 95% CI 1.3, 4.2) and 'when online I talk about private things' (23.0% vs 10.1%; OR 2.3, 95% CI 1.1, 5.0) compared to those without a probable disorder. Both were moderate associations. Significant differences between those with and those without a probable disorder were not observed for the following items: 'when I am going through a difficult time, I go online more often' (33.5% vs 22.7%), 'when I am going through a difficult time, going online makes me feel better' (31.4% vs 20.6%), 'I go online much more on weekends' (48.1% vs 49.2%), and 'I talk about different things with people online' (26.5% vs 23.8%).

Table 4.11 Internet use in Transitioned ADF and 2015 Regular ADF with and without probable 30-day disorder

	Transitioned ADF n=24,932						2015 Regular ADF n=52,500					
	No Probable Disorder n=17,881			Probable Disorder n=7051			No Probable Disorder n=44,620			Probable Disorder n=7880		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
How often use the internet*												
Every day or almost every day	2468	17,143	95.9 (94.8, 96.7)	904	6645	94.2 (92.3, 95.7)	6197	42947	96.2 (94.0, 97.7)	874	7390	93.8 (79.8, 98.3)
Once or twice a week	98	654	3.7 (2.8, 4.7)	48	339	4.8 (3.4, 6.7)	196	1405	3.1 (1.8, 5.3)	31	466	5.9 (1.5, 20.4)
Once or twice a month	5	26	0.1 (0.1, 0.3)	#	–	–	19	63	0.1 (0.1, 0.2)	#	–	–
Less than once a month	6	26	0.1 (0.1, 0.3)	7	41	0.6 (0.3, 1.3)	14	181	0.4 (0.1, 1.6)	#	–	–
Hours spent on the internet on typical work day†												
<1 hour	279	1786	10.0 (8.6, 11.5)	59	489	6.9 (5.1, 9.4)	814	5789	13.0 (10.3, 16.3)	93	479	6.1 (4.3, 8.5)
1–2 hours	1292	8569	47.9 (45.4, 50.4)	381	2641	37.4 (33.8, 41.3)	3523	21798	48.9 (44.5, 53.2)	456	3193	40.5 (30.0, 52.0)
3–4 hours	575	4078	22.8 (20.8, 25.0)	249	1664	23.6 (20.5, 27.0)	1293	9682	21.7 (18.2, 25.6)	199	1959	24.9 (15.4, 37.5)
5 plus hours	380	3014	16.9 (15.0, 18.9)	221	1827	25.9 (22.5, 29.6)	723	5573	12.5 (9.9, 15.7)	141	2154	27.3 (17.1, 40.6)
Internet use after 11 pm‡	630	5078	28.4 (26.1, 30.8)	386	3182	45.1 (41.3, 49.1)	1329	11304	25.3 (21.4, 29.7)	258	2577	32.7 (22.2, 45.3)

*Based on weighted counts, 32 (0.1%) Transitioned ADF and 31 (0.1%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
†Based on weighted counts, 864 (3.5%) Transitioned ADF and 1874 (3.6%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
‡Based on weighted counts, approximately 5% of Transitioned ADF and 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Notes
Denominator: Entire cohort.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.
= Cell size too small to be reported.

Table 4.12 Attitudes towards online communication in Transitioned ADF and 2015 Regular ADF with and without probable disorder

	Transitioned ADF n=24,932						2015 Regular ADF n=52,500					
	No Probable Disorder n=17,881			Probable Disorder n=7051			No Probable Disorder n=44,620			Probable Disorder n=7880		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Easier to be myself when online*	425	3567	19.9 (17.9, 22.2)	384	2977	42.2 (38.4, 46.2)	953	7797	17.5 (14.1, 21.4)	241	2635	33.4 (22.8, 46.1)
Talk about different things with people online†	419	3642	20.4 (18.3, 22.6)	308	2464	34.9 (31.2, 38.8)	1014	10,630	23.8 (19.8, 28.4)	228	2091	26.5 (17.6, 37.9)
When online I talk about private things‡	211	1890	10.6 (9.0, 12.4)	189	1478	21.0 (17.9, 24.4)	465	4499	10.1 (7.4, 13.7)	122	1809	23.0 (13.2, 36.8)
I go online much more on weekends#	757	5683	31.8 (29.5, 34.2)	248	2015	28.6 (25.1, 32.3)	2980	21,935	49.2 (44.8, 53.6)	434	3790	48.1 (36.4, 60.1)
When I am going through a difficult time, I go online more often^	473	3893	21.8 (19.7, 24.0)	370	3007	42.6 (38.8, 46.6)	1105	10,143	22.7 (18.8, 27.2)	287	2639	33.5 (23.1, 45.8)
When I am going through a difficult time, going online makes me feel better+	419	3409	19.1 (17.1, 21.2)	307	2413	34.2 (30.6, 38.1)	975	9189	20.6 (16.8, 24.9)	231	2474	31.4 (21.1, 43.9)

*Based on weighted counts, 170 (0.7%) Transitioned ADF, and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
†Based on weighted counts, 171 (0.7%) Transitioned ADF, and 931 (1.8%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
‡Based on weighted counts, 170 (0.7%) Transitioned ADF, and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
#Based on weighted counts, 170 (0.7%) Transitioned ADF, and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
^Based on weighted counts, 170 (0.7%) Transitioned ADF, and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
+Based on weighted counts, 170 (0.7%) Transitioned ADF, and 897 (1.7%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Notes
Denominator: Entire cohort.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

5 Use of new and emerging technology in Transitioned and 2015 Regular ADF

Use of apps and wearable devices

- Half of the Transitioned ADF and 2015 Regular ADF reported using new and emerging technologies. Of these, over 80% used apps, while almost a third used wearable devices.
- Of those who did not use new and emerging technologies, about three quarters did not use them because they had 'no need or interest', it was 'too expensive' or it was a 'privacy issue'.
- Of the Transitioned ADF and 2015 Regular ADF who used apps and wearable devices, just under half reported using them to improve their health and wellbeing.
- Improving fitness, tracking progress and staying organised were the three most common ways in which apps and wearable devices were used to improve health and wellbeing.
- A quarter of the Transitioned ADF and 2015 Regular ADF who used apps and wearable devices for health and wellbeing used them to 'improve sleep'.
- Apps, when not being used to improve health and wellbeing, were being used for fun or recreation, for study or work and to enhance social interaction.

Probable 30-day disorder and use of new and emerging technology

Among those who reported using new or emerging technologies for the purpose of improving health and wellbeing:

- 20.9% of Transitioned ADF and 7.8% of 2015 Regular ADF met the criteria for a probable disorder.
- Transitioned ADF with a probable disorder were significantly more likely to use new or emerging technologies to improve their mood and less likely to use them to improve their fitness than those without a probable disorder.

Among those who reported using new or emerging technologies for reasons other than to improve health and wellbeing:

- 25.2% of the Transitioned ADF and 14.1% of the 2015 Regular ADF met the criteria for a probable disorder.
- Most of the Transitioned ADF and 2015 Regular ADF used them for 'fun or recreation', for 'study or work' and to 'enhance social interaction'.

- Transitioned ADF with a probable disorder were significantly less likely to use them for fun and recreation compared to Transitioned ADF with no probable disorder.

Glossary: refer to the Glossary of terms for definitions of key terms.

5.1 Introduction

The following chapter describes the use of new and emerging technologies in the Transitioned ADF and the 2015 Regular ADF. It is important to note that the survey was conducted in 2014 and that 'new and emerging technologies' included apps, biometrics and other wearable technologies. The chapter ends with a breakdown of these factors by probable disorder and no probable disorder among the Transitioned and 2015 Regular ADF. The key research questions this chapter explores include:

- How do the Transitioned and 2015 Regular ADF use new and emerging technologies?
- Do patterns of use of new and emerging technologies differ depending on the presence or absence of probable 30-day disorder in the Transitioned and 2015 Regular ADF?

The use of new and emerging technologies was examined using the following questions:

1. Do you currently use any new or emerging technologies (e.g. software applications or 'apps', wearable technology)?
    a. IF YES: What new or emerging technologies do you currently use?
    b. IF NO: Why don't you use any new or emerging technologies?
2. In an ideal world where money and time were no obstacle, what new and emerging technologies would you like to use to help improve your health and wellbeing?
3. Because new and emerging technologies are constantly being created then continually upgraded, when is the right time for you to buy a product?
4. Do you use any new or emerging technologies to help you improve your health and wellbeing?
    a. IF YES: How or why do you use new and emerging technologies to improve your health and wellbeing?
    b. IF NO: How or why do you use new and emerging technologies?

All outcomes measures in this chapter (as described above) were stratified by transition status (according to whether they were transitioned or remained in the Regular ADF in 2015) and probable 30-day disorder (according to whether they met criteria for a probable disorder or not) (as described in Chapter 4).

Logistic regression models performed on selected collapsed grouping variables were adjusted for sex and age.

5.2 Current use of new and emerging technologies

Table 5.1 and Figure 5.1 present the estimated proportions of Transitioned ADF and 2015 Regular ADF who reported currently using new and emerging technologies. Respondents were asked 'Do you currently use any new or emerging technologies (e.g. software applications or 'apps', wearable technology)?'

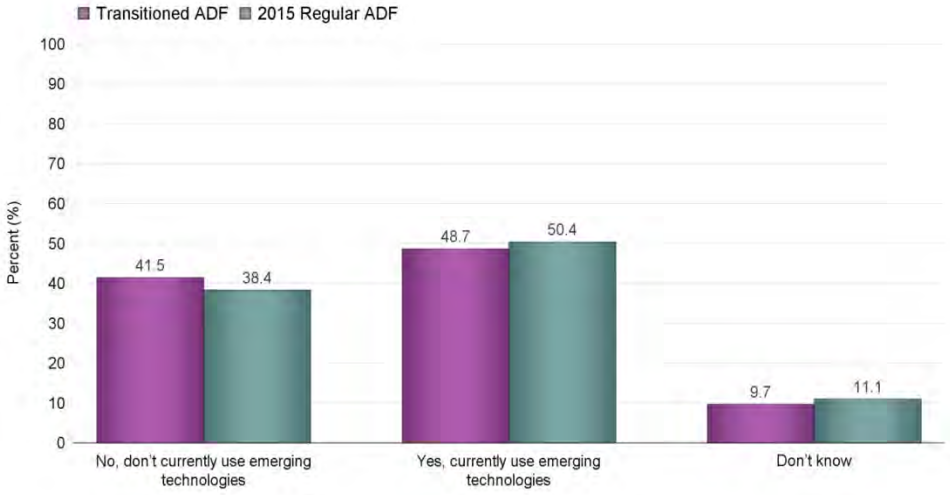
Approximately half of the Transitioned ADF (48.7%) and 2015 Regular ADF (50.4%) reported that they currently used new and emerging technologies, with no significant differences between the groups.

Table 5.1 Use of new and emerging technologies among Transitioned ADF and 2015 Regular ADF

	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
Use of emerging technologies	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No, don't currently use emerging technologies	1492	10,347	41.5 (39.5, 43.6)	2737	20,164	38.4 (34.4, 42.6)
Yes, currently use emerging technologies	1749	12,145	48.7 (46.6, 50.8)	4019	26,480	50.4 (46.3, 54.6)
Don't know	278	2427	9.7 (8.5, 11.2)	552	5812	11.1 (8.2, 14.7)

Notes
Denominator: Entire cohort.
Based on weighted counts, 13 (0.1%) Transitioned ADF and 43 (0.1%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 5.1 Use of new and emerging technologies among Transitioned ADF and 2015 Regular ADF



5.2.1 Types of new and emerging technologies used

Among those who reported using new and emerging technologies, the most common type of emerging technology used was software applications, or apps, with over 80% of the Transitioned ADF (83.0%) and 2015 Regular ADF (85.4%) using them (Table 5.2 and Figure 5.2). Approximately a third of the Transitioned ADF (28.7%) and 2015 Regular ADF (33.0%) reported using wearable technology (e.g. a commercially available wrist-based tracker), while just under 10% of Transitioned ADF (6.9%) and just over 10% of the 2015 Regular ADF (11.7%) wore a Smartwatch. The Transitioned ADF were significantly less likely to use a Smartwatch than 2015 Regular ADF (OR 0.5, 95% CI 0.3, 0.9). This was a moderate association.

Table 5.2 Types of technologies used by Transitioned ADF and 2015 Regular ADF who reported that they used new and emerging technologies

	Transitioned ADF n=12,145			2015 Regular ADF n=26,480		
Current types used	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Smartwatch	133	837	6.9 (5.6, 8.4)	314	3092	11.7 (8.0, 16.8)
Software applications or 'apps'	1456	10,081	83.0 (80.6, 85.2)	3337	22,618	85.4 (81.7, 88.5)
Wearable technology (e.g. wrist-based tracker)	538	3485	28.7 (26.2, 31.4)	1413	8730	33.0 (28.2, 38.1)
Other (please specify)	96	717	5.9 (4.6, 7.6)	179	1159	4.4 (2.9, 6.6)

Notes
Denominator: Those who use emerging technologies.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 5.2 Types of technologies used by Transitioned ADF and 2015 Regular ADF who reported that they used new and emerging technologies

5.2.2 Barriers to using new and emerging technologies

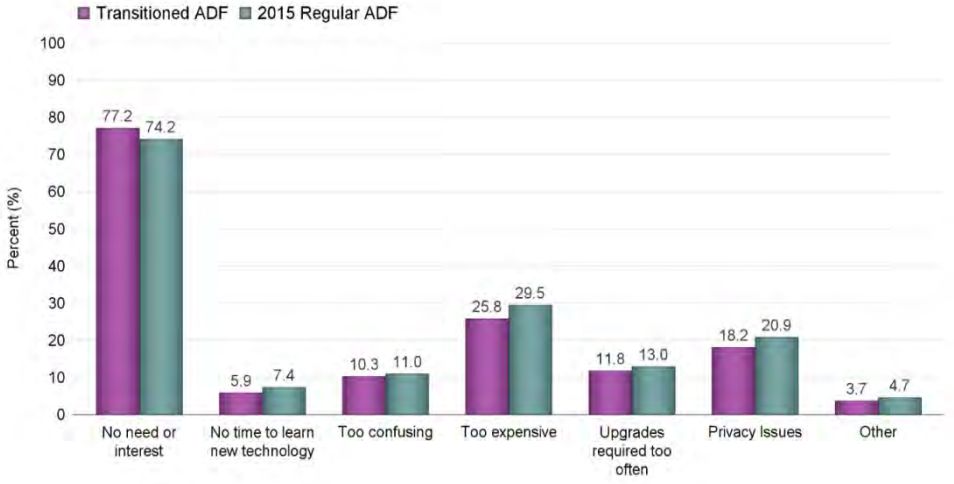
Of the Transitioned ADF and 2015 Regular ADF who did not use new and emerging technologies, the majority reported that they 'did not have a need or interest' (77.4%, 74.2% respectively) (Table 5.3 and Figure 5.3). Other reasons included that it was 'too expensive' (Transitioned ADF 25.8%, 2015 Regular ADF 29.5%, respectively) or that privacy was an issue (18.2%, 20.9%, respectively). Logistic regression indicated that there were no significant differences in the barriers to using technology between the Transitioned ADF and the 2015 Regular ADF.

Table 5.3 Barriers to using new and emerging technologies in Transitioned ADF and 2015 Regular ADF, among those who reported that they did not use new and emerging technologies

	Transitioned ADF n=10,347			2015 Regular ADF n=20,164		
Barriers	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No need or interest	1150	7987	77.2 (74.4, 79.7)	2167	14,958	74.2 (67.0, 80.2)
No time to learn new technology	106	610	5.9 (4.6, 7.5)	243	1483	7.4 (5.4, 9.9)
Too confusing	186	1067	10.3 (8.7, 12.2)	280	2224	11.0 (7.1, 16.7)
Too expensive	339	2673	25.8 (23.0, 28.9)	610	5946	29.5 (23.1, 36.7)
Upgrades required too often	165	1219	11.8 (9.8, 14.1)	293	2613	13.0 (9.0, 18.3)
Privacy issues	260	1880	18.2 (15.7, 20.9)	417	4219	20.9 (15.2, 28.1)
Other	58	385	3.7 (2.7, 5.1)	110	938	4.7 (2.7, 8.0)

Notes
Denominator: Those who don't use emerging technologies.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 5.3 Barriers to using new and emerging technologies in Transitioned ADF and 2015 Regular ADF among those who reported that they did not use new and emerging technologies



5.3 Desired new and emerging technologies

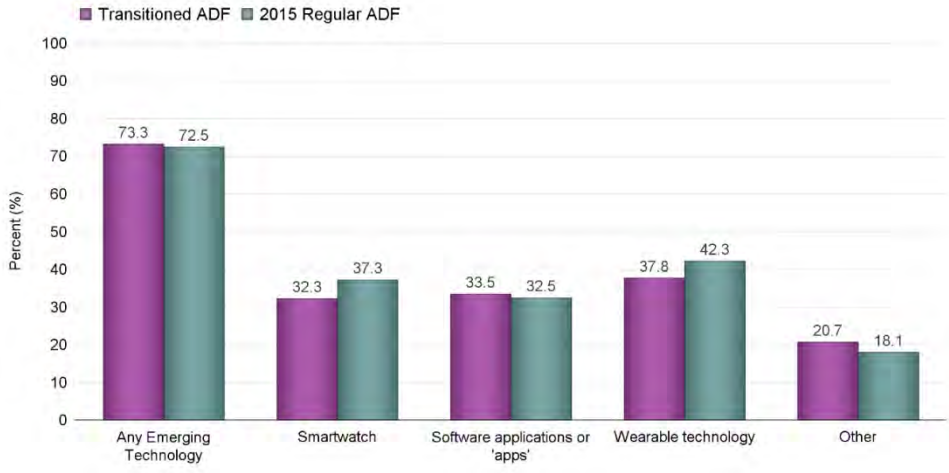
More than three quarters of the Transitioned ADF and 2015 Regular ADF reported that they would like to use 'any emerging technology' for health and wellbeing if money was not an issue (Table 5.4 and Figure 5.4). Approximately 40% were interested in using wearable technology (e.g. a commercially available wrist-based tracker) (Transitioned ADF 37.8%, 2015 Regular ADF 42.3%), a Smartwatch (Transitioned ADF 32.3%, 2015 Regular ADF 37.3%) and software applications or apps (Transitioned ADF 33.5%, 2015 Regular ADF 32.5%). There were no significant differences between Transitioned ADF and 2015 Regular ADF in the types of technologies desired.

Table 5.4 Desired new and emerging technologies in Transitioned ADF and 2015 Regular ADF

	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
Ideal types	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Any emerging technology	2555	18,275	73.3 (71.4, 75.1)	5643	38,062	72.5 (68.3, 76.3)
Smartwatch	1156	8053	32.3 (30.4, 34.3)	2792	19571	37.3 (33.3, 41.5)
Software applications or 'apps'	1192	8360	33.5 (31.6, 35.5)	2626	17,076	32.5 (29.0, 36.3)
Wearable technology (e.g. wrist based tracker)	1314	9415	37.8 (35.8, 39.8)	3256	22,182	42.3 (38.2, 46.4)
Other (please specify):	676	5172	20.7 (19.0, 22.6)	1230	9497	18.1(15.1, 21.5)

Notes
Denominator: Entire cohort.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 5.4 Desired new and emerging technologies in Transitioned ADF and 2015 Regular ADF



5.4 Best time to purchase new and emerging technologies

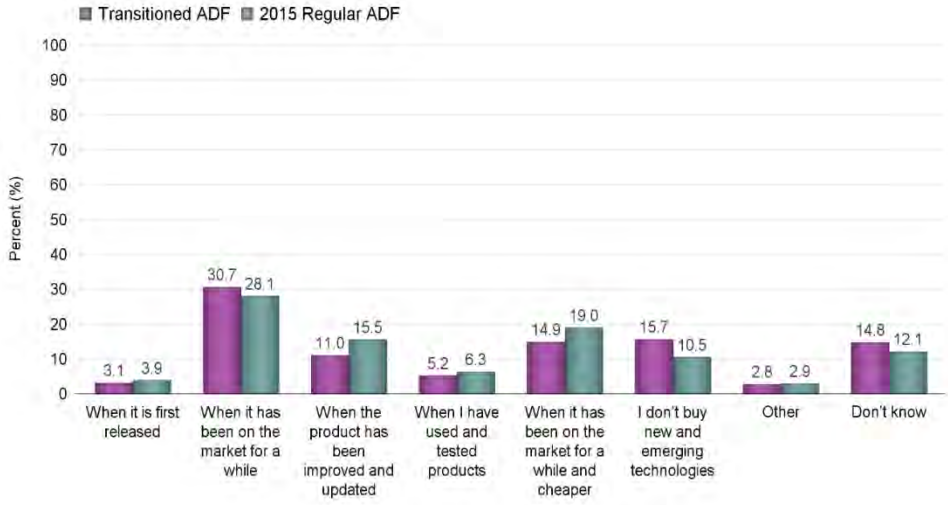
Approximately one in three of Transitioned ADF (30.7%) and 2015 Regular ADF (28.1%) reported that the best time to purchase new and emerging technologies was when they had been on the market for a while and all the bugs had been removed (Table 5.5 and Figure 5.5). Very few would choose to purchase them when they were first released. Compared to the Transitioned ADF, the 2015 Regular ADF were more likely to preference purchasing new and emerging technologies when the product has been improved and updated (15.5% compared to 11.0%), whereas a higher proportion of the Transitioned ADF reported not purchasing new and emerging technologies (15.7% compared to 10.5%).

Table 5.5 Best time to purchase new and emerging technologies among Transitioned ADF and 2015 Regular ADF

	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
Response	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
When it is first released	112	780	3.1 (2.5, 3.9)	197	2027	3.9 (2.3, 6.4)
When it has been on the market for a while and all the bugs have been removed	1076	7643	30.7 (28.7, 32.6)	2327	14,731	28.1 (24.9, 31.5)
When the product has been improved and updated	434	2749	11.0 (9.8, 12.3)	1115	8148	15.5 (12.5, 19.0)
When I have used and tested products from friends/ family	178	1304	5.2 (4.3, 6.3)	429	3321	6.3 (4.3, 9.2)
When it has been on the market for a while and cheaper because a newer version has been released	503	3704	14.9 (13.4, 16.4)	1231	9949	19.0 (15.6, 22.8)
I don't buy new and emerging technologies	563	3905	15.7 (14.2, 17.3)	925	5531	10.5 (8.8, 12.5)
Other (please specify):	99	689	2.8 (2.2, 3.5)	197	1518	2.9 (1.7, 4.9)
Don't know	499	3683	14.8 (13.3, 16.3)	821	6342	12.1 (9.6, 15.1)

Notes
Denominator: Entire cohort.
Based on weighted counts, 475 (1.9%) Transitioned ADF, and 935 (1.8%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 5.5 Best time to purchase new and emerging technologies among Transitioned ADF and 2015 Regular ADF



5.5 Current use of new and emerging technologies for the purpose of improving health and wellbeing

Approximately 50% of the Transitioned ADF and 2015 Regular ADF who used new and emerging technologies used them to improve their health and wellbeing (46.7% and 49.6% respectively) (Table 5.6 and Figure 5.6).

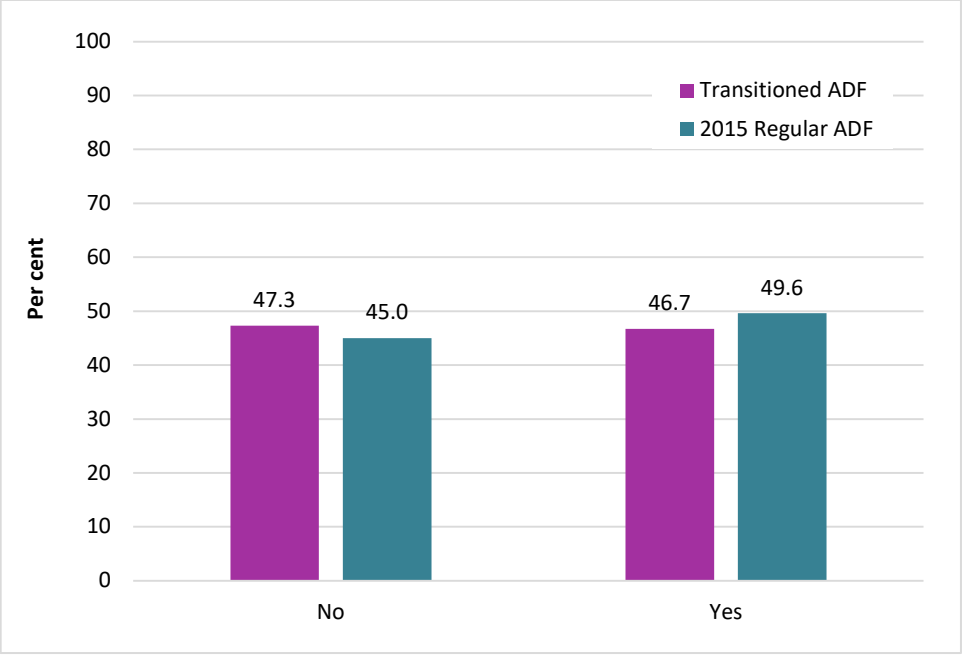
Logistic regression showed no differences between the Transitioned ADF and the 2015 Regular ADF in the proportion who used new and emerging technologies for the purpose of improving their health and wellbeing.

Table 5.6 Use of new or emerging technologies to improve health and wellbeing among Transitioned ADF and 2015 Regular ADF who currently used new or emerging technologies

Use any new or emerging technologies to improve health and wellbeing	Transitioned ADF n=12,145			2015 Regular ADF n=26,480		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No	817	5749	47.3 (44.4, 50.3)	1646	11,925	45.0 (39.6, 50.5)
Yes	847	5668	46.7 (43.7, 49.6)	2220	13,131	49.6 (44.2, 55.0)
Don't know	72	628	5.2 (3.9, 6.8)	135	1319	5.0 (2.7, 9.0)

Notes
Denominator: Those who currently use any new and emerging technologies.
Based on weighted counts, 100 (0.8%) Transitioned ADF, and 105 (0.5%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 5.6 **Use of new or emerging technologies to improve health and wellbeing among Transitioned ADF and 2015 Regular ADF who currently used new or emerging technologies**



5.5.1 The ways in which emerging technologies are used to improve health and wellbeing

Among the 50% of Transitioned ADF and 2015 Regular ADF who used emerging technologies to improve their health and wellbeing, the three most common reasons they were used were to 'improve fitness' (80.9% Transitioned ADF, 88.4% 2015 Regular ADF), to 'track progress' (58.8% Transitioned ADF, 56.1% 2015 Regular ADF) and to 'keep organised' (36.2% Transitioned ADF, 37.4% 2015 Regular ADF) (Table 5.7 and Figure 5.7). Approximately a quarter of this subgroup of Transitioned ADF and 2015 Regular ADF used them to 'improve sleep' (25.3% and 24.9% respectively).

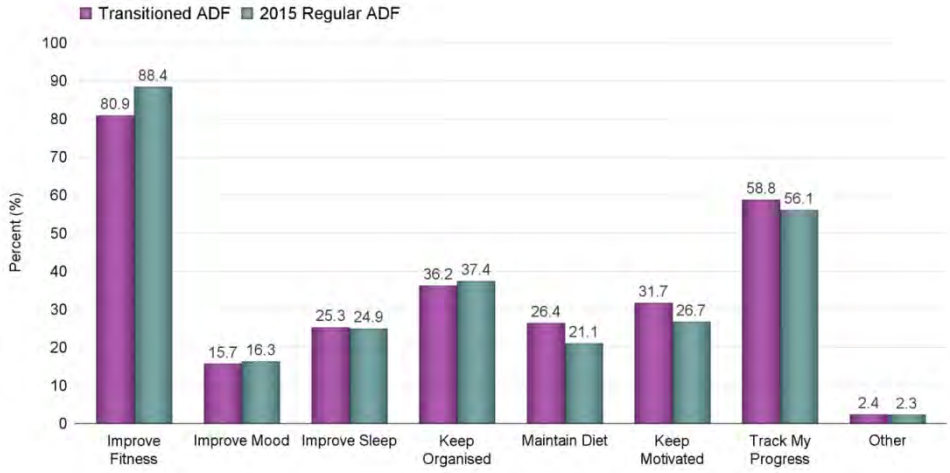
Among the Transitioned ADF and 2015 Regular ADF who used emerging technologies to improve health and wellbeing, Transitioned ADF were significantly more likely to use emerging technologies to 'maintain their diet or track their food intake' (OR 1.5, 95% CI 1.2, 2.0) or to 'keep motivated' (OR 1.4, 95% CI 1.1, 1.9) than the 2015 Regular ADF. These were moderate and weak associations, respectively.

Table 5.7 The ways in which emerging technologies are used to improve health and wellbeing among Transitioned ADF and 2015 Regular ADF

How emerging technologies are used to improve health and wellbeing	Transitioned ADF n=5668			2015 Regular ADF n=13,131		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Improve my fitness	694	4587	80.9 (77.3, 84.1)	1942	11,614	88.4 (84.0, 91.8)
Improve my mood	122	892	15.7 (12.7, 19.3)	225	2146	16.3 (11.0, 23.6)
Improve my sleep	216	1431	25.3 (21.8, 29.1)	529	3274	24.9 (19.1, 31.8)
Keep me organised	311	2053	36.2 (32.2, 40.4)	754	4912	37.4 (30.5, 44.9)
Maintain my diet/track food intake	223	1496	26.4 (22.8, 30.3)	633	2767	21.1 (17.9, 24.7)
To keep me motivated	259	1796	31.7 (27.8, 35.8)	697	3510	26.7 (22.5, 31.4)
Track my progress	492	3331	58.8 (54.5, 62.9)	1388	7362	56.1 (48.7, 63.2)
Other	23	134	2.4 (1.5, 3.8)	48	300	2.3 (1.0, 5.2)

Notes
Denominator: Transitioned ADF and 2015 Regular ADF who use new or emerging technologies to improve their health and wellbeing.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 5.7 The ways in which emerging technologies are used to improve health and wellbeing among Transitioned ADF and 2015 Regular ADF



5.5.2 Other reasons for using new and emerging technologies if they are not being used to improve health and wellbeing

Among those who did not report using new or emerging technologies to improve their health and wellbeing, the three most commonly reported reasons for using emerging technologies were for 'fun or recreation' (73.4% Transitioned ADF, 84.2% 2015 Regular ADF), for 'study or work' (51.7% Transitioned ADF, 38.1% 2015 Regular ADF) and to

'enhance social interaction' (29.5% Transitioned ADF, 30.4% 2015 Regular ADF) (Table 5.8 and Figure 5.8).

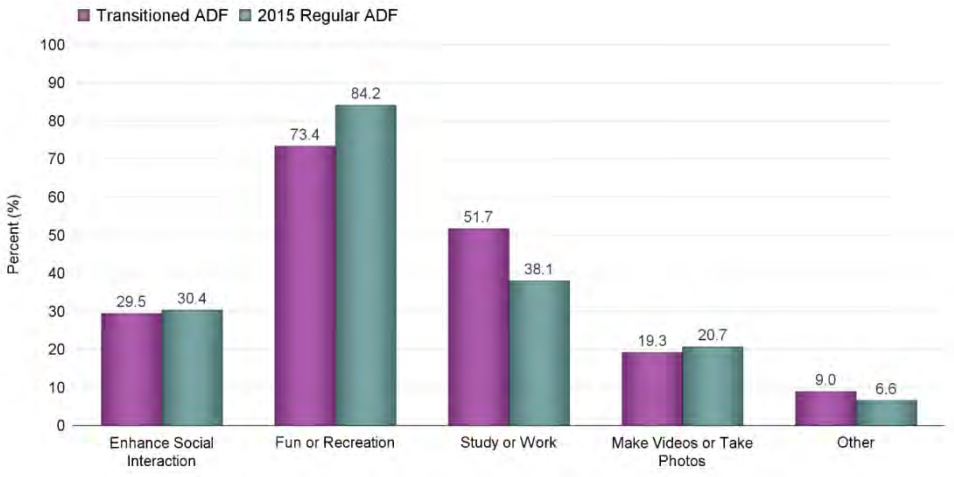
Among those who used emerging technologies for reasons other than to improve their health and wellbeing, Transitioned ADF were significantly more likely to use them for 'study or work' (OR 1.9, 95% CI 1.1, 3.1) than the 2015 Regular ADF, which was a moderate association.

Table 5.8 Other reasons for using new and emerging technologies among Transitioned ADF and 2015 Regular ADF, among those who currently used emerging technologies, but not for health and wellbeing

Reasons for using new and emerging technologies if not to improve health and wellbeing	Transitioned ADF n=5749			2015 Regular ADF n=11,925		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Enhance social interaction	223	1694	29.5 (25.5, 33.7)	504	3623	30.4 (22.8, 39.3)
Fun or recreation	579	4221	73.4 (69.5, 77.0)	1371	10,041	84.2 (77.6, 89.1)
Study or work	396	2974	51.7 (47.3, 56.1)	716	4538	38.1 (30.4, 46.3)
To make videos or take photos	147	1107	19.3 (16.0, 23.1)	340	2472	20.7 (14.2, 29.3)
Other (please specify)	71	517	9.0 (6.7, 12.0)	89	791	6.6 (2.9, 14.5)

Notes
Denominator: Transitioned ADF and 2015 Regular ADF who do not use new or emerging technologies to improve their health and wellbeing.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 5.8 Other reasons for using new and emerging technologies among Transitioned ADF and 2015 Regular ADF, among those who currently used emerging technologies, but not for health and wellbeing



5.6 Reasons for using emerging technology among Transitioned ADF and 2015 Regular ADF with and without probable disorder

5.6.1 The ways in which emerging technologies were used to improve health and wellbeing among Transitioned ADF and 2015 Regular ADF with and without probable disorder

Among the approximate 25% of Transitioned ADF (22.8%, n = 5685) and 2015 Regular ADF (25.0%, n = 13,140) who reported using emerging technologies for the purpose of improving health and wellbeing, 20.9% (n = 1189) of Transitioned ADF and 7.8% (n = 1029) of 2015 Regular ADF met the criteria for a probable disorder. In contrast, 79.1% (n = 4496) of Transitioned ADF and 92.1% (n = 12,111) of 2015 Regular ADF did not meet the criteria for a probable 30-day disorder. The following section reports on the reasons for using new and emerging technologies to improve health and wellbeing among these four subgroups.

Similar to the pattern reported in Transitioned ADF and Regular ADF in section 5.5.1 above, the three most common reasons for using new and emerging technologies among both the Transitioned ADF and 2015 Regular ADF with and without a probable 30-day disorder were to improve fitness, to track progress and to keep motivated (Table 5.9). The only observable differences in the reasons for using new or emerging technologies to improve health and wellbeing were among the Transitioned ADF. Among those who used emerging technologies to improve their health and wellbeing, Transitioned ADF with a probable disorder were significantly less likely to use them to improve their fitness (68.6% vs 84.0%; OR 0.4, 95% CI 0.3, 0.7) compared to Transitioned ADF with no probable disorder, and more likely to use them to improve their mood (23.1% vs 13.7%; OR 1.9, 95% CI 1.1, 3.3). Both were moderate associations.

5.6.2 Other reasons for using new and emerging technologies if they were not being used to improve health and wellbeing among Transitioned ADF and 2015 Regular ADF with and without probable disorder

Among the approximately 25% of Transitioned ADF (23.4%, n = 5837) and 2015 Regular ADF (23.05%, n = 12,101) who reported using emerging technologies for reasons other than to improve their health and wellbeing, 25.2% (n = 1472) of Transitioned ADF and 14.1% (n = 1700) of 2015 Regular ADF met the criteria for a probable disorder. In contrast, 74.8% (n = 4365) of Transitioned ADF and 85.9% (n = 10401) of 2015 Regular ADF did not meet the criteria for probable 30-day disorder. The following section reports other reasons for using new and emerging technologies (other than to improve health and wellbeing) among these four subgroups.

Similar to the pattern reported in the Transitioned ADF and Regular ADF in section 5.5.2 above, the three most common reasons for using new and emerging

technologies (other than for health and wellbeing) among both Transitioned ADF and 2015 Regular ADF with and without a probable 30-day disorder were for 'fun or recreation', for 'study or work' and to 'enhance social interaction' (Table 5.10).

Among those who used emerging technologies for reasons other than to improve their health and wellbeing, Transitioned ADF with a probable disorder were significantly less likely to use them for fun and recreation (65.1% vs 75.2%; OR 0.5, 95% CI 0.3, 0.8) compared to Transitioned ADF with no probable disorder. This was a moderate association. A strong association was found for 2015 Regular ADF. Specifically, those with a probable disorder were significantly less likely to use emerging technologies to make videos or take photos (9.1% vs 22.4%; OR 0.3, 95% CI 0.1, 0.7) compared to 2015 Regular ADF with no probable disorder.

Table 5.9 The ways in which emerging technologies were used to improve health and wellbeing among Transitioned ADF and 2015 Regular ADF who used emerging technologies to improve their health and wellbeing with and without probable disorder

How emerging technologies are used to improve health and wellbeing	Transitioned ADF who use new and emerging technologies to improve their health and wellbeing n=5685						2015 Regular ADF who use new and emerging technologies to improve their health and wellbeing n=13,140					
	No Probable Disorder n=4496			Probable Disorder n=1189			No Probable Disorder n=12,111			Probable Disorder n=1029		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
To improve fitness	555	3775	84.0 (80.2, 87.2)	140	816	68.6 (59.3, 76.7)	1736	10698	88.3 (83.5, 91.9)	206	916	89.0 (84.9, 92.1)
To improve mood	81	617	13.7 (10.6, 17.6)	41	275	23.1 (16.1, 32.0)	172	1964	16.2 (10.5, 24.2)	53	182	17.6 (12.7, 24.0)
To improve sleep	154	1072	23.8 (19.9, 28.2)	62	359	30.2 (23.1, 38.4)	461	2999	24.8 (18.5, 32.3)	68	274	26.6 (19.7, 35.0)
To keep organised	239	1583	35.2 (30.7, 39.9)	72	470	39.6 (31.3, 48.4)	675	4500	37.2 (29.8, 45.2)	80	415	40.3 (29.4, 52.3)
To maintain diet/track food intake	164	1136	25.3 (21.3, 29.8)	59	360	30.3 (22.9, 38.9)	571	2524	20.8 (17.4, 24.7)	62	243	23.6 (17.1, 31.6)
To keep motivated	213	1461	32.5 (28.1, 37.2)	46	335	28.2 (20.6, 37.3)	608	3152	26.0 (21.6, 31.0)	89	358	34.8 (26.5, 44.1)
To track progress	393	2714	60.4 (55.5, 65.0)	100	621	52.2 (43.5, 60.8)	1244	6811	56.2 (48.3, 63.9)	145	554	53.8 (42.9, 64.4)

Notes
Denominator: Those who use emerging technologies to improve their health and wellbeing.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Table 5.10 The ways in which emerging technologies were used by Transitioned ADF and 2015 Regular ADF with and without probable disorder when they were not being used to improve health and wellbeing

	Transitioned ADF using new and emerging technologies for reasons other than to improve their health and wellbeing n=5837						2015 Regular ADF using new and emerging technologies for reasons other than to improve their health and wellbeing n=12,101					
	No Probable Disorder n=4365			Probable Disorder n=1472			No Probable Disorder n=10,401			Probable Disorder n=1700		
Use of new or emerging technologies for other reasons	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
To enhance social interaction	175	1243	28.5 (24.1, 33.3)	49	455	30.9 (23.0, 40.0)	445	2959	28.5 (20.8, 37.5)	59	664	39.1 (17.5, 65.9)
For fun or recreation	463	3282	75.2 (70.8, 79.1)	119	958	65.1 (56.6, 72.6)	1226	8666	83.3 (75.9, 88.8)	148	1394	82.0 (66.2, 91.4)
For study or work	310	2315	53.0 (48.0, 58.0)	87	683	46.4 (37.8, 55.1)	642	3994	38.4 (30.4, 47.1)	74	544	32.0 (15.1, 55.3)
To make videos or take photos	110	749	17.2 (13.7, 21.2)	37	358	24.3 (17.2, 33.3)	307	2330	22.4 (15.1, 31.9)	34	156	9.1 (4.9, 16.5)
Other (please specify):	51	371	8.5 (5.9, 12.0)	22	157	10.7 (6.5, 17.0)	75	702	6.7 (2.7, 16.0)	14	89	5.3 (2.4, 11.4)

Notes
Denominator: Those who use emerging technologies for reasons other than to improve their health and wellbeing.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

6 Use of the internet to seek mental health information or help (for self or other)

Use of the internet to seek help or information for, or to manage, mental health issues

- One in four Transitioned ADF and one in six 2015 Regular ADF used the internet to seek help or information for, or to manage, mental health issues.
- A higher proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder reported using the internet to seek help or information or to manage mental health issues than those without a probable disorder.
- Among those with a probable 30-day disorder, Transitioned ADF were more likely than 2015 Regular ADF to report using the internet to seek information on mental health issues.

Suitability, usefulness and level of satisfaction with using the internet to seek help or information, or to manage mental health

- The majority of Transitioned ADF and 2015 Regular ADF who used the internet to seek information about mental health reported that they received the kind of information they required.
- The majority of Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information or to manage mental health reported the internet helped them either a little or a lot.
- Less than 10% of Transitioned ADF and 2015 Regular ADF reported that the internet helped them a lot and only 5% were very satisfied with the information they received.
- Almost 18% of Transitioned ADF and 13.2% of 2015 Regular ADF reported being dissatisfied with the information they received.

Glossary: refer to the Glossary of terms for definitions of key terms.

6.1 Introduction

This chapter presents the estimated proportion of Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for, or to manage, mental health issues more broadly, not necessarily for their own mental health. For those who responded 'YES', a series of further questions about their experiences with using the internet for this purpose was examined.

Specific questions asked were:

1. Do you use the internet to seek help or information for, or manage, mental health issues?

   IF YES:

   - Which devices do you mainly use to access the internet?
   - By using the internet, did you get the kind of information you needed in relation to mental health?
   - Did the internet help you deal more effectively with mental health problems?
   - Overall, how satisfied were you with the information you received on the internet in relation to mental health?

Each section within this chapter begins with a statistical comparison of the prevalence of each outcome variable listed above among the Transitioned and 2015 Regular ADF. Following this, each of the dichotomised outcome measures was further stratified by probable disorder, sex, age group, and age group by sex categories for descriptive purposes (no odds ratios) in order to provide detailed information on the demographic profile of those who use the internet to seek help or information for, or manage, mental health issues.

6.2 Use of the internet for seeking help or information, or for managing, mental health issues

6.2.1 Transitioned ADF and 2015 Regular ADF

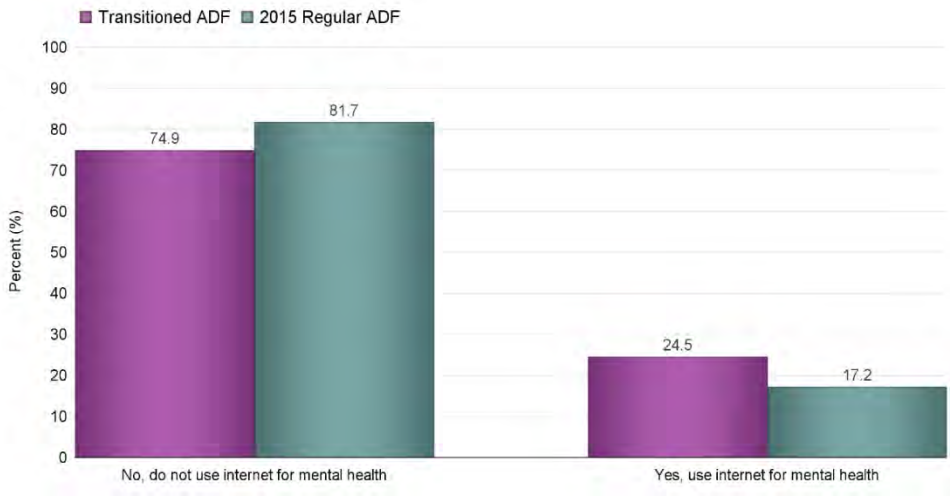
Table 6.1 and Figure 6.1 describe the estimated proportions of Transitioned ADF and 2015 Regular ADF who used the internet *to seek help or information for, or manage, mental health issues*. Transitioned ADF were significantly more likely to use the internet to seek help or information for, or manage, mental health issues compared to 2015 Regular ADF (24.5% vs 17.2%; OR 1.6, 95% CI 1.2, 2.1). This was a moderate association. Most of the Transitioned ADF and the 2015 Regular ADF did not use the internet for seeking help or information or to manage mental health issues (74.9% and 81.7%, respectively).

Table 6.1 Use of the internet for seeking help or information, or for managing mental health issues among Transitioned ADF and 2015 Regular ADF

	Transitioned ADF n=24,932			2015 Regular ADF n=52,500		
Use internet for mental health issues.	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No, don't use internet for mental health issues.	2668	18,667	74.9 (73.0, 76.7)	5875	42,914	81.7 (78.4, 84.6)
Yes, use internet for mental health issues.	856	6116	24.5 (22.8, 26.4)	1431	9042	17.2 (14.4, 20.5)

Notes
Denominator: Entire cohort.
Based on weighted counts, 149 (0.6%) Transitioned ADF and 543 (1.0%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 6.1 Use of the internet for seeking help or information, or for managing mental health issues among Transitioned ADF and 2015 Regular ADF



6.2.2 Probable 30-day disorder and demographic characteristics

Table 6.2 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF who did and did not report using the internet to seek help or information or to manage mental health issues according to probable disorder and demographic characteristics.

For both groups, the majority of respondents reported that they did *not* use the internet for mental health issues, regardless of whether or not they had a probable disorder. A higher proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder reported using the internet to seek help or information or to manage mental health issues than those without a probable disorder (Transitioned ADF: 38.3% vs 19.1%; 2015 Regular ADF: 22.0% vs 16.4%). Among those *with* a probable disorder, Transitioned ADF (38.3%) were more likely than 2015 Regular ADF (22.0%) to report using the internet to seek information on mental health issues.

Table 6.2 Use of internet for management of mental health issues among Transitioned ADF and 2015 Regular ADF by probable disorder and demographic characteristics

	Transitioned ADF n=24,932						2015 Regular ADF n=52,500					
	No, don't use internet for mental health issues. n=18,667			Yes, use internet for mental health issues. n=6116			No, don't use internet for mental health issues. n=42,914			Yes, use internet for mental health issues. n=9042		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	568	4316	61.2 (57.3, 64.9)	389	2703	38.3 (34.6, 42.2)	627	6120	77.7 (67.0, 85.6)	280	1732	22.0 (14.1, 32.6)
No	2100	14,351	80.3 (78.2, 82.2)	467	3413	19.1 (17.2, 21.2)	5248	36,794	82.5 (79.0, 85.5)	1151	7310	16.4 (13.5, 19.8)
Sex												
Male	2308	16,554	76.4 (74.3, 78.3)	664	4990	23.0 (21.1, 25.0)	4809	39,503	82.9 (79.2, 86.1)	1002	7636	16.0 (13.0, 19.6)
Female	360	2113	64.8 (60.1, 69.2)	192	1126	34.5 (30.1, 39.2)	1065	3408	70.2 (67.7, 72.5)	429	1407	29.0 (26.7, 31.4)
Age group												
18–27	247	3621	74.2 (68.8, 78.9)	97	1231	25.2 (20.6, 30.5)	359	7443	77.0 (63.5, 86.6)	117	2002	20.7 (11.7, 34.1)
28–37	703	6424	72.5 (68.9, 75.9)	279	2415	27.3 (23.9, 30.9)	1554	13,522	77.5 (70.9, 82.9)	508	3844	22.0 (16.6, 28.6)
38–47	654	3744	71.4 (67.9, 74.7)	263	1450	27.7 (24.4, 31.2)	2099	12,578	85.8 (82.9, 88.3)	498	1932	13.2 (11.1, 15.5)
48–57	616	2895	81.2 (77.8, 84.2)	137	632	17.7 (15.0, 20.9)	1605	7428	87.8 (85.9, 89.5)	263	961	11.4 (9.8, 13.2)
58+	424	1759	85.2 (81.6, 88.2)	70	294	14.2 (11.3, 17.8)	164	712	89.5 (82.9, 93.8)	22	84	10.5 (6.2, 17.1)
Sex and Age group												
Male 18–37	761	8681	74.9 (71.5, 77.9)	260	2875	24.8 (21.8, 28.1)	1361	19,041	78.4 (71.4, 84.1)	368	4967	20.5 (14.9, 27.5)
Male 38+	1528	7666	78.3 (76.1, 80.4)	397	2038	20.8 (18.8, 23.0)	3368	19,288	87.6 (85.7, 89.4)	622	2504	11.4 (10.0, 13.0)
Female 18–37	189	1363	63.6 (57.2, 69.5)	116	771	36.0 (30.0, 42.4)	551	1921	67.8 (64.3, 71.0)	257	880	31.0 (27.8, 34.5)
Female 38+	166	732	67.7 (61.0, 73.7)	73	337	31.2 (25.3, 37.8)	500	1429	75.1 (71.9, 78.0)	161	473	24.8 (21.9, 28.0)

Notes

Denominator: Entire cohort. Probable 30-day disorder = PCL $\geq$ 53 or K10 $\geq$ 25; No probable 30-day disorder = PCL < 53 and K10 < 25.

Based on weighted counts, 149 (0.6%) Transitioned ADF and 543 (1.0%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals. 95%CI = 95% confidence interval.

As can be seen in Table 6.2, overall, among both the Transitioned ADF and 2015 Regular ADF, males were less likely to report using the internet to seek help or information or to manage mental health issues compared to females (Transitioned ADF: 23.0% vs 34.5%; 2015 Regular ADF: 16.0% vs 29.0%), with the younger age groups (particularly young females) being most likely to use it for this purpose. These comparisons were not statistically tested.

6.3 Use of devices to access the internet

6.3.1 Transitioned ADF and 2015 Regular ADF

Table 6.3 presents the types of devices used to access the internet among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues.

Among both the Transitioned ADF and 2015 Regular ADF, the most commonly used devices were smart phones (59.5% and 72.1% respectively), followed by a privately used or owned laptop (52.2% and 42.3% respectively) and other hand-held portable devices (24.8% and 24.7% respectively). These were followed by other shared laptops and computers. The least commonly used devices among both groups were portable gaming devices, televisions and gaming consoles.

Table 6.3 The types of devices used to access the internet among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
Devices used to access internet	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
A desktop computer shared with other members of your family	217	1384	22.6 (19.4, 26.2)	342	1434	15.9 (12.6, 19.8)
A games console (e.g. Playstation, Xbox,Wii)	43	488	8.0 (5.7, 11.1)	63	835	9.2 (4.1, 19.4)
A laptop shared with other members of your family and that you cannot use in private	89	599	9.8 (7.6, 12.5)	183	1435	15.9 (9.2, 26.0)
A portable gaming device (e.g. PSP, DS. Gameboy)	6	78	1.3 (0.5, 3.2)	7	27	0.3 (0.1, 0.7)
A smart phone (e.g. iPhone, Blackberry)	481	3642	59.5 (55.4, 63.6)	908	6518	72.1 (64.1, 78.8)
A television set (TV)	23	171	2.8 (1.7, 4.6)	53	413	4.6 (1.8, 11.1)
Your own desktop computer	146	1117	18.3 (15.2, 21.8)	227	1572	17.4 (11.5, 25.3)
Your own laptop or laptop that you mainly use and can use in private	434	3191	52.2 (48.0, 56.4)	679	3823	42.3 (33.5, 51.6)
Other handheld portable devices (e.g. MP3 player, iPod Touch, iPad or other Android tablets)	251	1516	24.8 (21.5, 28.4)	496	2231	24.7 (19.1, 31.3)
Other	7	42	0.7 (0.3,1.5)	19	157	1.7 (0.6, 4.9)

Notes
Denominator: Those who use the internet to seek help or information for, or manage, mental health issues.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. Because responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question. 95%CI = 95% confidence interval.

6.4 Suitability of available information about mental health on the internet

6.4.1 Overall Transitioned ADF and 2015 Regular ADF

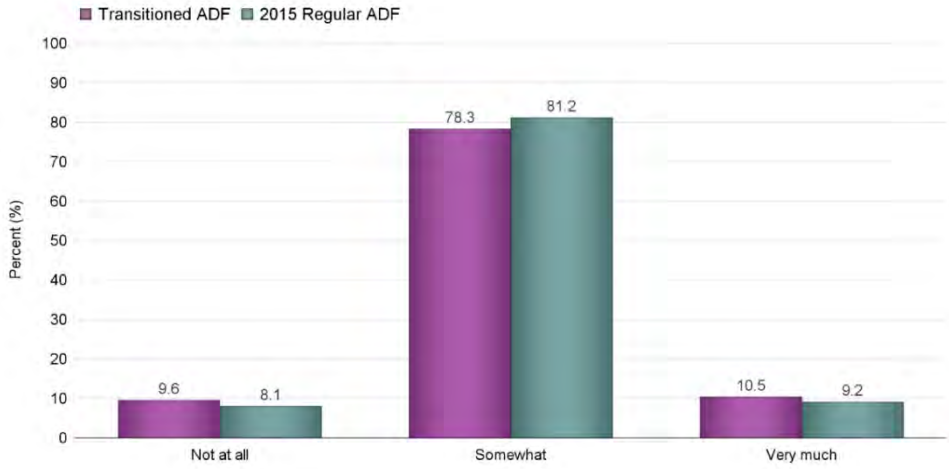
Among both the Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health, most indicated that they 'somewhat' received the kind of information they needed in relation to mental health (78.3% and 81.2% respectively), with only 9.6% of Transitioned ADF and 8.1% of 2015 Regular ADF responding 'not at all' (Table 6.2 and Figure 6.2). This pattern remained when responses were further dichotomised to 'somewhat/very much', with no significant differences between groups.

Table 6.4 Suitability of information received from the internet about mental health among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
Suitability of information received	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Not at all	69	585	9.6 (7.2, 12.6)	92	729	8.1 (3.4, 17.9)
Somewhat	683	4788	78.3 (74.5, 81.7)	1153	7341	81.2 (72.3, 87.7)
Very much	91	641	10.5 (8.2, 13.3)	162	829	9.2 (5.6, 14.6)
Dichotomised grouping						
Not at all	69	585	9.6 (7.2, 12.6)	92	729	8.1 (3.4, 17.9)
Somewhat/Very much	774	5429	88.8 (85.6, 91.3)	1315	8170	90.4 (81.2, 95.3)

Notes
Denominator: Those who use the internet to seek help or information for, or manage, mental health issues.
Based on weighted counts, 102 (1.7%) Transitioned ADF, and 144 (1.6%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 6.2 Suitability of information received from the internet about mental health among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues



6.4.2 Probable 30-day disorder and demographic characteristics

Table 6.5 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF (who reported that they used the internet to seek help or information or manage mental health issues) who did (somewhat/very much) and did not (at all) report receiving the information they needed in relation to their mental health, according to probable disorder and demographic characteristics.

Among the Transitioned ADF and 2015 Regular ADF, the vast majority of respondents reported they received the information they needed from the internet regarding their mental health, regardless of probable disorder status, sex or age. When the sex and age categories were examined together, for both the Transitioned ADF and 2015 Regular ADF, females aged 38+ were most likely to report receiving the information they needed.

Table 6.5 Suitability of information received from the internet about mental health among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues, by probable 30-day disorder and demographic characteristics

	Transitioned ADF n=6116						2015 Regular ADF n=9042					
	Not at all n=585			Somewhat / Very much n=5429			Not at all n=729			Somewhat / Very much n=8170		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	34	285	10.5 (7.0, 15.5)	350	2384	88.2 (83.2, 91.9)	18	77	4.5 (2.2, 8.8)	258	1644	94.9 (90.4, 97.4)
No	35	301	8.8 (5.9, 13.0)	424	3044	89.2 (84.7, 92.5)	74	651	8.9 (3.4, 21.2)	1057	6526	89.3 (78.0, 95.1)
Sex												
Male	62	543	10.9 (8.1, 14.5)	592	4373	87.6 (83.9, 90.6)	72	666	8.7 (3.4, 20.6)	913	6848	89.7 (78.6, 95.4)
Female	7	42	3.7 (1.6, 8.6)	182	1056	93.8 (87.9, 96.9)	20	62	4.4 (3.1, 6.4)	402	1322	94.0 (91.8,95.6)
Age (yrs)												
18–27	9	133	10.8 (5.4, 20.5)	87	1083	87.9 (78.1, 93.7)	9	359	17.9 (3.2, 59.4)	105	1613	80.5 (41.1, 96.1)
28–37	23	198	8.2 (5.0, 13.2)	252	2191	90.7 (85.6, 94.1)	23	113	2.9 (1.6, 5.2)	475	3673	95.5 (92.8, 97.3)
38–47	15	108	7.5 (4.1, 13.2)	245	1306	90.1 (83.4, 94.2)	33	134	7.0 (4.7, 10.1)	462	1789	92.6 (89.5, 94.9)
48–57	11	82	12.9 (6.4, 24.3)	124	542	85.7 (74.6, 92.5)	25	100	10.4 (6.7, 15.9)	233	842	87.6 (82.0, 91.7)
58+	8	32	10.8 (5.9, 19.1)	61	258	88.0 (79.6, 93.2)	#	–	–	21	81	97.2 (87.7, 99.4)
Sex and Age (yrs)												
Male 18–37	28	299	10.4 (6.7, 15.8)	229	2553	88.8 (83.4, 92.6)	19	428	8.6 (2.0, 30.6)	340	4463	89.9 (70.1, 97.1)
Male 38+	32	215	10.6 (7.0, 15.6)	359	1776	87.1 (81.7, 91.1)	52	218	8.7 (6.4, 11.8)	563	2261	90.3 (87.1, 92.7)
Female 18–37	#	–	–	110	720	93.4 (84.9, 97.3)	13	44	5.0 (3.1, 7.8)	240	823	93.5 (90.4, 95.7)
Female 38+	#	–	–	71	331	98.0 (93.5, 99.4)	7	18	3.9 (2.1, 7.0)	153	452	95.6 (92.5, 97.5)

Notes
Denominator: Those who use the internet to seek help or information for, or manage, mental health issues (IU Q6 = Yes).
Based on weighted counts, 102 (1.7%) Transitioned ADF and 144 (1.6%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals. 95%CI = 95% confidence interval. # = Cell size too small to be reported.

6.5 Usefulness of the internet in helping to deal more effectively with mental health problems

6.5.1 Use of internet for this purpose by Transitioned ADF and 2015 Regular ADF overall

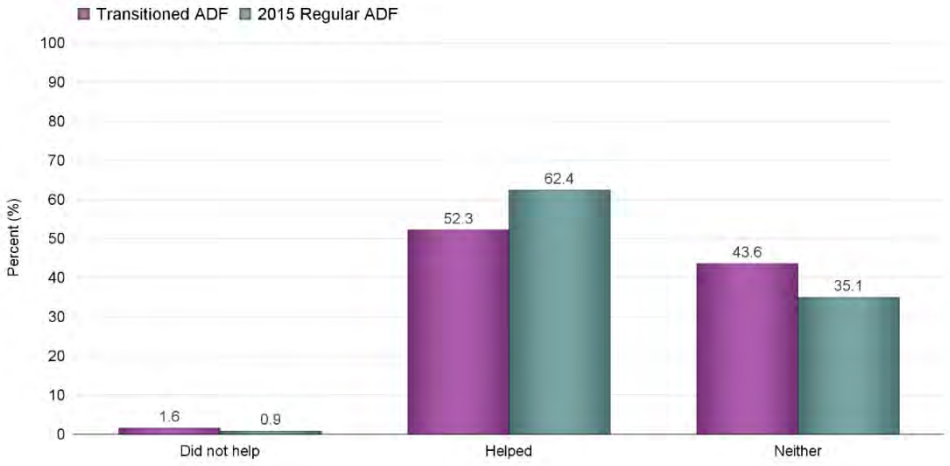
Among both the Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues, most reported that using the internet helped a little or a lot to effectively deal with mental health problems (52.2% and 62.4%) (Table 6.6 and Figure 6.3). Just over one third of both the Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues indicated that it 'neither helped nor made it worse' (43.6% and 35.1%). Only a very small minority reported that the internet 'made it worse' for them to deal effectively with mental health problems (Transitioned ADF: 1.6%; 2015 Regular ADF: 0.9%). When logistic regression was performed on the grouped variables, no significant differences between the Transitioned ADF and the 2015 Regular ADF were found.

Table 6.6 Usefulness of the internet in helping to deal more effectively with mental health issues among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or to manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
Usefulness of internet	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Made it a lot worse	#	–	–	#	–	–
Made it a little worse	14	96	1.6 (0.8, 2.9)	15	75	0.8 (0.4, 1.6)
Neither	343	2669	43.6 (39.4, 47.9)	505	3173	35.1 (26.5, 44.8)
Helped a little	418	2755	45.0 (40.9, 49.3)	784	4909	54.3 (44.7, 63.6)
Helped a lot	63	442	7.2 (5.3, 9.7)	101	736	8.1 (4.4, 14.5)
Collapsed grouping						
Made it worse	15	99	1.6 (0.9, 3.0)	18	82	0.9 (0.5, 1.7)
Helped	481	3197	52.3 (48.0, 56.5)	885	5644	62.4 (52.8, 71.1)
Neither	343	2669	43.6 (39.4, 47.9)	505	3173	35.1 (26.5, 44.8)

Notes
Denominator: Those who use the internet to seek help or information for, or manage, mental health issues.
Based on weighted counts, 151 (2.5%) Transitioned ADF and 143 (0.1%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.
= Cell size too small to be reported.

Figure 6.3 Usefulness of the internet in helping to deal more effectively with mental health issues among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues



6.5.2 Probable 30-day disorder and demographic characteristics

Table 6.7 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF (who reported that they used the internet to seek help or information or to manage mental health issues) who reported that the internet 'helped', 'did not help' or 'neither helped nor did not help' them deal more effectively with mental health problems, according to probable disorder and demographic characteristics.

Among the Transitioned ADF who reported using the internet to seek help or information or manage mental health issues, 48.4% of those with a probable disorder reported that using the internet neither helped nor did not help them deal effectively with their mental health. A similar proportion (46.2%) reported that it helped. Only 3.1% reported that it did not help.

A slightly different pattern was seen among the 2015 Regular ADF who reported using the internet to seek help or information or manage mental health issues. In this group, 51.7% of those with a probable disorder reported use of the internet to be helpful (51.7%), followed by neither helpful nor not helpful (45.3%), with again only a very small proportion reporting it to be not helpful (2.2%).

Transitioned ADF aged 28–37 (57.9%) and 58+ (56.5%) were most likely to report use of the internet for this purpose as helpful, while in the 2015 Regular ADF those aged 58+ were most likely to perceive it as helpful (82.5%).

Looking at sex differences by age group, female Transitioned ADF in the 38+ age group were most likely to report use of the internet for this purpose as helpful (65.8%) while in the 2015 Regular ADF males aged 18–37 were most likely to report use of the internet for this purpose as helpful (66.0%).

Table 6.7 Usefulness of the internet in helping to deal more effectively with mental health issues among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues by probable disorder and demographic characteristics

	Transitioned ADF n=6116									2015 Regular ADF n=9042								
	Did not help n=99			Helped n=3197			Neither n=2669			Did not help n=82			Helped n=5644			Neither n=3174		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder																		
Yes	12	83	3.1 (1.5, 6.1)	194	1249	46.2 (40.2, 52.4)	174	1307	48.4 (42.2, 54.6)	9	39	2.2 (0.9, 5.6)	151	896	51.7 (29.8, 73.1)	115	784	45.3 (24.1, 68.3)
No	#	–	–	287	1947	57.0 (51.1, 62.8)	169	1362	39.9 (34.3, 45.8)	9	43	0.6 (0.3, 1.4)	734	4748	64.9 (54.8, 73.9)	390	2389	32.7 (23.9, 42.9)
Sex																		
Male	10	66	1.3 (0.6, 3.0)	360	2545	51.0 (46.1, 55.9)	279	2247	45.0 (40.2, 50.0)	13	68	0.9 (0.4, 1.8)	615	4776	62.6 (51.2, 72.7)	355	2661	34.9 (24.9, 46.4)
Female	5	33	2.9 (1.3, 6.6)	121	652	57.9 (49.7, 65.7)	64	422	37.5 (29.8, 45.8)	5	14	1.0 (0.5, 2.2)	270	868	61.7 (56.9, 66.3)	150	512	36.4 (31.8, 41.2)
Age (yrs)																		
18–27	5	31	2.5 (1.1, 6.0)	43	506	41.1 (30.6, 52.5)	48	678	55.0 (43.8, 65.8)	#	–	–	67	1269	63.4 (32.4, 86.2)	44	686	34.2 (12.2, 66.2)
28–37	#	–	–	171	1399	57.9 (50.4, 65.0)	101	974	40.3 (33.2, 47.8)	#	–	–	326	2559	66.6 (51.3, 79.0)	170	1211	31.5 (19.2, 47.1)
38–47	#	–	–	148	767	52.9 (45.7, 60.0)	107	599	41.3 (34.5, 48.4)	8	31	1.6 (0.7, 3.8)	310	1084	56.1 (49.2, 62.9)	176	794	41.1 (34.3, 48.3)
48–57	#	–	–	80	347	54.9 (45.5, 63.9)	50	236	37.3 (29.1, 46.2)	#	–	–	151	515	53.6 (46.5, 60.5)	103	403	42.0 (35.2, 49.1)
58+	#	–	–	37	166	56.5 (44.4, 67.8)	31	120	40.8 (29.9, 52.7)	#	–	–	16	69	82.5 (66.9, 91.7)	6	15	17.5 (8.3, 33.1)

	Transitioned ADF n=6116									2015 Regular ADF n=9042								
	Did not help n=99			Helped n=3197			Neither n=2669			Did not help n=82			Helped n=5644			Neither n=3174		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Sex and Age (yrs)																		
Male 18–37	#	–	–	143	1475	51.3 (44.0, 58.6)	111	1362	47.4 (40.1, 54.7)	#	–	–	231	3280	66.0 (48.3, 80.2)	124	1580	31.8 (17.9, 49.9)
Male 38+	8	59	2.9 (1.2, 7.0)	215	1058	51.9 (46.1, 57.6)	165	839	41.1 (35.7, 46.8)	9	47	1.9 (0.8, 4.3)	375	1380	55.1 (49.2, 60.8)	228	1032	41.2 (35.4, 47.3)
Female 18–37	5	33	4.3 (1.8, 9.6)	71	430	55.7 (45.1, 65.8)	38	289	37.5 (27.8, 48.4)	#	–	–	162	548	62.3 (56.1, 68.0)	90	316	35.9 (30.2, 42.1)
Female 38+	#	–	–	50	222	65.8 (52.7, 76.9)	23	115	34.2 (23.1, 47.3)	#	–	–	102	289	61.1 (53.6, 68.0)	57	180	38.0 (31.0, 45.5)

Notes
Denominator: Those who use the internet to seek help or information for, or manage, mental health issues.
Based on weighted counts, 151 (2.5%) Transitioned ADF and 143 (0.1%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Probable 30-day disorder = PCL ≥ 53 or K10 ≥ 25; No probable 30-day disorder = PCL < 53 and K10 < 25.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

6.6 Satisfaction with available information about mental health on the internet

6.6.1 Satisfaction among Transitioned ADF and 2015 Regular ADF overall

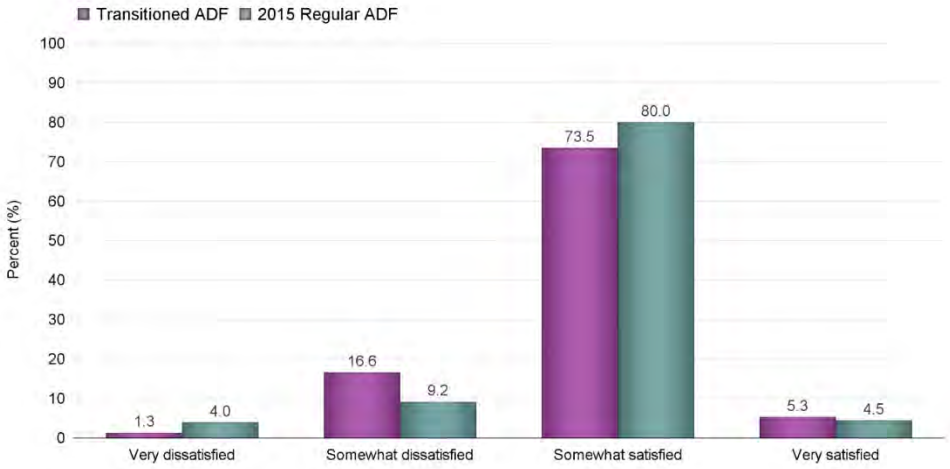
Among both the Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues, the majority reported being 'somewhat satisfied' with the information they received on the internet in relation to mental health (73.5% and 80.0%) (Table 6.8 and Figure 6.4). When dichotomised, a slightly larger proportion of Transitioned ADF than 2015 Regular ADF reported being dissatisfied (17.9% vs 13.2%); however this difference was not significant.

Table 6.8 Satisfaction with mental health information available on the internet among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Very dissatisfied	11	81	1.3 (0.7, 2.6)	12	359	4.0 (0.7, 19.8)
Somewhat dissatisfied	126	1016	16.6 (13.6, 20.1)	149	831	9.2 (5.8, 14.2)
Somewhat satisfied	642	4495	73.5 (69.6, 77.1)	1121	7231	80.0 (71.4, 86.4)
Very satisfied	53	324	5.3 (3.9, 7.2)	106	404	4.5 (3.4, 5.9)
Dichotomous grouping						
Dissatisfied	137	1097	17.9 (14.8, 21.5)	161	1190	13.2 (7.3, 22.6)
Satisfied	695	4820	78.8 (75.0, 82.2)	1227	7635	84.4 (75.4, 90.5)

Notes
Denominator: Those who use the internet to seek help or information for, or manage, mental health issues.
Based on weighted counts, 200 (3.3%) Transitioned ADF and 218 (2.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 6.4 Satisfaction with mental health information available on the internet among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health issues



6.6.2 Probable 30-day disorder and demographic characteristics

Table 6.9 presents the estimated proportion of the Transitioned ADF and 2015 Regular ADF (who reported that they use the internet to seek help or information or to manage mental health issues) who were satisfied versus those dissatisfied with the mental health information they received on the internet, according to probable disorder status and demographic characteristics.

The majority of Transitioned ADF and 2015 Regular ADF with a probable 30-day disorder reported being satisfied with the information they received (74.2% and 86.7% respectively).

Satisfaction with the mental health information they received on the internet did not appear to differ according to probable disorder, age or sex.

Table 6.9 Satisfaction with mental health information available on the internet among Transitioned ADF and 2015 Regular ADF who reported that they used the internet to seek help or information or manage mental health, by probable disorder and demographic characteristics

	Transitioned ADF n=6116						2015 Regular ADF n=9042					
	Dissatisfied n=1097			Satisfied n=4820			Dissatisfied n=1190			Satisfied n=7635		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	80	614	22.7 (17.8, 28.6)	300	2005	74.2 (68.2, 79.4)	46	195	11.3 (6.4, 19.1)	225	1502	86.7 (77.9, 92.4)
No	57	482	14.1 (10.4, 18.9)	395	2815	82.5 (77.4, 86.6)	115	995	13.6 (6.8, 25.4)	1002	6133	83.9 (72.8, 91.0)
Sex												
Male	118	967	19.4 (15.8, 23.6)	528	3862	77.4 (73.0, 81.3)	119	1054	13.8 (7.1, 25.2)	851	6399	83.8 (73.0, 90.8)
Female	19	129	11.5 (7.0, 18.2)	167	958	85.1 (78.1, 90.1)	42	136	9.7 (7.2, 12.9)	376	1235	87.8 (84.4, 90.5)
Age (yrs)												
18–27	20	272	22.1 (14.1, 32.9)	74	896	72.8 (61.4, 81.8)	12	385	19.2 (3.8, 58.9)	101	1584	79.1 (41.3, 95.3)
28–37	38	389	16.1 (11.3, 22.4)	234	1988	82.3 (76.0, 87.3)	43	412	10.7 (4.5, 23.4)	449	3337	86.8 (74.9, 93.6)
38–47	36	202	13.9 (9.8, 19.4)	223	1205	83.1 (76.8, 88.0)	68	226	11.7 (8.8, 15.3)	420	1660	85.9 (81.9, 89.1)
48–57	29	155	24.5 (16.6, 34.5)	103	446	70.5 (60.4, 79.0)	34	139	14.5 (10.0, 20.6)	218	787	81.8 (75.6, 86.7)
58+	11	46	15.5 (9.1, 25.2)	56	236	80.4 (70.3, 87.8)	#	–	–	19	76	90.5 (76.8, 96.5)
Sex and Age (yrs)												
Male 18–37	49	580	20.2 (15.0, 26.7)	206	2224	77.4 (70.6, 82.9)	32	712	14.3 (5.3, 33.4)	323	4147	83.5 (65.6, 93.1)
Male 38+	67	358	17.6 (13.6, 22.4)	318	1594	78.2 (72.9, 82.7)	86	322	12.8 (10.0, 16.4)	517	2107	84.2 (80.4, 87.3)
Female 18–37	9	81	10.5 (5.3, 19.7)	102	660	85.5 (76.1, 91.6)	23	85	9.6 (6.3, 14.4)	227	774	87.9 (83.0, 91.5)
Female 38+	9	44	13.1 (6.2, 25.5)	64	293	86.9 (74.5, 93.8)	19	51	10.8 (7.6, 15.3)	140	414	87.7 (82.9,91.3)

Notes
Denominator: Those who use the internet to seek help or information for, or manage, mental health issues.
Based on weighted counts, 200 (3.3%) Transitioned ADF and 218 (2.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

7 Use of the internet for one's own mental health

Note: All findings reported in this chapter are a proportion of those in the Transitioned ADF (n = 6116) and 2015 Regular ADF (n = 9042) who reported using the internet to seek help or information for, or to manage, mental health issues.

Frequency and timing of seeking help or information about their *own* mental health

- Among those who reported using the internet to seek help or information or manage mental health issues, almost 30% of the Transitioned ADF (29.1%) and 19.8% of the 2015 Regular ADF used the internet to seek help or access information about their own mental health at least once per month.
- While frequent use (at least once a month) was more common among Transitioned ADF with a probable disorder than those without (42.5% and 18.4%), the majority of the Transitioned ADF and 2015 Regular ADF used the internet infrequently (less than once per month) for their own mental health (52.3% and 68.8%), if at all (3.7% and 2.1%).
- Among those who reported using the internet to seek help or information or manage mental health issues, both the Transitioned ADF and 2015 Regular ADF were most likely to report accessing the internet for their own mental health between 8 pm and 12 midnight (40.6% and 42.8% respectively).

Talking online to peers, family or friends about one's *own* mental health

- Almost one in three Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information or manage mental health issues reported talking online to a peer, family member or friend about their *own* mental health (33.4% and 30.6% respectively), with the majority finding this helpful (63.3% and 75.2% respectively).
- Approximately one third of the Transitioned ADF and 2015 Regular ADF with a probable disorder who used the internet to manage their mental health reported talking online with a peer, family member or friend about their mental health (37.2% and 37.0% respectively).
- In general, younger Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information or manage mental health issues were most likely to talk online to a peer, family member or friend, with nearly half of those aged 18–27 endorsing this.

Talking online to other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) about one's *own* mental health

- Approximately one in 10 Transitioned ADF and 2015 Regular ADF who used the internet to manage mental health reported talking online to other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) about their mental health (12.4% and 7.8%).

- Transitioned ADF were significantly more likely to talk online to other people about their own mental health compared to 2015 Regular ADF.
- Among those who reported talking online to other people about their own mental health, the majority found it helpful, although this was lower among the Transitioned ADF compared to the 2015 Regular ADF (60.9% vs 87.8%).
- A small minority of both the Transitioned ADF and 2015 Regular ADF who used the internet to manage mental health found it to be harmful to talk online to other people about their own mental health (5.9% and 1.3% respectively).
- Just under 20% (17.4%) of the Transitioned ADF and 6.2% of the 2015 Regular ADF with a probable disorder and who used the internet to manage mental health reported talking to others on the internet about their own mental health.
- Among the Transitioned ADF, a greater proportion of those with a probable disorder than those without reported talking to others on the internet about their own mental health (17.4% vs 8.4%).
- Among the 2015 Regular ADF, there was little difference in the proportion of those with a probable disorder compared to those without a probable disorder who reported talking to others on the internet about their own mental health (6.2% vs 8.1%).

Talking online to a psychologist or other mental health professional about one's *own* mental health

- Almost one in 10 Transitioned ADF and 2015 Regular ADF who used the internet to manage mental health reported talking online to a psychologist or other mental health professional about their mental health (7.9% and 9.5%), with the majority finding this helpful (65.3% and 59.7%).
- Among those who used the internet to manage mental health who had a probable 30-day disorder, an estimated 7.2% of Transitioned ADF and an estimated 3.7% of 2015 Regular ADF reported using the internet to talk to a psychologist or other health professional about their own mental health.
- Transitioned ADF in the 18–27 age band (9.8%) and 2015 Regular ADF aged 28–37 (17.1%) were most likely to talk online to a psychologist or other mental health professional about their own mental health, followed by those aged 58+ (13.4%).

Glossary: refer to the Glossary of terms for definitions of key terms.

Many assumptions are made about the benefits of technology and the role technology may play in supporting self-management of one's own mental health issues and enhancing early help seeking, and how technology may act as an adjunct to one's own mental health care. In community samples, evidence clearly suggests that young people feel safer online, are able to express their feelings online and are more likely to disclose sensitive information.

This chapter explores the use of the internet specifically for one's *own* mental health among those who reported using the internet to seek help or assistance for mental health more broadly. The key questions examined were:

- How often do you use the internet to seek help or access information about *your* mental health?'
- What time are you most likely to use the internet to seek help or access information about *your* mental health?
- Have you ever talked about *your* mental health on the internet with peer, family member or friend?'

    IF YES: did you find this harmful, helpful or neither?'

Each section within this chapter begins with a statistical comparison of the prevalence of each outcome variable listed above among the Transitioned and 2015 Regular ADF. Following this, each of the dichotomised outcome measures was further stratified by probable disorder, sex, age group, and age group by sex categories for descriptive purposes (no odds ratios) in order to provide detailed information on the demographic profile of those who used the internet to seek help or information for or to manage mental health issues.

7.1 Frequency of seeking information about one's *own* mental health on the internet

7.1.1 Transitioned ADF and 2015 Regular ADF

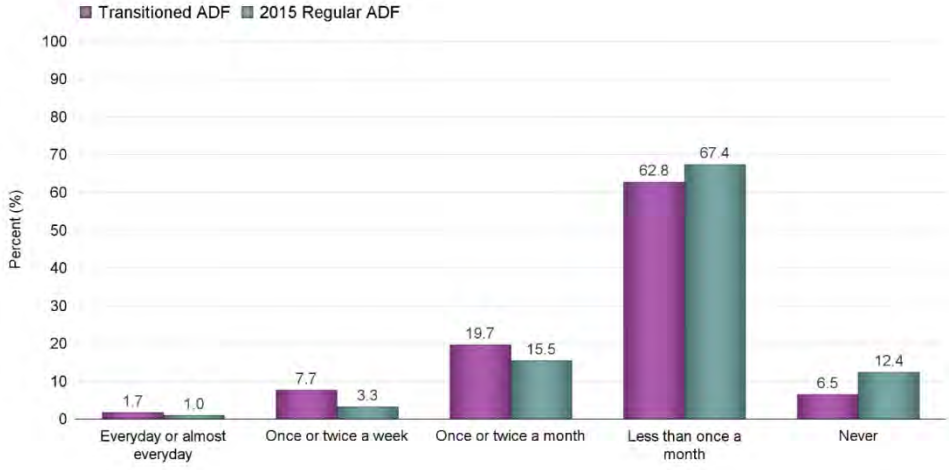
Of the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues more broadly, most reported using the internet to seek help for their *own* mental health less than once a month (62.8% and 67.4% respectively) (Table 7.1 and Figure 7.1). Only a very small proportion used the internet to seek information about their own mental health every day or almost every day (Transitioned ADF: 1.7%, 2015 Regular ADF: 1.0%).

Table 7.1 Estimated frequency of internet use to seek help or access information about one's *own* mental health among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
Frequency of use	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Every day or almost every day	17	107	1.7 (1.0, 3.1)	23	90	1.0 (0.6, 1.6)
Once or twice a week	72	470	7.7 (5.8, 10.1)	72	296	3.3 (2.4, 4.5)
Once or twice a month	170	1202	19.7 (16.5, 23.2)	203	1402	15.5 (8.6, 26.4)
Less than once a month	547	3841	62.8 (58.6, 66.8)	1005	6095	67.4 (57.3, 76.1)
Never	41	399	6.5 (4.5, 9.4)	118	1120	12.4 (6.8, 21.5)
Collapsed grouping						
At least once per month	259	1778	29.1 (25.4, 33.0)	298	1788	19.8 (12.5, 29.8)
Less than monthly	547	3841	62.8 (58.6, 66.8)	1005	6095	67.4 (57.3, 76.1)
Never	41	399	6.5 (4.5, 9.4)	118	1120	12.4 (6.8, 21.5)

Notes
Denominator: Those who used internet to manage mental health.
Based on weighted counts, 97 (1.6%) Transitioned ADF and 39 (0.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 7.1 Estimated frequency of internet use to seek help or access information about one's own mental health among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues



7.1.2 Probable 30-day disorder and demographic characteristics

Table 7.2 presents the frequency of internet use for seeking information about their own mental health among Transitioned ADF and 2015 Regular ADF, according to probable disorder status and demographic characteristics.

Among the Transitioned ADF who reported using the internet to seek help or information for or manage mental health issues, 42.5% of those with a probable disorder reported using the internet to seek information about their *own* mental health at least once a month, 52.3% reported using it less than once a month and 3.7% reported never using it for this purpose. Among the 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, 28.6% of those with a probable disorder reported using the internet to seek information about their own mental health at least once a month, 68.8% reported using it less than once a month and 2.1% reported never using the internet for this purpose.

Among Transitioned ADF who reported using the internet to seek help or information for or manage mental health issues, those who had a probable disorder were more likely to report using the internet for seeking mental health information at least once a month than those with no probable disorder (42.5% vs 18.4%), whereas those with no probable disorder were more likely to use the internet for their own mental health less than once per month (71.1% vs 52.3%).

Among 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, a higher proportion of those without a probable disorder reported never using the internet for their own mental health compared to those with a probable disorder (14.8% and 2.1% respectively).

Among the Transitioned ADF and the 2015 Regular ADF, the frequency with which respondents reported using the internet to seek mental health information was reasonably evenly distributed across sex and age bands.

When the frequency of using the internet for mental health issues was examined by age and sex group, among the Transitioned ADF a higher proportion of males aged 18–37 reported never using the internet for their own mental health compared to males aged 38 and older (10.0% and 2.4% respectively).

Table 7.2 Estimated frequency of internet use to seek help or access information about one's own mental health among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, by probable disorder and demographic characteristics

	Transitioned ADF n=6116									2015 Regular ADF n=9042								
	At least once per month n=1778			Less than once per month n=3841			Never n=399			At least once per month n=1788			Less than once per month n=6095			Never n=1120		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder																		
Yes	184	1149	42.5 (36.7, 48.6)	190	1414	52.3 (46.1, 58.4)	10	99	3.7 (1.7, 7.6)	130	496	28.6 (17.1, 43.9)	137	1191	68.8 (52.5, 81.4)	10	36	2.1 (0.9, 4.5)
No	75	629	18.4 (14.1, 23.7)	357	2427	71.1 (65.2, 76.4)	31	300	8.8 (5.7, 13.3)	168	1292	17.7 (9.5, 30.6)	868	4904	67.1 (55.3, 77.1)	108	1084	14.8 (8.1, 25.7)
Sex																		
Male	200	1461	29.3 (25.1, 33.8)	424	3076	61.6 (56.8, 66.3)	31	355	7.1 (4.7, 10.6)	208	1509	19.8 (11.5, 31.9)	697	5076	66.5 (54.6, 76.6)	90	1020	13.4 (6.9, 24.3)
Female	59	317	28.1 (21.9, 35.4)	123	765	67.9 (60.6, 74.5)	10	44	3.9 (2.2, 6.9)	90	279	19.8 (16.5, 23.6)	308	1019	72.4 (68.1, 76.4)	28	101	7.2 (5.0, 10.2)
Age group																		
18–27	24	292	23.8 (15.5, 34.6)	64	744	60.4 (48.8, 71.0)	8	171	13.9 (7.2, 25.2)	27	771	38.5 (14.0, 70.7)	74	823	41.1 (18.9, 67.6)	16	408	20.4 (4.4, 58.7)
28–37	89	762	31.5 (25.2, 38.7)	169	1485	61.5 (54.1, 68.3)	18	146	6.0 (3.4, 10.5)	87	378	9.8 (6.8, 14.0)	367	3052	79.4 (70.3, 86.2)	49	391	10.2 (5.4, 18.4)
38–47	78	441	30.4 (24.2, 37.4)	176	943	65.1 (57.8, 71.7)	7	37	2.6 (1.1, 5.9)	113	387	20.0 (16.3, 24.4)	348	1307	67.7 (60.1, 74.4)	34	229	11.9 (6.0, 22.3)
48–57	41	166	26.3 (19.9, 33.8)	90	432	68.4 (60.1, 75.7)	5	20	3.2 (1.5, 6.7)	61	207	21.6 (16.6, 27.5)	182	676	70.3 (63.8, 76.1)	18	72	7.5 (4.5, 12.1)
58+	24	97	32.9 (23.2, 44.4)	42	181	61.6 (49.8, 72.2)	#	–	–	6	21	25.5 (10.7, 49.4)	16	62	74.5 (50.6, 89.3)	49	391	10.2 (5.4, 18.4)

	Transitioned ADF n=6116									2015 Regular ADF n=9042								
	At least once per month n=1778			Less than once per month n=3841			Never n=399			At least once per month n=1788			Less than once per month n=6095			Never n=1120		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Sex and Age group																		
Male 18–37	73	811	28.2 (22.1, 35.3)	163	1729	60.1 (52.7, 67.1)	20	288	10.0 (6.2, 15.8)	63	980	19.7 (8.4, 39.6)	257	3239	65.2 (47.2, 79.7)	44	726	14.6 (5.9, 32.0)
Male 38+	125	638	31.3 (26.3, 36.8)	257	1300	63.8 (58.1, 69.1)	10	50	2.4 (1.2, 4.8)	144	516	20.6 (17.2, 24.6)	430	1705	68.1 (61.9, 73.7)	45	274	10.9 (6.1, 18.9)
Female 18–37	40	243	31.5 (23.1, 41.4)	70	500	64.8 (54.9, 73.5)	6	29	3.7 (1.7, 7.9)	51	169	19.3 (15.0, 24.4)	184	636	72.2 (66.5, 77.3)	21	73	8.3 (5.5, 12.2)
Female 38+	18	66	19.4 (12.9, 28.3)	51	257	76.1 (66.5, 83.6)	#	–	–	36	99	20.9 (16.2, 26.6)	116	340	71.9 (65.1, 77.8)	7	28	5.9 (2.7, 12.4)

Notes
Denominator: Among those that said 'Yes' to using the internet for mental health issues.
Based on weighted counts, 97 (1.6%) Transitioned ADF and 39 (0.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Probable 30-day disorder = PCL ≥ 53 or K10 ≥ 25; No probable 30-day disorder = PCL < 53 and K10 < 25.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

7.2 Timing of accessing information about mental health on the internet

7.2.1 Timing of access for Transitioned ADF and 2015 Regular ADF overall

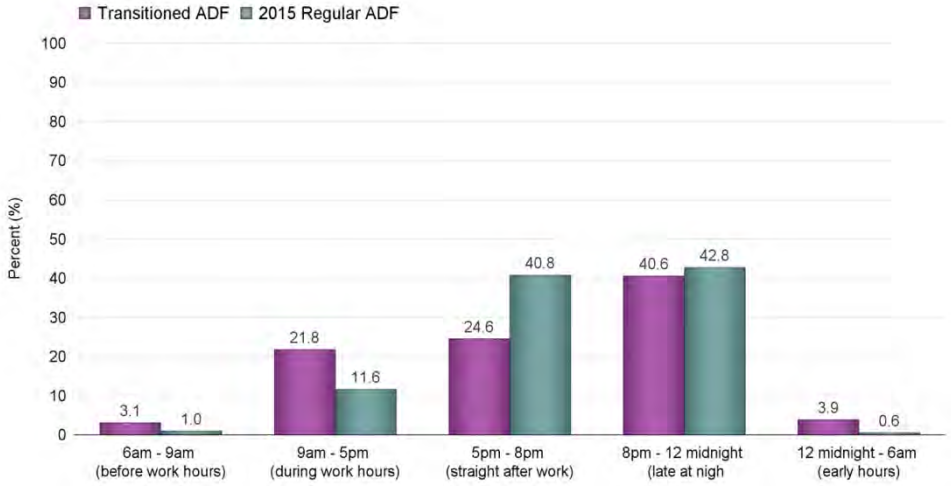
Of the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues more broadly, most reported accessing the internet for their own mental health between 8 pm and 12 midnight (40.6% and 42.8%) (Table 7.3 and Figure 7.2). When these groups were dichotomised for further analysis, among the Transitioned ADF similar proportions reported accessing the internet for their own mental health between 9 am and 8 pm (46.4%) and between 8 pm and 9 am (47.7%). Among the 2015 Regular ADF, the opposite pattern emerged, where slightly more reported accessing the internet for their own mental health between 9 am and 8 pm (52.5%) than between 8 pm and 9 am (44.4%); however these differences were not statistically significant.

Table 7.3 Timing of internet use to seek help or access information about one's own mental health among Transitioned ADF and 2015 Regular ADF who used the internet to seek help or information for or manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
Timing	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Between 6 am and 9 am (before work hours)	30	192	3.1 (2.0, 4.8)	23	93	1.0 (0.6, 1.7)
Between 9 am and 5 pm (during work hours)	203	1336	21.8 (18.7, 25.4)	205	1053	11.6 (7.7, 17.3)
Between 5 pm and 8 pm (straight after work)	200	1504	24.6 (21.1, 28.5)	496	3692	40.8 (31.4, 51.0)
Between 8 pm and 12 midnight (late at night)	346	2484	40.6 (36.5, 44.9)	635	3868	42.8 (33.8, 52.2)
Between 12 midnight and 6 am (early hours of the morning)	35	240	3.9 (2.5, 6.0)	16	51	0.6 (0.3, 1.0)
Dichotomised grouping						
Between 9 am and 8 pm	403	2840	46.4 (42.2, 50.7)	701	4744	52.5 (43.0, 61.7)
Between 8 pm and 9 am	411	2916	47.7 (43.4, 51.9)	674	4012	44.4 (35.3, 53.8)

Notes
Denominator: Those who used internet to manage mental health.
Based on weighted counts, 360 (5.9%) Transitioned ADF and 266 (3.2%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 7.2 Timing of internet use to seek help or access information about mental health among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues



7.2.2 Probable 30-day disorder and demographic characteristics

Table 7.4 presents self-reported timing of internet use for accessing mental health information among Transitioned ADF and 2015 Regular ADF according to probable 30-day disorder and demographic characteristics.

Among the Transitioned ADF who reported using the internet to seek help or information for or manage mental health issues, there were no differences in the proportions of those with a probable disorder using the internet between 9 am and 8 pm (44.7%) and between 8 pm and 9 am (50.0%). Among Transitioned ADF without a probable disorder, the same pattern was apparent, with relatively equal numbers using the internet between 9 am and 8 pm (47.8%) and using it between 8 pm and 9 am (45.8%). Among the 2015 Regular ADF, those with a probable disorder were more likely to report using the internet for their mental health between 9 am and 8 pm than between 8 pm and 9 am (66.6% vs 31.9%).

There were no differences in the timing of internet use for males and females in either the Transitioned ADF or 2015 Regular ADF.

When the timing of internet use was examined according to age bands, it was seen that a higher proportion of Transitioned ADF in the 58+ age band reported using the internet for their mental health between 9 am and 8 pm than between 8 pm and 9 am (67.1% vs 28.5%). Transitioned ADF members aged 58+ were more likely to use the internet for their own mental health between 9 am and 8 pm compared to the Transitioned ADF in the younger age groups.

Table 7.4 Timing of internet use to seek help or access information about mental health among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, by probable disorder and demographic characteristics

	Transitioned ADF n=6116						2015 Regular ADF n=9042					
	Between 9 am and 8 pm n=2840			Between 8 pm and 9 am n=2916			Between 9 am and 8 pm n=4744			Between 8 pm and 9 am n=4012		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	176	1208	44.7 (38.6, 50.9)	196	1353	50.0 (43.9, 56.2)	132	1153	66.6 (49.5, 80.2)	140	552	31.9 (18.9, 48.4)
No	227	1632	47.8 (42.1, 53.7)	215	1563	45.8 (40.1, 51.7)	569	3591	49.1 (38.8, 59.6)	534	3460	47.3 (37.1, 57.8)
Sex												
Male	305	2220	44.5 (39.7, 49.4)	327	2470	49.5 (44.6, 54.4)	487	4029	52.8 (41.7, 63.6)	472	3362	44.0 (33.5, 55.2)
Female	98	620	55.1 (47.1, 62.8)	84	446	39.6 (32.2, 47.5)	214	715	50.8 (46.1, 55.5)	202	650	46.2 (41.5, 50.9)
Age group												
18–27	46	590	47.9 (36.9, 59.2)	47	574	46.6 (35.7, 57.9)	61	1113	55.6 (26.9, 80.9)	50	849	42.4 (17.7, 71.6)
28–37	124	1069	44.2 (37.1, 51.6)	139	1207	50.0 (42.6, 57.3)	246	2095	54.5 (39.5, 68.7)	238	1639	42.6 (28.8, 57.7)
38–47	120	689	47.5 (40.5, 54.6)	135	701	48.3 (41.3, 55.4)	221	887	45.9 (39.3, 52.7)	265	979	50.7 (44.2, 57.2)
48–57	63	257	40.6 (32.5, 49.3)	66	322	51.0 (41.9, 60.0)	150	524	54.5 (47.5, 61.4)	101	390	40.6 (33.9, 47.7)
58+	45	197	67.1 (55.8, 76.6)	22	84	28.5 (19.7, 39.2)	15	54	64.9 (38.3, 84.6)	7	29	35.1 (15.4, 61.7)
Sex and Age group												
Male 18–37	110	1228	42.7 (35.6, 50.1)	134	1466	51.0 (43.6, 58.3)	173	2742	55.2 (38.5, 70.8)	176	2110	42.5 (27.2, 59.4)
Male 38+	192	962	47.2 (41.5, 52.9)	191	975	47.8 (42.2, 53.6)	312	1253	50.1 (44.5, 55.6)	287	1141	45.6 (40.2, 51.0)
Female 18–37	60	431	55.8 (45.5, 65.7)	52	314	40.7 (31.2, 51.0)	134	466	52.9 (46.7, 59.0)	112	379	43.0 (37.0, 49.3)
Female 38+	36	181	53.6 (41.6, 65.2)	32	132	39.0 (28.4, 50.8)	74	212	44.8 (38.0, 51.9)	86	258	54.6 (47.6, 61.4)

Notes
Those that said 'Yes' to using the internet for mental health issues.
Based on weighted counts, 360 (5.9%) Transitioned ADF and 266 (3.2%) 2015 Regular ADF had a missing value for this question, therefore row percentages may not add up to 100. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
Probable 30-day disorder = PCL ≥ 53 or K10 ≥ 25; No probable 30-day disorder = PCL < 53 and K10 < 25.

7.3 Talking with peers, family members or friends about one's own mental health on the internet

7.3.1 Talking online for this purpose among Transitioned ADF and 2015 Regular ADF overall

Of the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues more broadly, approximately one third reported talking online to a peer, family member or friend about their own mental health (33.4% and 30.6% respectively) (Table 7.5 and Table 7.3). Among these, the majority of the Transitioned ADF and 2015 Regular ADF reported it to be helpful (63.3% and 75.2% respectively).

7.3.2 Probable 30-day disorder and demographic characteristics

Table 7.6 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF who reported talking about their own mental health on the internet with a peer, family member or friend, according to probable disorder and demographic characteristics.

Among both the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, approximately one third of those with a probable disorder (37.2% and 37.0% respectively) and without one (30.4% and 29.1% respectively) reported talking about their mental health on the internet with a peer, family member or friend.

When the distribution across sex and age bands was examined, among the Transitioned ADF there was a pattern where greater proportions of younger respondents reported speaking on the internet about their mental health to peers, family members or friends, with nearly half of those aged 18–27 endorsing this (47.8%), in contrast to only 14.2% of those aged 58+. A similar pattern was observed among the 2015 Regular ADF, with just under half of those aged 18 to 27 reporting using the internet to talk about mental health with peers, family members or friends (45.9%) compared to smaller proportions of the other age groups. There were no differences in the proportion of males and females from the Transitioned ADF and 2015 Regular ADF who reported speaking on the internet about their mental health to peers, family members or friends.

Among the 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, females aged 18–37 were more likely to report talking about their mental health on the internet with a peer, family member or friend than females aged 38+ (37.7% and 20.7% respectively).

Table 7.5 Talking about one's own mental health on the internet with peers, family members or friends among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
Talk with peers	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No, did not talk on the internet with peers or family.	577	4000	65.4 (61.2, 69.4)	1023	6202	68.6 (58.8, 77.0)
Yes, did talk on the internet with peers or family.	269	2041	33.4 (29.4, 37.6)	395	2768	30.6 (22.2, 40.5)
Harmful	5	30	1.5 (0.5, 4.0)	#	–	–
Helpful	173	1292	63.3 (55.7, 70.3)	298	2081	75.2 (57.3, 87.3)
Neither	90	695	34.1 (27.3, 41.6)	92	672	24.3 (12.3, 42.3)

Notes
Denominator: Those who used internet to manage mental health.
Based on weighted counts, 75 (1.2%) Transitioned ADF and 73 (0.8%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.
= Cell size too small to be reported.

Figure 7.3 Talking about one's own mental health on the internet with peers, family members or friends among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

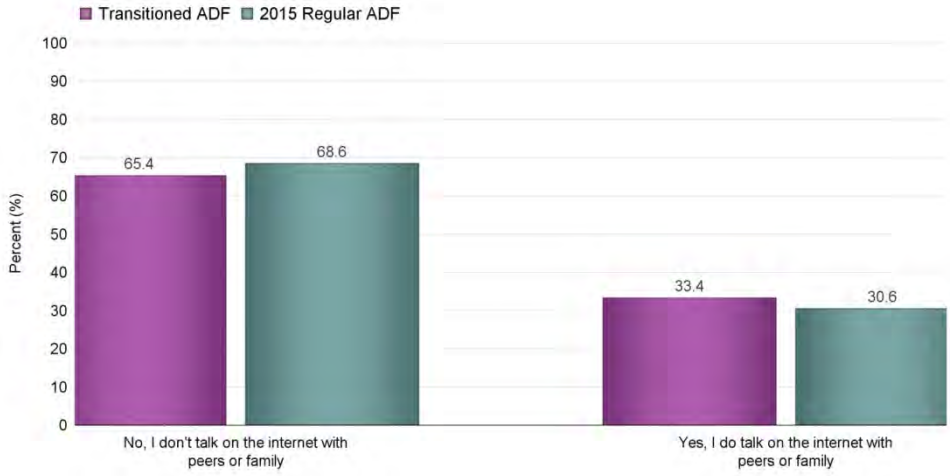


Table 7.6 Talking about one's own mental health on the internet with peers, family members or friends among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues by probable disorder and demographic characteristics

	Transitioned ADF n=6116						2015 Regular ADF n=9042					
	No, did not talk on the internet with peers or family. n=4000			Yes, did talk on the internet with peers or family. n=2041			No, did not talk on the internet with peers or family. n=6202			Yes, did talk on the internet with peers or family. n=2768		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	244	1672	61.9 (55.7, 67.7)	141	1005	37.2 (31.4, 43.4)	179	1073	61.9 (39.4, 80.3)	97	641	37.0 (18.9, 59.8)
No	333	2328	68.2 (62.4, 73.5)	128	1037	30.4 (25.1, 36.2)	844	5129	70.2 (59.0, 79.4)	298	2126	29.1 (19.9, 40.4)
Sex												
Male	449	3272	65.6 (60.7, 70.1)	206	1652	33.1 (28.6, 37.9)	734	5245	68.7 (57.0, 78.4)	259	2328	30.5 (20.8, 42.3)
Female	128	728	64.7 (56.4, 72.1)	63	389	34.6 (27.1, 42.8)	289	957	68.0 (63.7, 72.0)	136	439	31.2 (27.2, 35.5)
Age (yrs)												
18–27	53	643	52.2 (41.0, 63.3)	44	588	47.8 (36.7, 59.0)	73	1084	54.1 (25.7, 80.1)	44	919	45.9 (19.9, 74.3)
28–37	187	1653	68.5 (61.3, 74.9)	90	744	30.8 (24.4, 37.9)	353	2749	71.5 (55.7, 83.4)	150	1067	27.8 (16.0, 43.7)
38–47	175	926	63.9 (56.6, 70.6)	85	492	33.9 (27.5, 41.0)	360	1409	73.0 (67.6, 77.7)	133	503	26.1 (21.4, 31.3)
48–57	98	466	73.8 (65.8, 80.4)	38	162	25.6 (19.0, 33.5)	204	759	78.9 (72.9, 83.9)	57	197	20.5 (15.6, 26.5)
58+	57	243	82.8 (73.5, 89.4)	11	42	14.2 (8.5, 23.0)	19	70	83.8 (56.8, 95.3)	#	–	–
Sex and Age (yrs)												
Male 18–37	165	1813	63.0 (55.7, 69.9)	93	1044	36.3 (29.5, 43.7)	269	3291	66.3 (48.5, 80.4)	96	1654	33.3 (19.2, 51.2)
Male 38+	279	1401	68.7 (63.1, 73.8)	112	594	29.1 (24.2, 34.6)	459	1867	74.6 (70.0, 78.7)	158	616	24.6 (20.6, 29.1)
Female 18–37	75	484	62.8 (52.0, 72.4)	41	287	37.2 (27.6, 48.0)	157	542	61.6 (55.7, 67.2)	98	332	37.7 (32.1, 43.6)
Female 38+	51	235	69.8 (56.7, 80.3)	22	102	30.2 (19.7, 43.3)	124	371	78.4 (72.7, 83.2)	35	98	20.7 (16.0, 26.3)

Notes
Denominator: Those that said 'Yes' to using the internet for mental health issues. Based on weighted counts, 75 (1.2%) Transitioned ADF and 73 (0.8%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals. 95%CI = 95% confidence interval. # = Cell size too small to be reported.

7.4 Talking with other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) about one's own mental health on the internet

7.4.1 Online talking with other people among Transitioned ADF and 2015 Regular ADF overall

Only a small proportion of the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues more broadly reported talking online to other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) about their own mental health (12.4% and 7.8%) (Table 7.7 and Figure 7.4), with significantly more Transitioned ADF reporting this (OR 1.9, 95% CI 1.0, 3.4). Among those who reported talking online to other people about their mental health, the majority found it helpful, although this was lower among the Transitioned ADF compared to the 2015 Regular ADF (60.9% vs 87.8%).

7.4.2 Probable 30-day disorder and demographic characteristics

Table 7.8 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF respondents who reported talking about their own mental health on the internet with others (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger), according to whether or not they had a probable disorder and demographic characteristics.

Among those who reported using the internet to seek help or information for or manage mental health issues, Transitioned ADF with a probable disorder (17.4%) were more likely to report talking to others on the internet about their own mental health compared to the 2015 Regular ADF with a probable disorder (6.2%). Among the Transitioned ADF, a greater proportion of those with a probable disorder than those without reported talking to others on the internet about their mental health (17.4% vs 8.4%). In contrast, among the 2015 Regular ADF there was little difference in the proportion of those with and without a probable disorder who reported talking to others (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) on the internet about their own mental health (6.2% vs 8.1%).

Among both the Transitioned ADF and 2015 Regular ADF, males and females were equally likely to report talking on the internet with others about their mental health (Transitioned ADF males 11.6% vs females 15.8%; 2015; Regular ADF males 7.8% vs females 7.5%).

When examined according to age bands, again there were very few age differences, and the patterns were similar for the Transitioned and 2015 Regular ADF, with the majority of those who reported talking to others about their mental health in the youngest age band of 18–27 (Transitioned ADF: 16.5%, 2015 Regular ADF: 12.2%). There were also no differences when the age and sex categories were combined.

Table 7.7 Talking about one's own mental health on the internet with other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
Talk with other people	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No, did not talk on the internet with other people.	729	5194	84.9 (81.7, 87.7)	1295	8213	90.8 (85.0, 94.5)
Yes, did talk on the internet with other people.	110	758	12.4 (10.0, 15.3)	114	704	7.8 (4.3, 13.8)
Harmful	8	45	5.9 (2.7, 12.3)	#	–	–
Helpful	67	462	60.9 (49.6, 71.1)	88	618	87.8 (77.0, 93.9)
Neither	35	252	33.2 (23.6, 44.4)	23	77	10.9 (5.4, 20.9)

Notes
Denominator: Those who used internet to manage mental health.
Based on weighted counts, 163 (2.7%) Transitioned ADF and 126 (1.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.
= Cell size too small to be reported.

Figure 7.4 Talking about one's own mental health on the internet with other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

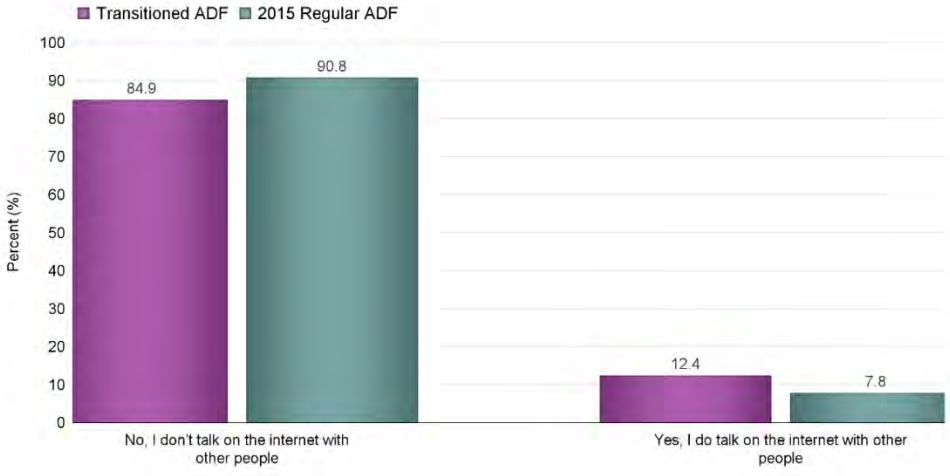


Table 7.8 Talking about one's own mental health on the internet with other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger) among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, by probable disorder and demographic characteristics

	Transitioned ADF n=6116						2015 Regular ADF n=9042					
	No, did not talk on the internet with other people. n=5194			Yes, did talk on the internet with other people. n=758			No, did not talk on the internet with other people. n=8213			Yes, did talk on the internet with other people. n=704		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	308	2155	79.8 (74.4, 84.2)	74	470	17.4 (13.4, 22.3)	244	1608	92.8 (87.6, 96.0)	30	108	6.2 (3.4, 11.1)
No	421	3039	89.0 (84.8, 92.2)	36	288	8.4 (5.7, 12.2)	1051	6605	90.3 (83.0, 94.7)	84	595	8.1 (4.0, 15.8)
Sex												
Male	564	4255	85.3 (81.6, 88.4)	84	580	11.6 (9.0, 14.9)	902	6939	90.9 (83.7, 95.1)	85	598	7.8 (3.9, 15.2)
Female	165	939	83.4 (76.1, 88.8)	26	178	15.8 (10.5, 23.2)	393	1274	90.5 (87.0, 93.2)	29	105	7.5 (5.2, 10.7)
Age (yrs)												
18–27	76	1004	81.6 (71.7, 88.5)	20	203	16.5 (10.1, 25.7)	103	1735	86.7 (57.6, 96.9)	12	244	12.2 (2.5, 42.7)
28–37	241	2065	85.5 (79.5, 90.0)	33	280	11.6 (7.8, 17.0)	459	3583	93.2 (86.9, 96.6)	40	225	5.9 (2.7, 12.3)
38–47	222	1212	83.6 (77.5, 88.3)	38	203	14.0 (10.0, 19.3)	453	1751	90.6 (86.5, 93.6)	40	156	8.1 (5.4, 12.0)
48–57	120	568	89.9 (85.0, 93.4)	14	52	8.2 (5.2, 12.7)	241	895	93.1 (89.2, 95.6)	19	59	6.1 (3.7, 10.0)
58+	62	264	89.8 (82.0, 94.4)	5	20	6.7 (3.1, 13.8)	18	64	77.1 (47.8, 92.5)	#	–	–
Sex and Age (yrs)												
Male 18–37	219	2426	84.4 (78.4, 88.9)	35	355	12.4 (8.5, 17.7)	330	4529	91.2 (78.7, 96.7)	31	397	8.0 (2.8, 20.9)
Male 38+	339	1757	86.2 (81.9, 89.6)	49	224	11.0 (8.3, 14.5)	561	2265	90.5 (87.0, 93.1)	54	201	8.0 (5.7, 11.2)
Female 18–37	98	643	83.4 (73.9, 89.9)	18	128	16.6 (10.1, 26.1)	232	789	89.7 (85.4, 92.8)	21	72	8.1 (5.6, 11.6)
Female 38+	65	287	85.1 (71.6, 92.8)	8	50	14.9 (7.2, 28.4)	151	445	94.1 (90.4, 96.5)	7	20	4.2 (2.2, 7.6)

Notes: Denominator: Those that said 'Yes' to using the internet for mental health issues. Based on weighted counts, 163 (2.7%) Transitioned ADF and 126 (1.4%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals. 95%CI = 95% confidence interval. Note: Probable 30-day disorder = PCL ≥ 53 or K10 ≥ 25; No probable 30-day disorder = PCL < 53 and K10 < 25. # = Cell size too small to be reported.

7.5 Talking with a psychologist or other mental health professional about one's own mental health on the internet

7.5.1 Talking online with a mental health professional by Transitioned ADF and 2015 Regular ADF overall

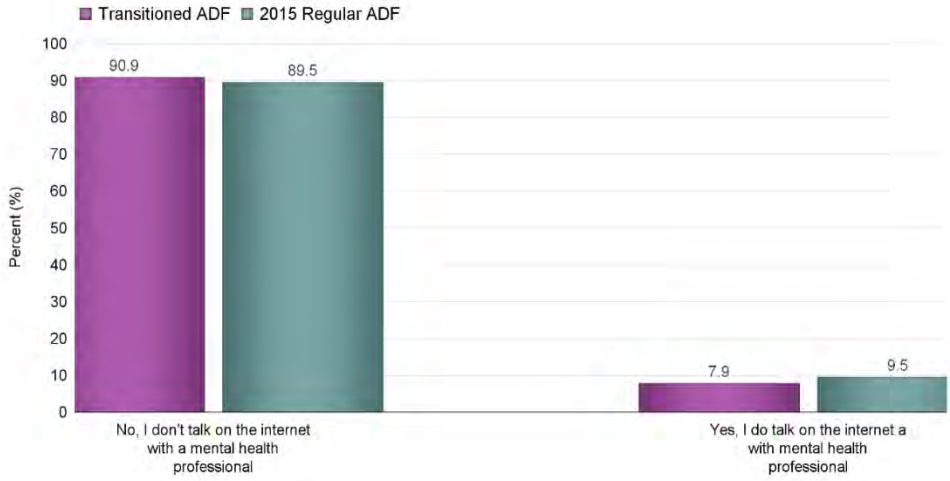
Of the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, 7.9% and 9.5% respectively reported talking online to a psychologist or other mental health professional about their mental health (Table 7.9 and Figure 7.5). Among these, the majority of both the Transitioned ADF and 2015 Regular ADF reported finding this helpful (65.3% and 59.7%).

Table 7.9 Talking about one's own mental health on the internet with a psychologist or other mental health professional among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues

	Transitioned ADF n=6116			2015 Regular ADF n=9042		
Talk with psychologist	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
No, did not talk on the internet with a mental health professional.	785	5561	90.9 (88.0, 93.2)	1331	8093	89.5 (81.7, 94.2)
Yes, did talk on the internet with a mental health professional.	62	481	7.9 (5.8, 10.6)	85	860	9.5 (4.9, 17.6)
Harmful	#	–	–	#	–	–
Helpful	40	314	65.3 (49.5, 78.3)	65	513	59.7 (25.4, 86.6)
Neither	18	132	27.4 (16.0, 42.9)	20	347	40.3 (13.4, 74.6)

Notes
Denominator: Those who used internet to manage mental health.
Based on weighted counts, 73 (1.2%) Transitioned ADF and 90 (1.0%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
Note: For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.
= Cell size too small to be reported.

Figure 7.5 Talking about one's own mental health on the internet with a psychologist or other mental health professional among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues



7.5.2 Probable 30-day disorder and demographic characteristics

Table 7.10 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF who reported using the internet to talk with a psychologist or other health professional about their mental health, according to whether or not they had a probable disorder and demographic characteristics.

Among those who reported using the internet to seek help or information for or manage mental health issues, and who also had a probable disorder, an estimated 7.2% of Transitioned ADF and 3.7% of 2015 Regular ADF reported using the internet to talk to a health professional about their own mental health.

Among the Transitioned ADF and the 2015 Regular ADF, similar proportions of males (7.9% and 10.1% respectively) and females (7.7% and 6.5% respectively) reported using the internet to talk to a health professional about their own mental health.

As with findings about talking on the internet to peers, family and friends, and others, again, for the Transitioned ADF the greatest proportion reporting talking on the internet with a psychologist or other mental health professional was in the 18–27 age band (9.8%), though the distribution across age was very similar for all bands. In contrast, within the 2015 Regular ADF, the greatest proportion was among those aged 28–37 (17.1%). There were no differences when the age and sex categories were combined.

Table 7.10 Talking about one's own mental health on the internet with a psychologist or other mental health professional among Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues, by probable disorder and demographic characteristics

	Transitioned ADF n=6116						2015 Regular ADF n=9042					
	No, did not talk on the internet with a mental health professional. n=5561			Yes, did talk on the internet with a mental health professional. n=481			No, did not talk on the internet with a mental health professional. n=8093			Yes, did talk on the internet with a mental health professional. n=860		
Type	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable 30-day disorder												
Yes	350	2479	91.7 (88.3, 94.2)	35	195	7.2 (5.0, 10.3)	262	1660	95.8 (91.9, 97.9)	16	63	3.7 (1.8, 7.4)
No	435	3082	90.3 (85.6, 93.6)	27	287	8.4 (5.4, 12.9)	1069	6433	88.0 (78.4, 93.7)	69	797	10.9 (5.4, 20.8)
Sex												
Male	607	4535	90.9 (87.5, 93.4)	50	395	7.9 (5.6, 11.1)	938	6789	88.9 (79.4, 94.3)	54	769	10.1 (4.8, 19.8)
Female	178	1026	91.1 (85.1, 94.9)	12	87	7.7 (4.2, 13.7)	393	1304	92.7 (90.5, 94.4)	31	91	6.5 (4.8, 8.6)
Age (yrs)												
18–27	89	1110	90.2 (80.7, 95.3)	8	121	9.8 (4.7, 19.3)	113	1979	98.8 (95.9, 99.7)	#	–	–
28–37	258	2219	91.9 (86.6, 95.2)	19	178	7.4 (4.2, 12.6)	464	3139	81.6 (64.6, 91.6)	35	659	17.1 (7.5, 34.7)
38–47	242	1311	90.4 (84.5, 94.2)	16	96	6.6 (3.8, 11.3)	464	1794	92.9 (89.1, 95.4)	31	131	6.8 (4.3, 10.5)
48–57	126	591	93.5 (89.2, 96.1)	11	41	6.5 (3.9, 10.8)	248	910	94.6 (91.1, 96.8)	14	49	5.1 (3.0, 8.6)
58+	64	271	92.3 (85.2, 96.2)	6	23	7.7 (3.8, 14.8)	20	72	86.6 (57.1, 96.9)	#	–	–
Sex and Age (yrs)												
Male 18–37	238	2615	90.9 (85.5, 94.5)	20	242	8.4 (5.0, 13.8)	345	4311	86.8 (71.6, 94.5)	17	605	12.2 (4.7, 27.9)
Male 38+	365	1870	91.7 (87.8, 94.5)	28	130	6.4 (4.3, 9.3)	582	2332	93.2 (90.0, 95.3)	37	164	6.6 (4.4, 9.7)
Female 18–37	109	714	92.6 (85.0, 96.6)	7	57	7.4 (3.4, 15.0)	232	807	91.7 (88.5, 94.0)	21	64	7.3 (5.1, 10.3)
Female 38+	67	303	89.8 (76.6, 95.9)	5	30	8.8 (3.1, 22.5)	150	443	93.8 (90.2, 96.1)	10	27	5.7 (3.5, 9.3)

Notes: Denominator: Those that said 'Yes' to using the internet for mental health issues. Based on weighted counts, 73 (1.2%) Transitioned ADF and 90 (1.0%) 2015 Regular ADF had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals. Probable 30-day disorder = PCL ≥ 53 or K10 ≥ 25; No probable 30-day disorder = PCL < 53 and K10 < 25. 95%CI = 95% confidence interval. # = Cell size too small to be reported.

8 Barriers to talking online about one's own mental health in Transitioned ADF and Regular 2015 ADF

Note: All findings reported in this section are a proportion of the Transitioned and 2015 Regular ADF who reported using the internet to seek help or information for or manage mental health issues but *did not* report talking to either a peer, a family member or friend, other people (i.e. online forums, chatrooms, blogs, MSN or Gmail messenger) or a psychologist or other health professional about their own mental health.

Barriers to talking online about one's own mental health

- Among the Transitioned ADF and 2015 Regular ADF who reported using the internet to seek help or information or manage mental health issues, but reported they did NOT talk to someone online about their own mental health, the main barriers they reported were a preference for face-to-face contact (59.0% and 70.2% respectively), concerns about lack of privacy and confidentiality (50.4% and 63.3% respectively) and concerns about lack of website security (41.2% and 45.7%). Concerns about the validity of information online were also a factor (36.5% and 35.8%).
- Transitioned ADF were significantly less likely than 2015 Regular ADF to report concerns about a lack of privacy/confidentiality as a barrier to talking about their mental health issues online.
- Transitioned ADF were significantly more likely than 2015 Regular ADF to report unaffordable technology as a barrier preventing them from talking about their mental health issues online.

Glossary: refer to the Glossary of terms for definitions of key terms.

8.1 Barriers to talking online about one's own mental health

Table 8.1 and Figure 8.1 examine barriers to talking about mental health online that may be experienced by the Transitioned ADF and the 2015 Regular ADF. Respondents who *did not* talk about their mental health online were asked 'Which of the following barriers might prevent you from talking about your mental health issues online?'

The most common barrier preventing both the Transitioned ADF and 2015 Regular ADF from talking about their mental health issues online was their preference for face-to-

face contact (59.0% and 70.2% respectively). The least common barrier reported was the lack of access to technology, with 1.6% of Transitioned ADF and 0.5% of 2015 Regular ADF endorsing this item.

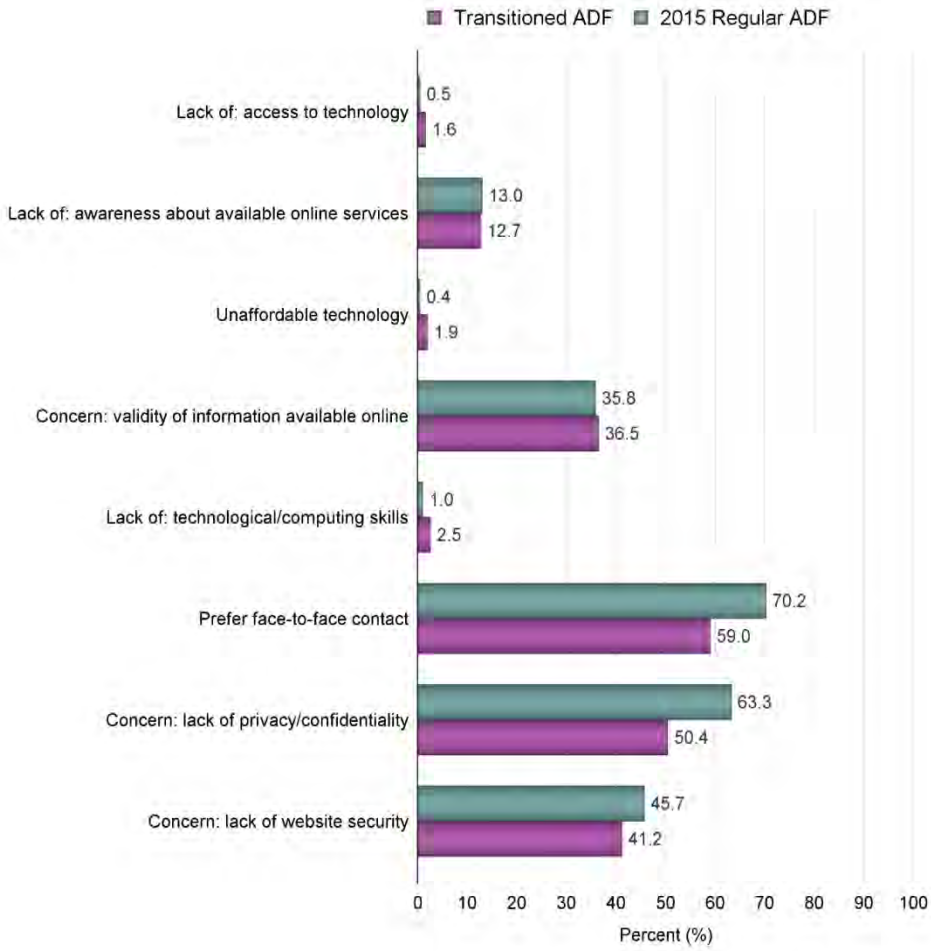
When logistic regressions were performed, Transitioned ADF were significantly less likely than 2015 Regular ADF to report concerns about a lack of privacy/confidentiality as a barrier to talking about their mental health issues online (50.4% vs 63.3%, OR 0.5, 95% CI 0.3, 0.9). In contrast, Transitioned ADF were more likely than 2015 Regular ADF to report unaffordable technology as a barrier preventing them from talking about their mental health issues online (1.9% vs 0.4%, OR 3.7, 95% CI 1.3, 10.3). Caution should be applied to the interpretation of this result, however, because of the small number of participants reporting this as a barrier. (See Annex B for detailed description of the strength of the association and individual odds ratios).

Table 8.1 Barriers preventing Transitioned ADF and the 2015 Regular ADF from talking about their mental health issues online among those who reported using the internet to seek help or information for or manage mental health issues but reported they did NOT talk to someone online about their own mental health

	Transitioned ADF n=3452			2015 Regular ADF n=5470		
Barriers to talking about mental health issues online	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Lack of access to technology	6	54	1.6 (0.6, 4.2)	7	25	0.5 (0.2, 1.0)
Lack of awareness about available online services	65	438	12.7 (9.4, 17.0)	102	710	13.0 (5.5, 27.7)
Unaffordable technology	6	65	1.9 (0.7, 5.2)	8	22	0.4 (0.2, 0.7)
Concerns about validity of information available online	180	1260	36.5 (31.3, 42.0)	309	1960	35.8 (24.7, 48.8)
Lack of technological/computing skills	11	88	2.5 (1.4, 4.7)	14	54	1.0 (0.5, 1.9)
Preference for face-to-face contact	313	2036	59.0 (53.3, 64.4)	619	3842	70.2 (60.8, 78.2)
Concerns about a lack of privacy/confidentiality	278	1740	50.4 (44.8, 56.0)	510	3461	63.3 (53.5, 72.1)
Concerns about a lack of website security	218	1422	41.2 (35.8, 46.8)	411	2500	45.7 (34.2, 57.7)

Notes
Denominator: Those who do not talk about mental health online.
Participants could endorse multiple responses for this question, hence percentages do not add up to 100%. As responses that were not endorsed were assumed to be left blank intentionally, there are no missing values for this question.
95%CI = 95% confidence interval.
For a full description of odds ratios, interpretation and strength of association, please refer to Table B.1 in Annex B, Odds ratio table.

Figure 8.1 **Barriers preventing Transitioned ADF and the 2015 Regular ADF from talking about their mental health issues online among those who reported using the internet to seek help or information for or manage mental health issues but reported they did NOT talk to someone online about their own mental health**



9 Mental health status and the use of DVA, Defence and other civilian mental health websites by Transitioned ADF and Regular 2015 ADF

Use of the internet to seek help or information for or manage mental health issues

- Overall, about 40% of the Transitioned ADF and 20–40% of the 2015 Regular ADF with a 30-day probable disorder used the internet for mental health across the different mental disorders, including suicidal thoughts and plans, PTSD, anxiety/depression and alcohol use.
- Of those with subsyndromal disorder, approximately 30% of the Transitioned ADF and 16–30% of the 2015 Regular ADF used the internet for mental health.
- Internet use to seek help or information or manage mental health issues was generally higher among those with more mental health symptoms.
- There was no association between self-reported stigma and perceived barriers to care and use of the internet to seek help or information or to manage mental health issues among Transitioned and 2015 Regular ADF members with probable PTSD, alcohol disorder or 12-month suicidal ideation and behaviour.
- Among those with probable anxiety/depression or depressive episodes, Transitioned ADF reporting at least one mental health stigma or at least one perceived barrier were more likely to use the internet to seek help or information or manage mental health issues than those with no stigma or barriers.
- Among those with probable anxiety/depression or probable generalised anxiety disorder and no barriers, Transitioned ADF members (30.5%) were more likely to use the internet for mental health issues than the 2015 Regular ADF (8.6%).

Use of a Defence website

- Approximately 10–14% of Transitioned ADF with a probable disorder and 17–34% of the 2015 Regular ADF with a probable disorder reported using the ADF website.
- For example, 30% of the 2015 Regular ADF who had made a suicide plan in the last 12 months, or who had a probable 30-day PTSD or alcohol disorder, reported using the ADF website.
- There was a trend for the 2015 Regular ADF with no disorder to be more likely to use the ADF website to inform/assess their mental health than the Transitioned ADF with no disorder.

- There was no association between self-reported stigma or perceived barriers to care and use of the ADF website to assess/inform mental health among Transitioned and 2015 Regular ADF members with probable PTSD, anxiety/depression, depressive episodes, generalised anxiety disorder or 12-month suicidal ideation and behaviour.
- Among the 2015 Regular ADF with a probable alcohol disorder, however, those without mental health stigmas or perceived barriers to care were substantially more likely to use the ADF website than those with stigmas or perceived barriers.

Use of a DVA or At Ease website

- Overall, the use of the DVA or At Ease websites across the different mental disorder and symptom categories among the Transitioned ADF and the 2015 Regular ADF was relatively high and comparable to use of the internet for mental health overall.
- Approximately 30–40% of the Transitioned ADF with a probable disorder or suicidality and 16–42% of the 2015 Regular ADF reported using the DVA or At Ease website to inform/assess mental health.
- Transitioned ADF members with probable PTSD (43.3%) or probable depressive episodes (40.3%) or who had made a suicide plan in the last 12 months (42.0%) were most likely to use the DVA or At Ease website to inform/assess mental health.
- 2015 Regular ADF members with probable PTSD (38.5%) or probable alcohol disorder (41.6%) or who had made a suicide plan in the last 12 months (32.4%) were most likely to use the DVA or At Ease website to inform/assess mental health.
- In both the Transitioned ADF and 2015 Regular ADF, there was little difference between the proportion of those with or without stigma and barriers who used the DVA or At Ease website, except for suicidality, whereby Transitioned ADF who reported at least one mental health stigma (31.5%) or perceived barrier to care (30.8%) were more likely to use the DVA or At Ease website to inform/assess mental health than 2015 Regular ADF who reported at least one mental health stigma (16.9%) or barrier (17.0%).

Use of civilian mental health websites

- An estimated 25–30% of the Transitioned ADF and 18–33% of the 2015 Regular ADF with a probable disorder used a civilian mental website to inform/assess their mental health.
- Less than 12% of the Transitioned ADF and 2015 Regular ADF used a civilian mental health website if they did not have a disorder.
- Transitioned ADF members who had made a suicide plan in the last 12 months (34.7%) or who had probable PTSD (29.6%) were most likely to use other civilian mental health websites to inform/assess mental health.
- 2015 Regular ADF members with probable depressive episodes (32.8%) or probable alcohol disorder (32.0%) were most likely to use other civilian mental health websites to inform/assess mental health.

- Overall, there was no association between self-reported stigma and perceived barriers to care and the use of other civilian mental health websites to inform/assess mental health among Transitioned and 2015 Regular ADF members with probable PTSD, 12-month suicidal ideation and behaviour or generalised anxiety disorder.
- Among those with a probable alcohol disorder, however, a larger proportion of the 2015 Regular ADF with no stigmas used other civilian mental health websites to inform/assess mental health compared to 2015 Regular ADF with at least one stigma and Transitioned ADF with no stigma.
- Among those with probable anxiety/depression or depressive episodes, Transitioned ADF with at least one perceived barrier were more likely to use other civilian mental health websites to inform/assess their mental health compared to those with no perceived barriers to care.
- In contrast, those with a probable alcohol disorder and no barriers were more likely to use a civilian mental health website to inform/assess their mental health than those with at least one barrier.

Glossary: refer to the Glossary of terms for definitions of key terms.

9.1 Introduction

This chapter explores the use of the internet to inform or assess mental health among Transitioned and 2015 Regular ADF members according to the presence or absence of probable mental disorder. The key questions examined were:

- 'Do you use the internet to seek help or information for, or manage, mental health issues?'
- 'In the past 12 months have you used the ADF website to inform or assess your mental health?' (In the survey 'mental health' was defined as including but not restricted to such things a stress, anxiety, depression or problems with alcohol or drugs.)
- 'In the past 12 months have you used the DVA or At Ease website to inform or assess your mental health?'
- 'In the past 12 months have you used other websites (either Black Dog institute website, HeadSpace website, Beyond Blue website, Mindhealthconnect website, Lifeline website, Kids Helpline Website, Mens Helpline website, other health website) to inform or assess your mental health?'
- 'In the last 12 months did you use VVCS Vetline to inform/assess your mental health?

The purpose of this chapter is to examine whether use of the internet (in particular DVA, Defence and other websites providing mental health information) differs according to the type (PTSD, anxiety/affective disorder, alcohol disorder, depressive episodes, suicidality and generalised anxiety disorder) and severity (no disorder, subsyndromal disorder and probable disorder) of mental health symptoms reported by Transitioned ADF and 2015 Regular ADF members.

Each section begins with a detailed breakdown of the use of the internet/websites/VVCS Vetline among Transitioned ADF and 2015 Regular ADF members with a probable mental disorder, a subsyndromal mental disorder and no disorder. This is followed by a focused examination of the use of the internet/website/VVCS Vetline among those with a probable disorder who report mental health stigmas and barriers to care.

Probable 30-day disorder, subsyndromal disorder and no disorder categories on the self-report measures of PTSD, psychological distress, alcohol use and depression were calculated using cut-offs on the PCL, K10, AUDIT and PHQ, which were developed as part of the 2010 ADF MHPWS (McFarlane et al., 2011). The epidemiological cut-off gives the 'closest estimate of the true prevalence of 30-day ICD-10 disorder as measured by the CIDI' (McFarlane et al., 2011, p. 103). The screening cut-offs reflect a broader spectrum of moderate to severe symptoms rather than diagnosable disorder, allowing for potential early intervention. These screening cut-offs maximise potential identification of true cases but include a larger proportion of 'false positives' than the epidemiological cut-offs.

Where scores on the relevant measures fall above the optimal screening cut off, but below the optimal epidemiological cut off, this is referred to as 'subsyndromal'. Where scores on the relevant measures are above both the optimal screening and epidemiological cut offs, this is referred to as 'probable disorder'. The cut-offs used in this chapter to denote no disorder, subsyndromal disorder and probable disorder are presented in Table 9.1 below.

Table 9.1 Screening and epidemiological cut-offs used to denote no disorder, subsyndromal disorder and probable disorder on the self-report mental health measures

Mental disorder	Measure	No disorder	Subsyndromal disorder	Probable disorder
PTSD	PCL	<29	29 – 52	53+
Anxiety/affective disorder (psychological distress)	K10	<17	17 – 24	25+
Alcohol disorder	AUDIT	<8	8 – 19	20+
Depressive episodes	PHQ	<6	6 – 17	18+
Generalised anxiety disorder	GAD-7	N/A	N/A	10+

For 12-month suicidality, outcomes according to 'suicidal ideation', 'suicide plan', suicide attempts and 'any suicidality' (having either suicidal ideation OR a suicide plan OR a suicide attempt) are presented.

Responses on stigma and barriers to care items were scored on a 5-point Likert scale. Response options were dichotomised to reflect 'agree' versus 'uncertain/disagree', and then summed to create a stigma count variable and a total barrier count variable. In this chapter, the total stigma count variables were further dichotomised in order to identify those with no stigmas and those with one or more stigmas, and the total barrier count variable was further dichotomised in order to identify those with no barriers and those with one or more barriers.

9.2 Use of the internet to seek help, information or to manage mental health issues in Transitioned ADF and 2015 Regular ADF

9.2.1 Probable, subsyndromal and no disorder

This section examines the estimated proportion of the Transitioned and 2015 Regular ADF with a probable disorder, a subsyndromal disorder and no disorder who reported using the internet to seek help or information for, or to manage, mental health issues more broadly, not necessarily for their own mental health (Table 9.2).

Overall, approximately 40% of the Transitioned ADF and 20–40% of the 2015 Regular ADF with a probable disorder used the internet for mental health across the different mental disorders, including suicidal thoughts and plans, PTSD, psychological distress, depressive disorder, generalised anxiety disorder and alcohol use. For subsyndromal symptoms, approximately 30% of the Transitioned ADF and 16–30% of the 2015 Regular ADF used the internet to seek help or information for or manage mental health issues. The following sections examine the association between each mental disorder type and use of the internet to seek help or information for or manage mental health issues.

Table 9.2 Estimated proportion of Transitioned ADF and 2015 Regular ADF meeting criteria for key mental health outcomes who reported using the internet to seek help or information for, or to manage mental health issues

	Transitioned ADF n=24,935						2015 Regular ADF n=52,500					
	No internet use n=18,667			Internet use n=6116			No internet use n=42,914			Internet use n=9042		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress syndrome disorder (PCL-C)												
Probable disorder	259	1908	58.1 (52.7, 63.4)	220	1361	41.4 (36.2, 46.9)	114	856	57.4 (36.8, 75.7)	107	633	42.4 (24.1, 63.0)
Subsyndromal disorder	618	4558	65.9 (61.9, 69.6)	317	2344	33.9 (30.2, 37.8)	847	6802	69.7 (58.4, 79.1)	376	2895	29.7 (20.4, 41.0)
No disorder	1753	11,907	82.8 (80.5, 84.9)	311	2362	16.4 (14.4, 18.7)	4869	35,013	86.0 (83.2, 88.5)	931	5411	13.3 (10.9, 16.1)
Probable anxiety/depression (K10)												
Probable disorder	547	4174	61.4 (57.4, 65.2)	366	2594	38.1 (34.3, 42.1)	610	6016	78.2 (67.3, 86.3)	265	1648	21.4 (13.4, 32.4)
Subsyndromal disorder	502	3536	70.6 (66.2, 74.7)	222	1471	29.4 (25.3, 33.8)	869	6623	70.0 (59.2, 78.9)	373	2822	29.8 (20.9, 40.6)
No disorder	1605	10,844	83.6 (81.3, 85.7)	262	2007	15.5 (13.4, 17.8)	4369	29,756	86.4 (83.3, 89.0)	785	4529	13.1 (10.6, 16.2)
Probable alcohol use disorder (AUDIT)												
Probable disorder	134	962	59.6 (51.2, 67.4)	89	653	40.4 (32.6, 48.8)	52	391	78.7 (55.6, 91.6)	25	103	20.6 (8.1, 43.3)
Subsyndromal disorder	657	4985	73.1 (69.2, 76.6)	246	1781	26.1 (22.6, 29.9)	1010	8683	82.9 (76.3, 87.9)	318	1766	16.9 (11.8, 23.4)
No disorder	1849	12,508	77.1 (74.8, 79.2)	515	3633	22.4 (20.3, 24.6)	4776	33,632	81.5 (77.6, 84.9)	1082	7148	17.3 (14.0, 21.2)

	Transitioned ADF n=24,935						2015 Regular ADF n=52,500					
	No internet use n=18,667			Internet use n=6116			No internet use n=42,914			Internet use n=9042		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable depressive episode (PHQ-9)												
Probable disorder	258	1989	58.7 (53.2, 64.1)	201	1380	40.7 (35.4, 46.3)	140	1215	64.0 (36.7, 84.6)	92	679	35.8 (15.3, 63.2)
Subsyndromal disorder	837	5997	68.6 (65.2, 71.9)	378	2730	31.2 (28.0, 34.7)	1521	12565	74.2 (66.4, 80.7)	597	4310	25.4 (19.0, 33.2)
No disorder	1557	10,595	83.6 (81.2, 85.7)	272	1967	15.5 (13.5, 17.8)	4189	29,017	86.9 (84.2, 89.3)	735	4028	12.1 (9.9, 14.6)
12-month suicidal ideation and behaviour												
Any suicidality (suicidal ideation or plan)	619	4521	59.4 (55.6, 63.0)	433	3068	40.3 (36.7, 44.0)	571	4877	69.9 (57.9, 79.6)	347	2090	29.9 (20.2, 41.9)
Suicidal ideation	462	3338	59.9 (55.5, 64.2)	299	2225	39.9 (35.6, 44.4)	501	4231	71.9 (58.8, 82.1)	278	1644	27.9 (17.8, 41.0)
Suicide plan	157	1183	57.9 (51.0, 64.5)	134	842	41.2 (34.7, 48.1)	70	646	59.0 (27.9, 84.2)	69	446	40.7 (15.6, 71.8)
Suicide attempts	35	268	51.5 (37.6, 65.1)	34	252	48.5 (34.9, 62.4)	18	97	26.9 (7.3, 63.4)	17	260	72.2 (35.4, 92.5)
Probable generalised anxiety disorder												
Above screening cut-off	429	3338	59.4 (55.0, 63.7)	329	2258	40.2 (36.0, 44.6)	1193	7076	59.9 (44.0, 73.9)	229	1931	39.5 (25.5, 55.4)
Below screening cut-off	2217	15,161	79.4 (77.3, 81.3)	521	3815	20.0 (18.1, 22.0)	5484	39,860	84.3 (81.3, 86.9)	1193	7076	15.0 (12.4, 17.9)

Notes
Denominator: Entire cohort.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

PTSD

Among the Transitioned ADF with probable PTSD, 41.4% reported using the internet to seek help or information for or to manage mental health issues, followed by 33.9% for those with subsyndromal PTSD and 16.4% for those without PTSD. For the 2015 Regular ADF, 42.4% of those with probable PTSD, 29.7% of those with subsyndromal PTSD and 13.3% of those with no PTSD reported using the internet to seek help or information for or to manage mental health issues. Both Transitioned and 2015 Regular ADF members with no disorder (16.4% and 13.3% respectively) were less likely to report using the internet to seek help or information for, or manage, mental health issues than those with either subsyndromal (33.9% and 29.7% respectively) or probable PTSD (41.4% and 42.4% respectively).

Anxiety/depression (K10)

Among the Transitioned ADF, those with probable anxiety/depression (38.1%) were more likely to report using the internet to seek help or information for or to manage mental health issues compared to those with subsyndromal anxiety/depression (29.4%) and those with no disorder (15.5%). In contrast, among the 2015 Regular ADF a different pattern emerged, whereby a larger proportion of those with subsyndromal anxiety/depression reported using the internet for mental health (29.8%) compared to those with probable disorder (21.4%) or no disorder (13.1%).

Alcohol consumption and disorder

Among the Transitioned ADF, those with probable alcohol disorder (40.4%) were more likely to report using the internet to seek help or information for or to manage mental health issues compared with those with subsyndromal alcohol disorder (26.1%) and those with no disorder (22.4%). For the 2015 Regular ADF, there was no difference in the proportions of those with probable (20.6%), subsyndromal (16.9%) or no alcohol use disorder (17.3%) who reported using the internet to seek help or information for or to manage mental health issues.

Depressive episodes

Among the Transitioned ADF, those with probable depressive disorder (40.7%) were more likely to report using the internet to seek help or information for or to manage mental health issues compared to those with subsyndromal disorder (31.2%) and those with no disorder (15.5%). Similarly, for the 2015 Regular ADF, 35.8% with probable 30-day depressive episodes, 25.4% with subsyndromal symptoms and 12.1% without a depressive disorder reported using the internet for mental health, with those with subsyndromal disorder more likely to use the internet to seek help or information for or to manage mental health issues than those with no disorder.

Suicidality

For both the Transitioned ADF and 2015 Regular ADF there were no differences in the proportion of individuals who used the internet to seek help or information or manage mental health issues based on self-reported 12-month suicidal ideation or behaviour. Approximately 40% of both the Transitioned ADF (41.2%) and 2015 Regular ADF (40.7%) members who had reported making a suicide plan in the last 12 months used the internet to manage mental health issues compared to 39.9% of Transitioned ADF and 27.9% of 2015 Regular ADF members who reported 12-month suicidal ideation. Almost 50% of the Transitioned ADF and 72.2% of the 2015 Regular ADF reported using the internet to seek help or information or manage mental health issues.

Generalised anxiety disorder

Among both the Transitioned ADF and 2015 Regular ADF, a larger proportion of those screening above the cut-off for generalised anxiety reported using the internet to seek help or information or manage mental health issues compared to below the cut-off (Transitioned ADF: 40.2% vs 20.0%; 2015 Regular ADF: 39.5% vs 15.0%).

9.2.2 Probable disorder according to the presence or absence of self-reported mental health stigmas

Table 9.3 below presents the estimated proportion of Transitioned ADF and 2015 Regular ADF meeting the criteria for a probable 30-day disorder on key mental health outcomes who reported using the internet to seek help or information or to manage mental health issues according to the presence or absence of mental health stigmas.

Overall, there was no association between self-reported stigma and use of the internet to seek help or information or to manage mental health issues among Transitioned ADF and 2015 Regular ADF members with probable PTSD, alcohol disorder or generalised anxiety disorder or 12-month suicidal ideation and behaviour.

Among those with probable anxiety/depression on the K10 or a probable depressive episode according to the PHQ-9, however, Transitioned ADF who reported at least one mental health stigma (41.7% and 44.9%) were more likely to use the internet to seek help or information for or to manage mental health issues than those with no stigma (27.0% and 25.4% respectively).

Table 9.3 Estimated proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder who did and did not use the internet for mental health broken down by those with no mental health stigma and those with at least one stigma

	Transitioned ADF						2015 Regular ADF					
	No stigma			At least one stigma			No stigma			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress syndrome disorder (PCL-C)	n=63 (Weighted n=426)			n=413 (Weighted n=2800)			n=25 (Weighted n=124)			n=197 (Weighted n=1368)		
Used internet for mental health	21	121	28.5 (17.3, 43.0)	199	1239	44.3 (38.5, 50.2)	12	45	35.9 (15.5, 63.0)	95	588	43.0 (23.4, 65.1)
Did not use internet for mental health	42	304	71.5 (57.0, 82.7)	213	1546	55.2 (49.3, 61.0)	12	76	61.3 (34.0, 83.0)	102	780	57.0 (34.9, 76.6)
Probable anxiety/depression (K10)	n=193 (Weighted n=1332)			n=716 (Weighted n=5345)			n=230 (Weighted n=2503)			n=647 (Weighted n=5145)		
Used internet for mental health	51	360	27.0 (20.0, 35.4)	314	2230	41.7 (37.3, 46.3)	29	225	9.0 (2.9, 24.6)	236	1423	27.7 (16.7, 42.1)
Did not use internet for mental health	141	969	72.7 (64.3, 79.7)	398	3091	57.8 (53.3, 62.3)	197	2266	90.5 (75.2, 96.8)	409	3707	72.0 (57.6, 83.0)
Probable alcohol use disorder (AUDIT)	n=32 (Weighted n=208)			n=190 (Weighted n=1384)			n=14 (Weighted n=245)			n=64 (Weighted n=252)		
Used internet for mental health	10	76	36.6 (18.2, 59.8)	79	577	41.7 (33.2, 50.8)	#	–	–	22	84	33.4 (21.6, 47.8)
Did not use internet for mental health	22	132	63.4 (40.2, 81.8)	111	807	58.3 (49.2, 66.8)	10	223	91.1 (56.0, 98.8)	42	168	66.6 (52.2, 78.4)
Probable depressive episode (PHQ-9)	n=74 (Weighted n=553)			n=382 (Weighted n=2774)			n=25 (Weighted n=128)			n=208 (Weighted n=1770)		
Used internet for mental health	21	136	25.4 (15.6, 38.6)	180	1244	44.9 (38.9, 51.0)	7	21	16.6 (7.7, 32.0)	85	658	37.2 (15.3, 65.9)
Did not use internet for mental health	53	397	74.6 (61.4, 84.4)	200	1512	54.5 (48.3, 60.5)	17	103	80.7 (64.2, 90.7)	123	1112	62.8 (34.1, 84.7)
Any 12-month suicidal ideation and behaviour	n=201 (Weighted n=1334)			n=850 (Weighted n=6198)			n=151 (Weighted n=779)			n=769 (Weighted n=6184)		
Used internet for mental health	70	475	35.6 (28.1, 43.9)	362	2587	41.7 (37.6, 46.0)	51	281	36.0 (18.4, 58.4)	296	1810	29.3 (18.8, 42.5)
Did not use internet for mental health	130	855	64.1 (55.8, 71.6)	485	3590	57.9 (53.7, 62.0)	98	492	63.2 (41.2, 80.8)	470	4366	70.6 (57.4, 81.1)

	Transitioned ADF						2015 Regular ADF					
	No stigma			At least one stigma			No stigma			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable generalised anxiety disorder	n=129 (Weighted n=912)			n=625 (Weighted n=4616)			n=71 (Weighted n=591)			n=524 (Weighted n=4297)		
Used internet for mental health	41	286	31.4 (22.3, 42.2)	288	1971	42.7 (38.0, 47.6)	27	96	16.3 (7.3, 32.5)	202	1835	42.7 (27.3, 59.7)
Did not use internet for mental health	87	622	68.2 (57.4, 77.3)	335	2626	56.9 (52.0, 61.6)	42	488	82.6 (65.7, 92.2)	319	2439	56.7 (39.9, 72.2)

Notes
Denominator: Transitioned and 2015 Regular ADF with a probable disorder.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

9.2.3 Probable disorder according to the presence or absence of perceived barriers to seeking care for a mental health condition

Table 9.4 below presents the estimated proportion of Transitioned ADF and 2015 Regular ADF meeting the criteria for a probable disorder on key mental health outcomes who reported using the internet to seek help or information or to manage mental health issues according to the presence or absence of perceived barriers to care.

Similar to results for stigma, there was no association between perceived barriers to care and use of the internet to seek help or information or to manage mental health issues among Transitioned and 2015 Regular ADF members with probable PTSD, alcohol disorder or 12-month suicidal ideation or behaviour.

Among those with probable 30-day anxiety/depression on the K10, Transitioned ADF with at least one perceived barrier (41.9%) were marginally more likely to use the internet to seek help or information for, or to manage, mental health issues than those with no perceived barriers to care (30.5%). Among those with probable anxiety/depression on the K10 and no barriers, Transitioned ADF members (30.5%) were more likely to use the internet for mental health issues than the 2015 Regular ADF (8.6%).

Similar to the pattern reported for the K10, among those with a probable depressive episode and no barriers, Transitioned ADF (38.5%) were more likely to use the internet for mental health issues than 2015 Regular ADF (12.9%). The same pattern emerged in relation to probable generalised anxiety. with Transitioned ADF with probable generalised anxiety disorder and no perceived barriers to care (37.1%) more likely to use the internet for mental health issues than 2015 Regular ADF with a probable generalised anxiety disorder and no perceived barriers to care (6.8%).

Table 9.4 Estimated proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder who did and did not use the internet to seek help or information or to manage mental health issues broken down by those with no barriers and those with at least one barrier

	Transitioned ADF						2015 Regular ADF					
	No barriers			At least one barrier			No barriers			At least one barrier		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress syndrome disorder (PCL-C)	n=126 (Weighted n=781)			n=350 (Weighted n=2445)			n=25 (Weighted n=124)			n=197 (Weighted n=1368)		
Used internet for mental health	56	324	41.5 (32.0, 51.6)	164	1037	42.4 (36.1, 48.9)	11	34	27.5 (12.5, 50.3)	96	598	43.8 (24.0, 65.8)
Did not use internet for mental health	70	457	58.5 (48.4, 68.0)	185	1394	57.0 (50.5, 63.3)	13	87	69.7 (46.0, 86.1)	101	769	56.2 (34.2, 76.0)
Probable anxiety/depression (K10)	n=279 (Weighted n=1831)			n=630 (Weighted n=4847)			n=213 (Weighted n=2743)			n=664 (Weighted n=4905)		
Used internet for mental health	91	558	30.5 (24.6, 37.1)	274	2032	41.9 (37.2, 46.8)	33	235	8.6 (2.8, 23.0)	232	1413	28.8 (17.7, 43.3)
Did not use internet for mental health	186	1266	69.1 (62.5, 75.1)	353	2794	57.6 (52.8, 62.4)	175	2483	90.5 (76.5, 96.6)	431	3489	71.1 (56.7, 82.3)
Probable alcohol use disorder (AUDIT)	n=65 (Weighted n=436)			n=157 (Weighted n=1156)			n=15 (Weighted n=253)			n=63 (Weighted n=244)		
Used internet for mental health	22	145	33.2 (21.0, 48.2)	67	509	44.0 (34.4, 54.0)	#	–	–	21	82	33.4 (21.4, 48.1)
Did not use internet for mental health	43	291	66.8 (51.8, 79.0)	90	647	56.0 (46.0, 65.6)	10	228	90.3 (56.3, 98.5)	42	163	66.6 (51.9, 78.6)
Probable depressive episode (PHQ-9)	n=129 (Weighted n=892)			n=327 (Weighted n=2415)			n=20 (Weighted n=110)			n=213 (Weighted n=1788)		
Used internet for mental health	52	343	38.5 (29.3, 48.6)	149	1037	42.9 (36.5, 49.6)	5	14	12.9 (5.3, 28.2)	87	665	37.2 (15.5, 65.6)
Did not use internet for mental health	77	549	61.5 (51.4, 70.7)	176	1360	56.3 (49.6, 62.8)	14	92	83.9 (66.9, 93.1)	126	1124	62.8 (34.4, 84.5)

	Transitioned ADF						2015 Regular ADF					
	No barriers			At least one barrier			No barriers			At least one barrier		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Any 12-month suicidal ideation and behaviour	n=304 (Weighted n=1948)			n=747 (Weighted n=5585)			n=159 (Weighted n=800)			n=761 (Weighted n=6163)		
Used internet for mental health	122	817	41.9 (35.3, 48.9)	310	2246	40.2 (35.9, 44.7)	50	281	35.1 (17.8, 57.4)	297	1809	29.4 (18.8, 42.7)
Did not use internet for mental health	181	1127	57.9 (50.9, 64.5)	434	3317	59.4 (54.9, 63.7)	107	513	64.1 (42.2, 81.4)	461	4345	70.5 (57.2, 81.0)
Probable generalised anxiety disorder	n=208 (Weighted n=1350)			n=546 (Weighted n=4178)			n=70 (Weighted n=886)			n=525 (Weighted n=4002)		
Used internet for mental health	82	501	37.1 (29.8, 45.1)	247	1757	42.0 (37.0, 47.3)	21	61	6.8 (2.7, 16.3)	208	1871	46.7 (31.7, 62.4)
Did not use internet for mental health	125	845	62.6 (54.6, 69.9)	297	2403	57.5 (52.3, 62.6)	46	806	90.9 (78.3, 96.5)	315	2121	53.0 (37.4, 68.0)

Notes
Denominator: Transitioned and 2015 Regular ADF with a probable disorder.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

9.3 Use of the ADF website

The following section considers the use of the ADF website. Defence has a variety of websites and portals that support the mental health and wellbeing of the current serving ADF, including information and available programs relating to PTSD, suicide prevention, and alcohol, tobacco and drug use.

9.3.1 Probable, subsyndromal and no disorder

Approximately 10–14% of Transitioned ADF with a probable disorder and 17–34% of the 2015 Regular ADF with a probable disorder reported using the ADF website (Table 9.5).

PTSD

Among the Transitioned ADF with probable PTSD, 14.3% reported having used the ADF website to inform/assess their mental health compared to 33.8% of 2015 Regular ADF with probable PTSD. Among those with subsyndromal PTSD symptoms, 11.5% of the Transitioned ADF and 19.3% of the 2015 Regular ADF reported using the ADF website. Both Transitioned and 2015 Regular ADF members with a probable disorder (14.3% and 33.8% respectively) were more likely to report using the ADF website to inform/assess their mental health in the last 12 months than those with no disorder (8.5% and 12.6% respectively).

Anxiety/depression (K10)

Transitioned ADF with probable anxiety/depression (11.5%) and subsyndromal anxiety/depression (13.8%) were more likely to use the ADF website to inform/assess mental health compared to Transitioned ADF with no probable anxiety/depression (7.7%). Although there were no differences between the 2015 Regular ADF with probable, subsyndromal and no anxiety/depression, the 2015 Regular ADF with no disorder (12.9%) were more likely to use the ADF website to inform/assess their mental health than the Transitioned ADF with no anxiety/depression (7.7%).

Alcohol consumption and disorder

Among the Transitioned and 2015 Regular ADF there was no difference in the proportion of individuals who used the ADF website according to probable alcohol disorder status. Almost 11% of Transitioned ADF with a probable alcohol disorder used the ADF website compared to 33.8% of the 2015 Regular ADF with a probable 30-day alcohol disorder. A marginally higher proportion of the 2015 Regular ADF with no alcohol disorder (14.5%) reported using the ADF website compared to the Transitioned ADF with no alcohol disorder (9.7%).

Table 9.5 Estimated proportion of Transitioned ADF and 2015 Regular ADF meeting criteria for key mental health outcomes who reported using the ADF website to inform/assess their mental health

	Transitioned ADF n=24935						2015 Regular ADF n=52500					
	No – Use ADF Website n=22,427			Yes –Use ADF Website n=2505			No – Use ADF Website n=44,923			Yes – Use ADF Website n=7577		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress disorder (PCL-C)												
Probable disorder	426	2785	85.7 (82.0, 88.8)	84	464	14.3 (11.2, 18.0)	153	961	66.2 (44.2, 83.0)	76	490	33.8 (17.0, 55.8)
Subsyndromal disorder	865	6016	88.5 (86.0, 90.7)	130	779	11.5 (9.3, 14.0)	979	7909	80.7 (73.3, 86.5)	316	1886	19.3 (13.5, 26.7)
No disorder	2040	13,319	91.5 (89.9, 92.9)	182	1234	8.5 (7.1, 10.1)	5233	35,755	87.4 (84.5, 89.9)	876	5135	12.6 (10.1, 15.5)
Probable anxiety/depression (K10)												
Probable disorder	847	5990	88.5 (86.0, 90.6)	132	779	11.5 (9.4, 14.0)	716	5914	80.1 (71.0, 86.8)	215	1473	19.9 (13.2, 29.0)
Subsyndromal disorder	668	4315	86.2 (82.7, 89.1)	101	689	13.8 (10.9, 17.3)	1028	7909	83.8 (77.0, 88.9)	293	1527	16.2 (11.1, 23.0)
No disorder	1843	12000	92.3 (90.7, 93.6)	164	1004	7.7 (6.4, 9.3)	4642	30,512	87.1 (83.8, 89.8)	768	4526	12.9 (10.2, 16.2)
Probable alcohol use disorder (AUDIT)												
Probable disorder	213	1461	89.1 (83.4, 93.0)	27	180	10.9 (7.0, 16.6)	63	511	66.2 (25.4, 91.8)	22	261	33.8 (8.2, 74.6)
Subsyndromal disorder	859	6031	89.7 (87.1, 91.8)	105	692	10.3 (8.2, 12.9)	1160	9125	87.6 (81.2, 92.0)	233	1295	12.4 (8.0, 18.8)
No disorder	2272	14,674	90.3 (88.8, 91.6)	261	1581	9.7 (8.4, 11.2)	5159	35,133	85.5 (82.4, 88.1)	1021	5972	14.5 (11.9, 17.6)

	Transitioned ADF n=24935						2015 Regular ADF n=52500					
	No – Use ADF Website n=22,427			Yes –Use ADF Website n=2505			No – Use ADF Website n=44,923			Yes – Use ADF Website n=7577		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable depressive episode (PHQ-9)												
Probable disorder	417	2863	85.8 (81.9, 88.9)	78	475	14.2 (11.1, 18.1)	184	1432	79.8 (65.8, 89.1)	66	362	20.2 (10.9, 34.2)
Subsyndromal disorder	1146	7785	88.6 (86.3, 90.6)	160	999	11.4 (9.4, 13.7)	1759	14,248	84.5 (79.5, 88.4)	485	2623	15.5 (11.6, 20.5)
No disorder	1794	11,672	92.2 (90.6, 93.5)	159	994	7.8 (6.5, 9.4)	4448	29,017	86.4 (82.8, 89.3)	726	4558	13.6 (10.7, 17.2)
12-month suicidal ideation and behaviour												
Any suicidality (suicidal ideation or plan)	966	6597	87.5 (85.0, 89.6)	154	944	12.5 (10.4, 15.0)	728	6004	82.9 (75.9, 88.1)	246	1241	17.1 (11.9, 24.1)
Suicidal ideation	698	4846	88.6 (85.9, 90.9)	105	622	11.4 (9.1, 14.1)	617	5278	84.8 (79.7, 88.8)	210	943	15.2 (11.2, 20.3)
Suicidal plan	268	1751	84.4 (78.8, 88.8)	49	323	15.6 (11.2, 21.2)	111	725	70.9 (36.7, 91.1)	36	297	29.1 (8.9, 63.3)
Suicide attempt	59	391	75.3 (60.5, 85.9)	13	128	24.7 (14.1, 39.5)	27	115	33.4 (8.8, 72.4)	10	229	66.6 (27.6, 91.2)
Probable generalised anxiety disorder												
Above screening cut-off	680	4782	85.9 (82.8, 88.4)	132	788	14.1 (11.6, 17.2)	465	3605	77.5 (65.4, 86.2)	161	1048	22.5 (13.8, 34.6)
Below screening cut-off	2668	17,450	91.3 (90.0, 92.5)	264	1658	8.7 (7.5, 10.0)	5920	41076	86.4 (83.5, 88.8)	1115	6493	13.6 (11.2, 16.5)

Denominator: Entire cohort
Note: Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Depressive episodes

Transitioned ADF with a probable depressive episode (14.2%) and a subsyndromal depressive episode (11.4%) were more likely to use the ADF website to inform/assess mental health compared to Transitioned ADF with no probable anxiety/depression (7.8%). Although there were no differences between the 2015 Regular ADF with probable, subsyndromal and no depressive episode, the 2015 Regular ADF with no disorder (13.6%) were more likely to use the ADF website to inform/assess their mental health than the Transitioned ADF with no depressive episode (7.8%).

Suicidality

For both the Transitioned ADF and 2015 Regular ADF there was no difference in the proportion of individuals who used the ADF website to inform/assess mental health based on self-reported 12-month suicidal ideation or behaviour. Overall among those with any suicidal thoughts or plans in the previous 12 months, 12.5% of Transitioned ADF compared to 17.1% of the 2015 Regular ADF reported using the ADF website to inform/assess their mental health. Among the Transitioned ADF, 15.6% of those with a suicide plan reported using the ADF website to inform/assess their mental health compared to 11.4% who reported thoughts of suicide. For 2015 Regular ADF, 29.1% of those with a suicide plan and 15.2% of those with suicidal thoughts reported using the ADF website. Almost 25% of the Transitioned ADF and 66.7% of the 2015 Regular ADF reported using the ADF website to inform/assess their mental health, however these estimates should be interpreted with caution (particularly estimates for the 2015 Regular ADF) due to the very large confidence interval surrounding these estimates.

Generalised anxiety disorder

Finally, in the case of probable generalised anxiety disorder, among both the Transitioned ADF and 2015 Regular ADF, a larger proportion of those who screened above the cut-off compared to below the cut-off reported using the ADF website to inform/assess mental health (Transitioned ADF: 14.1% vs 8.7%; 2015 Regular ADF: 22.5% vs 13.6%). The 2015 Regular ADF with no probable disorder (13.6%) were more likely to use the ADF website compared to Transitioned ADF with no probable generalised anxiety disorder (8.7%).

9.3.2 Probable disorder according to the presence or absence of self-reported mental health stigmas

Table 9.6 below presents the estimated proportion of Transitioned ADF and 2015 Regular ADF meeting criteria for a probable 30-day disorder on key mental health outcomes who reported using the ADF website according to the presence or absence of self-reported mental health stigmas.

Table 9.6 Estimated proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder who did and did not use the ADF website broken down by those with no stigma and those with at least one stigma

	Transitioned ADF						2015 Regular ADF					
	No stigma			At least one stigma			No stigma			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress syndrome disorder (PCL-C)	n=69 (Weighted n=438)			n=441 (Weighted n=2811)			n=25 (Weighted n=114)			n=204 (Weighted n=1336)		
Used ADF website	9	58	13.2 (6.5, 24.9)	75	407	14.5 (11.2, 18.5)	8	30	25.9 (10.1, 52.3)	68	460	34.4 (16.6, 58.1)
Did not use ADF website	60	381	86.8 (75.1, 93.5)	366	2404	85.5 (81.5, 88.8)	17	85	74.1 (47.7, 89.9)	136	876	65.6 (41.9, 83.4)
Probable anxiety/depression (K10)	n=213 (Weighted n=1420)			n=766 (Weighted n=5350)			n=253 (Weighted n=2504)			n=678 (Weighted n=4882)		
Used ADF website	28	194	13.6 (8.9, 20.4)	104	586	10.9 (8.7, 13.6)	50	639	25.5 (12.0, 46.2)	165	834	17.1 (10.6, 26.4)
Did not use ADF website	185	1227	86.4 (79.6, 91.1)	662	4764	89.1 (86.4, 91.3)	203	1866	74.5 (53.8, 88.0)	513	4048	82.9 (73.6, 89.4)
Probable alcohol use disorder (AUDIT)	n=35 (Weighted n=242)			n=205 (Weighted n=1398)			n=14 (Weighted n=233)			n=71 (Weighted n=540)		
Used ADF website	#	–	–	23	155	11.1 (6.9, 17.5)	#	–	–	18	65	12.1 (3.8, 32.6)
Did not use ADF website	31	218	90.0 (72.7, 96.8)	182	1243	88.9 (82.5, 93.1)	10	37	15.8 (2.5, 57.5)	53	474	87.9 (67.4, 96.2)
Probable depressive episode (PHQ-9)	n=81 (Weighted n=568)			n=414 (Weighted n=2769)			n=29 (Weighted n=135)			n=221 (Weighted n=1659)		
Used ADF website	12	103	18.2 (9.8, 31.3)	66	371	13.4 (10.2, 17.4)	7	34	25.3 (10.9, 48.3)	59	328	19.8 (10.2, 34.9)
Did not use ADF website	69	465	81.8 (68.7, 90.2)	348	2398	86.6 (82.6, 89.8)	22	101	74.7 (51.7, 89.1)	162	1331	80.2 (65.1, 89.8)

	Transitioned ADF						2015 Regular ADF					
	No stigma			At least one stigma			No stigma			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Any 12-month suicidal ideation and behaviour	n=217 (Weighted n=1416)			n=903 (Weighted n=6125)			n=167 (Weighted n=1087)			n=807 (Weighted n=6157)		
Used ADF website	29	188	13.3 (8.8, 19.5)	125	757	12.4 (10.0, 15.1)	40	139	12.7 (6.7, 23.0)	206	1102	17.9 (11.9, 26.1)
Did not use ADF website	188	1228	86.7 (80.5, 91.2)	778	5368	87.6 (84.9, 90.0)	127	949	87.3 (77.0, 93.3)	601	5055	82.1 (73.9, 88.1)
Probable generalised anxiety disorder	n=142 (Weighted n=984)			n=670 (Weighted n=4586)			n=77 (Weighted n=574)			n=549 (Weighted n=4079)		
Used ADF website	25	161	16.3 (10.4, 24.7)	107	627	13.7 (10.9, 17.0)	15	245	42.7 (13.9, 77.4)	146	803	19.7 (11.9, 30.8)
Did not use ADF website	117	824	83.7 (75.3, 89.6)	563	3958	86.3 (83.0, 89.1)	62	329	57.3 (22.6, 86.1)	403	3276	80.3 (69.2, 88.1)

Denominator: Transitioned and 2015 Regular ADF with a probable disorder
Note: Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

Overall, there was no association between self-reported stigma and use of the ADF website to assess/inform mental health among Transitioned ADF and 2015 Regular ADF members with probable PTSD, anxiety/depression, depressive episodes, generalised anxiety disorder or 12-month suicidal ideation and behaviour.

9.3.3 Probable disorder according to the presence or absence of perceived barriers to seeking care for a mental health condition

Table 9.7 below presents the estimated proportion of Transitioned ADF and 2015 Regular ADF meeting criteria for a probable disorder on key mental health outcomes who reported using the ADF website, according to the presence or absence of perceived barriers to care.

Overall, there was no association between perceived barriers to care and use of the ADF website to assess/inform mental health among Transitioned ADF and 2015 Regular ADF members with probable PTSD, anxiety/depression, depressive episodes, generalised anxiety disorder or 12-month suicidal ideation and behaviour.

Among those with a probable alcohol disorder, however, 2015 Regular ADF with no barriers (87.6%) were substantially more likely to use the ADF website than the 2015 Regular ADF with at least one barrier (9.5%) and Transitioned ADF reporting no barriers (12.4%). Caution should be applied to the interpretation of this result however due to the small sample size.

Table 9.7 Estimated proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder who did and did not use the ADF website broken down by those with no barriers and those with at least one perceived barrier to care

	Transitioned ADF						2015 Regular ADF					
	No barriers			At least one barrier			No barriers			At least one barrier		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress syndrome disorder (PCL-C)	n=135 (Weighted n=788)			n=375 (Weighted n=2461)			n=25 (Weighted n=117)			n=204 (Weighted n=1334)		
Used ADF website	20	122	15.5 (9.8, 23.8)	64	342	13.9 (10.5, 18.2)	11	48	40.8 (18.1, 68.3)	65	442	33.1 (15.5, 57.2)
Did not use ADF website	115	665	84.5 (76.2, 90.2)	311	2119	86.1 (81.8, 89.5)	14	69	59.2 (31.7, 81.9)	139	892	66.9 (42.8, 84.5)
Probable anxiety/depression (K10)	n=301 (Weighted n=1877)			n=678 (Weighted n=4893)			n=232 (Weighted n=2683)			n=699 (Weighted n=4703)		
Used ADF website	37	233	12.4 (8.6, 17.5)	95	546	11.2 (8.8, 14.1)	46	613	22.9 (10.2, 43.6)	169	860	18.3 (11.6, 27.7)
Did not use ADF website	264	1644	87.6 (82.5, 91.4)	583	4346	88.8 (85.9, 91.2)	186	2070	77.1 (56.4, 89.8)	530	3844	81.7 (72.3, 88.4)
Probable alcohol use disorder (AUDIT)	n=69 (Weighted n=450)			n=171 (Weighted n=1191)			n=15 (Weighted n=241)			n=70 (Weighted n=532)		
Used ADF website	9	56	12.4 (6.0, 23.8)	18	124	10.4 (6.0, 17.5)	6	211	87.6 (52.8, 97.8)	16	51	9.5 (3.0, 26.6)
Did not use ADF website	60	395	87.6 (76.2, 94.0)	153	1067	89.6 (82.5, 94.0)	9	30	12.4 (2.2, 47.2)	54	481	90.5 (73.4, 97.0)
Probable depressive episode (PHQ-9)	n=141 (Weighted n=928)			n=354 (Weighted n=2410)			n=21 (Weighted n=105)			n=229 (Weighted n=1689)		
Used ADF website	21	162	17.5 (11.0, 26.6)	57	312	13.0 (9.6, 17.2)	8	47	45.0 (21.4, 71.0)	58	315	18.6 (9.5, 33.2)
Did not use ADF website	120	765	82.5 (73.4, 89.0)	297	2098	87.0 (82.8, 90.4)	13	58	55.0 (29.0, 78.6)	171	1374	81.4 (66.8, 90.5)

	Transitioned ADF						2015 Regular ADF					
	No barriers			At least one barrier			No barriers			At least one barrier		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Any 12-month suicidal ideation and behaviour	n=325 (Weighted n=1970)			n=795 (Weighted n=5571)			n=169 (Weighted n=1083)			n=805 (Weighted n=6162)		
Used ADF website	40	247	12.5 (8.9, 17.4)	114	697	12.5 (10.1, 15.5)	39	115	10.6 (5.7, 19.0)	207	1126	18.3 (12.2, 26.4)
Did not use ADF website	285	1723	87.5 (82.6, 91.1)	681	4874	87.5 (84.5, 89.9)	130	968	89.4 (81.0, 94.3)	598	5036	81.7 (73.6, 87.8)
Probable generalised anxiety disorder	n=223 (Weighted n=1387)			n=589 (Weighted n=4182)			n=74 (Weighted n=831)			n=552 (Weighted n=3822)		
Used ADF website	33	205	14.8 (10.1, 21.1)	99	583	13.9 (11.0, 17.5)	20	271	32.7 (8.4, 71.9)	141	777	20.3 (12.2, 31.8)
Did not use ADF website	190	1183	85.2 (78.9, 89.9)	490	3599	86.1 (82.5, 89.0)	54	559	67.3 (28.1, 91.6)	411	3045	79.7 (68.2, 87.8)

Denominator: Transitioned and 2015 Regular ADF with a probable disorder
Note: Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

9.4 Use of DVA or At Ease websites

The following section considers the use of DVA or At Ease websites to inform/assess mental health. The Health and Wellbeing section of the DVA website includes a section on mental health for serving and ex-serving personnel and families. This includes information about 'At Ease', DVA's portal to online mental health information. This provides self-help tools and information to support mental health and wellbeing and is a gateway to websites and free mobile apps about stress, PTSD, alcohol management, resilience and suicide awareness and prevention. The portal also links to a wide range of mental health resources for health professionals and GPs for effective assessment and evidence-based treatment of veterans. The webpage also includes information about PTSD group programs, and the 'High Res' Resilience and 'Operation Life' mobile app, as well as 'The Right Mix' website, which concerns alcohol, diet and exercise for veterans.

9.4.1 Probable, subsyndromal and no disorder

Approximately 30–44% of Transitioned ADF with a probable disorder and 16–42% of the 2015 Regular ADF with a probable disorder, reported using the DVA or At Ease website to inform/assess mental health (Table 9.8).

PTSD

Among both the Transitioned ADF and the 2015 Regular ADF, individuals with probable (43.3% and 38.5% respectively) or subsyndromal PTSD (25.3% and 17.1% respectively) were more likely to report using the DVA or At Ease website than those with no disorder (10.5% and 8.2% respectively). Among those with subsyndromal PTSD, Transitioned ADF (25.3%) were marginally more likely to report using DVA or At Ease websites compared to the 2015 Regular ADF with subsyndromal PTSD (17.1%).

Anxiety/depression (K10)

Transitioned ADF with probable anxiety/depression (30.1%) were more likely to use the DVA or At Ease website than 2015 Regular ADF (17.8%) with probable anxiety/depression. Among both Transitioned ADF and 2015 Regular ADF, those with probable (30.1% and 17.8% respectively) or subsyndromal anxiety/depression (24.0% and 15.2% respectively) were more likely to report using the DVA or At Ease website than those with no disorder (11.1% and 8.2% respectively).

Alcohol consumption and disorder

Among the Transitioned ADF, those with a probable alcohol disorder (35.9%) were more likely to use the DVA or At Ease website than those who were subsyndromal (21.5%) or who had no disorder (15.9%). Similarly for 2015 Regular ADF, those with a probable alcohol disorder (41.6%) were more likely to use the DVA or At Ease website than those who were subsyndromal (12.1%) and those with no disorder (9.8%).

Transitioned ADF with no disorder (15.9%) or subsyndromal disorder (21.5%) were more likely to use the DVA or At Ease website than 2015 Regular ADF with no disorder (9.8%) or subsyndromal disorder (12.1%).

Depressive episodes

When depressive episodes were examined, Transitioned ADF with a probable disorder (40.3%) were more likely to report using the DVA or At Ease websites than 2015 Regular ADF with a probable disorder (23.4%). For those with subsyndromal depressive episodes, 23.0% of Transitioned ADF and 14.7% of 2015 Regular ADF reported using the DVA or at Ease website. There was little difference between the groups for those with no depressive episodes (Transitioned ADF 10.5%; 2015 Regular ADF 8.1%).

Suicidality

When suicidal thoughts or plans in the previous 12 months were considered, a greater proportion of the Transitioned ADF (31.3%) compared to the 2015 Regular ADF (16.0%) reported using the DVA or At Ease websites. When suicidal thoughts were considered separately, twice as many Transitioned ADF compared to 2015 Regular ADF reported using DVA or At Ease websites (27.2% vs 13.3%). The proportion of both the Transitioned ADF and 2015 Regular ADF who reported using DVA or At Ease websites was higher among those with a suicide plan compared to those with suicidal ideation only (Transitioned ADF 42.0% vs 27.2%; 2015 Regular ADF 32.4% vs 13.3%). Almost 55% of the Transitioned ADF and 66.4% of the 2015 Regular ADF reported using the ADF website to inform/assess their mental health; however these estimates should be interpreted with caution (particularly those for the 2015 Regular ADF) because of the very large confidence interval surrounding these estimates.

Generalised anxiety disorder

Finally, in the case of probable generalised anxiety disorder, 35.9% of Transitioned ADF and 24.5% of 2015 Regular ADF screening above the cut-off reported using DVA or At Ease websites.

Table 9.8 Estimated proportion of Transitioned ADF and 2015 Regular ADF meeting criteria for key mental health outcomes who reported using the DVA or At Ease website to inform/assess their mental health

	Transitioned ADF n=24,935						2015 Regular ADF n=52,500					
	No – Use DVA or At Ease website n=2951			Yes – Use DVA or At Ease website n=20,213			No – Use DVA or At Ease website n=46,857			Yes – Use DVA or At Ease website n=5643		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress disorder (PCL-C)												
Probable disorder	251	1842	56.7 (51.5, 61.7)	259	1407	43.3 (38.3, 48.5)	131	893	61.5 (40.5, 79.0)	98	558	38.5 (21.0, 59.5)
Subsyndromal disorder	704	5074	74.7 (71.4, 77.7)	291	1720	25.3 (22.3, 28.6)	975	8121	82.9 (77.7, 87.1)	320	1674	17.1 (12.9, 22.3)
No disorder	1956	13,021	89.5 (87.9, 90.9)	266	1532	10.5 (9.1, 12.1)	5506	37,532	91.8 (89.5, 93.6)	603	3357	8.2 (6.4, 10.5)
Probable anxiety/depression (K10)												
Probable disorder	622	4734	69.9 (66.6, 73.1)	357	2036	30.1 (26.9, 33.4)	706	6071	82.2 (74.2, 88.1)	225	1315	17.8 (11.9, 25.8)
Subsyndromal disorder	561	3802	76.0 (72.1, 79.4)	208	1203	24.0 (20.6, 27.9)	1057	8005	84.8 (78.0, 89.8)	264	1431	15.2 (10.2, 22.0)
No disorder	1749	11,564	88.9 (87.2, 90.4)	258	1440	11.1 (9.6, 12.8)	4871	32,178	91.8 (89.8, 93.5)	539	2860	8.2 (6.5, 10.2)
Probable alcohol use disorder (AUDIT)												
Probable disorder	142	1052	64.1 (56.7, 71.0)	98	589	35.9 (29.0, 43.3)	53	451	58.4 (21.3, 87.9)	32	321	41.6 (12.1, 78.7)
Subsyndromal disorder	725	5279	78.5 (75.3, 81.4)	239	1444	21.5 (18.6, 24.7)	1161	9155	87.9 (83.1, 91.4)	232	1265	12.1 (8.6, 16.9)
No disorder	2053	13,665	84.1 (82.4, 85.6)	480	2590	15.9 (14.4, 17.6)	5417	37,087	90.2 (88.0, 92.1)	763	4019	9.8 (7.9, 12.0)

	Transitioned ADF n=24,935						2015 Regular ADF n=52,500					
	No – Use DVA or At Ease website n=2951			Yes – Use DVA or At Ease website n=20,213			No – Use DVA or At Ease website n=46,857			Yes – Use DVA or At Ease website n=5643		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable depressive episode (PHQ-9)												
Probable disorder	264	1993	59.7 (54.7, 64.6)	231	1344	40.3 (35.4, 45.3)	160	1374	76.6 (61.9, 86.8)	90	420	23.4 (13.2, 38.1)
Subsyndromal disorder	953	6762	77.0 (74.2, 79.6)	353	2022	23.0 (20.4, 25.8)	1801	14393	85.3 (80.3, 89.2)	443	2479	14.7 (10.8, 19.7)
No disorder	1714	11,340	89.5 (87.9, 91.0)	239	1326	10.5 (9.0, 12.1)	4679	30,858	91.9 (89.8, 93.6)	495	2718	8.1 (6.4, 10.2)
12-month suicidal ideation and behaviour												
Any suicidality (suicidal ideation or plan)	718	5183	68.7 (65.5, 71.8)	402	2358	31.3 (28.2, 34.5)	754	6084	84.0 (77.1, 89.1)	220	1161	16.0 (10.9, 22.9)
Suicidal ideation	547	3981	72.8 (69.1, 76.2)	256	1486	27.2 (23.8, 30.9)	654	5392	86.7 (81.8, 90.4)	173	829	13.3 (9.6, 18.2)
Suicidal plan	171	1202	58.0 (51.4, 64.3)	146	872	42.0 (35.7, 48.6)	100	691	67.6 (35.1, 89.0)	47	331	32.4 (11.0, 64.9)
Suicide Attempts	36	236	45.4 (32.4, 59.1)	36	284	54.6 (40.9, 67.6)	23	116	33.6 (8.8, 72.8)	14	228	66.4 (27.2, 91.2)
Probable generalised anxiety disorder												
Above screening cut-off	462	3572	64.1 (60.2, 67.8)	350	1998	35.9 (32.2, 39.8)	435	3513	75.5 (63.5, 84.5)	191	1140	24.5 (15.5, 36.5)
Below screening cut-off	2460	16,435	86.0 (84.5, 87.4)	462	3572	64.1 (60.2, 67.8)	6199	43,095	90.6 (88.6, 92.2)	836	4474	9.4 (7.8, 11.4)

Notes
Denominator: Entire cohort.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

9.4.2 Probable disorder according to the presence or absence of self-reported mental health stigmas

Table 9.9 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF meeting the criteria for a probable 30-day disorder on key mental health outcomes who reported using DVA or At Ease websites to inform/assess mental health according to the presence or absence of self-reported mental health stigmas.

Overall, there was no association between self-reported stigma and use of the DVA or At Ease website to inform/assess mental health among Transitioned ADF and 2015 Regular ADF members with probable PTSD, anxiety/depression, alcohol disorder, depressive episodes or generalised anxiety disorder.

Among those with 12-month suicidal ideation or behaviour, however, Transitioned ADF who reported at least one mental health stigma (31.5%) were more likely to use the DVA or At Ease website to inform/assess mental health than 2015 Regular ADF who reported at least one mental health stigma (16.9%).

9.4.3 Probable disorder according to the presence or absence of perceived barriers to seeking care for a mental health condition

Table 9.10 below presents the estimated proportion of Transitioned ADF and 2015 Regular ADF who met the criteria for a probable 30-day disorder on key mental health outcomes and reported using DVA or At Ease websites to inform/assess mental health according to the presence or absence of perceived barriers to care.

Overall, there was no association between perceived barriers to care and the use of the DVA or At Ease website to inform/assess mental health among Transitioned ADF and 2015 Regular ADF members with probable PTSD, anxiety/depression, alcohol disorder, depressive episodes or generalised anxiety disorder.

Among those with 12-month suicidal ideation or behaviour, however, Transitioned ADF with self-reported barriers to care (30.8%) and without them (32.6%) were more likely to use the DVA or At Ease website to inform/assess mental health than 2015 Regular ADF with (17.0%) and without (10.6%) self-reported barriers to care.

Table 9.9 Estimated proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder who do and do not use DVA or At Ease websites to inform/assess their mental health broken down by those with no stigma and those with at least one stigma

	Transitioned ADF						2015 Regular ADF					
	No stigma			At least one stigma			No stigma			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress syndrome disorder (PCL-C)	n=69 (Weighted n=438)			n=441 (Weighted n=2811)			n=25 (Weighted n=114)			n=204 (Weighted n=1336)		
Used DVA or At Ease websites	32	212	48.5 (34.7, 62.5)	227	1195	42.5 (37.2, 48.0)	12	42	36.9 (16.4, 63.6)	86	516	38.6 (20.0, 61.2)
Did not use DVA or At Ease websites	37	226	51.5 (37.5, 65.3)	214	1616	57.5 (52.0, 62.8)	13	72	63.1 (36.4, 83.6)	118	820	61.4 (38.8, 80.0)
Probable anxiety/depression (K10)	n=213 (Weighted n=1420)			n=766 (Weighted n=5350)			n=253 (Weighted n=2504)			n=678 (Weighted n=4882)		
Used DVA or At Ease websites	59	346	24.4 (18.5, 31.4)	298	1690	31.6 (28.0, 35.5)	38	374	14.9 (5.6, 34.2)	187	941	19.3 (12.5, 28.6)
Did not use DVA or At Ease websites	154	1074	75.6 (68.6, 81.5)	468	3660	68.4 (64.5, 72.0)	215	2130	85.1 (65.8, 94.4)	491	3941	80.7 (71.4, 87.5)
Probable alcohol use disorder (AUDIT)	n=35 (Weighted n=242)			n=205 (Weighted n=1398)			n=14 (Weighted n=233)			n=71 (Weighted n=540)		
Used DVA or At Ease websites	13	79	32.6 (16.9, 53.6)	85	510	36.4 (29.1, 44.5)	#	–	–	28	126	23.3 (7.2, 54.4)
Did not use DVA or At Ease websites	22	163	67.4 (46.4, 83.1)	120	889	63.6 (55.5, 70.9)	10	37	15.8 (2.5, 57.5)	43	414	76.7 (45.6, 92.8)
Probable depressive episode (PHQ-9)	n=81 (Weighted n=568)			n=414 (Weighted n=2769)			n=29 (Weighted n=135)			n=221 (Weighted n=1659)		
Used DVA or At Ease websites	35	232	40.8 (29.1, 53.7)	196	1112	40.2 (34.8, 45.7)	9	51	37.4 (18.0, 61.9)	81	369	22.3 (11.9, 37.9)
Did not use DVA or At Ease websites	46	336	59.2 (46.3, 70.9)	218	1657	59.8 (54.3, 65.2)	20	85	62.6 (38.1, 82.0)	140	1289	77.7 (62.1, 88.1)

	Transitioned ADF						2015 Regular ADF					
	No stigma			At least one stigma			No stigma			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Any 12-month suicidal ideation and behaviour	n=217 (Weighted n=1416)			n=903 (Weighted n=6125)			n=167 (Weighted n=1087)			n=807 (Weighted n=6157)		
Used DVA or At Ease websites	71	429	30.3 (23.8, 37.8)	331	1928	31.5 (28.0, 35.1)	30	119	10.9 (5.4, 20.8)	190	1042	16.9 (11.1, 25.0)
Did not use DVA or At Ease websites	146	987	69.7 (62.2, 76.2)	572	4197	68.5 (64.9, 72.0)	137	968	89.1 (79.2, 94.6)	617	5115	83.1 (75.0, 88.9)
Probable generalised anxiety disorder	n=142 (Weighted n=984)			n=670 (Weighted n=4586)			n=77 (Weighted n=574)			n=549 (Weighted n=4079)		
Used DVA or At Ease websites	55	345	35.0 (26.4, 44.7)	295	1653	36.0 (32.0, 40.4)	21	264	46.0 (17.0, 78.1)	170	876	21.5 (13.4, 32.7)
Did not use DVA or At Ease websites	87	639	65.0 (55.3, 73.6)	375	2933	64.0 (59.6, 68.0)	56	310	54.0 (21.9, 83.0)	379	3203	78.5 (67.3, 86.6)

Notes
Denominator: Transitioned and 2015 Regular ADF with a probable disorder.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

Table 9.10 Estimated proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder who did and did not use DVA or At Ease websites to inform/assess mental health broken down by those with no barriers and those with at least one barrier

	Transitioned ADF						2015 Regular ADF					
	No barriers			At least one barrier			No barriers			At least one barrier		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress disorder (PCL-C)	n=135 (Weighted n=788)			n=375 (Weighted n=2461)			n=25 (Weighted n=117)			n=204 (Weighted n=1334)		
Used DVA or At Ease websites	69	379	48.1 (38.6, 57.7)	190	1028	41.8 (36.0, 47.8)	12	39	33.2 (14.6, 59.2)	86	519	38.9 (20.3, 61.5)
Did not use DVA or At Ease websites	66	409	51.9 (42.3, 61.4)	185	1433	58.2 (52.2, 64.0)	13	78	66.8 (40.8, 85.4)	118	815	61.1 (38.5, 79.7)
Probable anxiety/depression (K10)	n=301 (Weighted n=1877)			n=678 (Weighted n=4983)			n=232 (Weighted n=2683)			n=699 (Weighted n=4703)		
Used DVA or At Ease websites	105	592	31.5 (25.9, 37.8)	252	1444	29.5 (25.8, 33.6)	42	410	15.3 (6.1, 33.4)	183	906	19.3 (12.4, 28.6)
Did not use DVA or At Ease websites	196	1285	68.5 (62.2, 74.1)	426	3449	70.5 (66.4, 74.2)	190	2273	84.7 (66.6, 93.9)	516	3798	80.7 (71.4, 87.6)
Probable alcohol use disorder (AUDIT)	n=69 (Weighted n=450)			n=171 (Weighted n=1191)			n=15 (Weighted n=241)			n=70 (Weighted n=532)		
Used DVA or At Ease websites	28	175	38.8 (26.2, 53.1)	70	414	34.8 (26.9, 43.6)	5	208	86.6 (50.5, 97.6)	27	113	21.3 (6.5, 51.2)
Did not use DVA or At Ease websites	41	276	61.2 (46.9, 73.8)	101	776	65.2 (56.4, 73.1)	10	32	13.4 (2.4, 49.5)	43	419	78.7 (48.8, 93.5)
Probable depressive episode (PHQ-9)	n=141 (Weighted n=928)			n=354 (Weighted n=2410)			n=21 (Weighted n=105)			n=229 (Weighted n=1689)		
Used DVA or At Ease websites	64	398	42.9 (33.8, 52.4)	167	946	39.3 (33.5, 45.3)	8	45	43.1 (19.5, 70.3)	82	375	22.2 (11.9, 37.5)
Did not use DVA or At Ease websites	77	530	57.1 (47.6, 66.2)	187	1463	60.7 (54.7, 66.5)	13	60	56.9 (29.7, 80.5)	147	1314	77.8 (62.5, 88.1)

	Transitioned ADF						2015 Regular ADF					
	No barriers			At least one barrier			No barriers			At least one barrier		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Any 12-month suicidal ideation and behaviour	n=325 (Weighted n=1970)			n=795 (Weighted n=5571)			n=169 (Weighted n=1083)			n=805 (Weighted n=6162)		
Used DVA or At Ease websites	109	642	32.6 (27.0, 38.7)	293	1716	30.8 (27.2, 34.7)	30	114	10.6 (5.2, 20.3)	190	1046	17.0 (11.1, 25.1)
Did not use DVA or At Ease websites	216	1328	67.4 (61.3, 73.0)	502	3855	69.2 (65.3, 72.8)	139	968	89.4 (79.7, 94.8)	615	5115	83.0 (74.9, 88.9)
Probable generalised anxiety disorder	n=223 (Weighted n=1387)			n=589 (Weighted n=4182)			n=74 (Weighted n=831)			n=552 (Weighted n=3822)		
Used DVA or At Ease websites	96	557	40.1 (33.0, 47.7)	254	1441	34.5 (30.2, 39.0)	26	314	37.8 (11.2, 74.5)	165	827	21.6 (13.3, 33.1)
Did not use DVA or At Ease websites	127	831	59.9 (52.3, 67.0)	335	2741	65.5 (61.0, 69.8)	48	517	62.2 (25.5, 88.8)	387	2996	78.4 (66.9, 86.7)

Notes
Denominator: Transitioned and 2015 Regular ADF with a probable disorder.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95% CI = 95% confidence interval.

9.5 Use of other civilian mental health websites

The following section considers the use of other civilian mental health websites to assess/inform mental health, including the Black Dog Institute's website, the Headspace website, the beyondblue website, the Mindhealthconnect website, the Lifeline website, the Kids helpline website, the Men's Helpline website or any other health website that respondents may have used. Since conducting this survey Mindhealthconnect has been replaced by Head to Health, a website built in partnership with the lived experience community. Head to Health has a dedicated search function available for defence personnel and veterans.

As can be seen in Table 9.11, an estimated 25–30% of the Transitioned ADF and 18–33% of the 2015 Regular ADF with a probable disorder reported using a civilian mental health website to inform/assess their mental health. Less than 12% of the Transitioned ADF and the 2015 Regular ADF used a civilian mental health website if they did not have a probable disorder. Transitioned ADF members who had made a suicide plan in the last 12 months (34.7%) or who had probable PTSD (29.6%) were most likely to use other civilian mental health websites to inform/assess mental health. 2015 Regular ADF members with probable depressive episodes (32.8%) or probable alcohol disorder (32.0%) were most likely to use other civilian mental health websites to inform/assess mental health.

9.5.1 Probable, subsyndromal and no disorder

PTSD

Among the Transitioned ADF, individuals with probable (29.6%) or subsyndromal PTSD (20.4%) were more likely to report using a civilian mental health website to inform/assess their mental health than those with no disorder (7.5%). Similarly, 2015 Regular ADF with probable (17.9%) or subsyndromal PTSD (20.9%) were more likely to report using a civilian mental health website to inform/assess their mental health compared to those with no disorder (8.2%).

Anxiety/depression (K10)

Among the Transitioned ADF, individuals with probable (25.9%) or subsyndromal anxiety/depression (16.2%) were more likely to report using a civilian mental health website to inform/assess their mental health than those with no disorder (6.8%). Similarly, 2015 Regular ADF with a probable (22.1%) or subsyndromal disorder (17.6%) were more likely to report using a civilian mental health website to inform/assess their mental health compared to those with no anxiety/depression (6.8%).

Alcohol consumption and disorder

Among the Transitioned ADF, individuals with a probable alcohol disorder (27.4%) were more likely to report using a civilian mental health website to inform/assess their mental health than those with subsyndromal alcohol disorder (15.9%) or no disorder (11.8%). Similarly, among 2015 Regular ADF, individuals with a probable disorder (32.0%) were more likely to report using a civilian mental health website to inform/assess their mental health than those with subsyndromal alcohol disorder (12.7%) or no disorder (10.0%).

Depressive episodes

Among both the Transitioned ADF and the 2015 Regular ADF, individuals with probable (26.9% and 32.8% respectively) and subsyndromal (19.4% and 18.7% respectively) depressive episodes were more likely to report using a civilian mental health website to inform/assess their mental health than those with no disorder (6.8% and 5.8% respectively).

Suicidality

When 12-month suicidal ideation and behaviour were considered, overall among those with any suicidal thoughts or plans in the previous 12 months, a similar proportion of Transitioned ADF and 2015 Regular ADF reported using other civilian mental health websites (28.1% vs 26.2%). When suicidal thoughts were considered separately, there was no difference in the proportion of Transitioned ADF and 2015 Regular ADF with suicidal ideation (25.6% and 27.8% respectively) who reported using a civilian mental health website to inform/assess their mental health. However, when looking at those with a suicide plan, Transitioned ADF (34.7%) were more likely to use a civilian mental health website to inform/assess their mental health than 2015 Regular ADF (16.4%). Approximately 40% of the Transitioned ADF and only 15.8% of the 2015 Regular ADF reported using the ADF website to inform/assess their mental health; however these estimates should be interpreted with caution (particularly estimates for the 2015 Regular ADF) because of the very large confidence interval surrounding these estimates.

Generalised anxiety disorder

Similar proportions of Transitioned ADF and 2015 Regular ADF above the cut-off on the GAD-7 for generalised anxiety disorder reported using a civilian mental health website to inform/assess their mental health (26.2% and 28.0% respectively). These proportions were higher than for those scoring below the cut-off (10.5% and 9.2% respectively).

Table 9.11 Estimated proportion of Transitioned ADF and 2015 Regular ADF meeting criteria for key mental health outcomes who reported using other civilian mental health websites to inform/assess mental health

	Transitioned ADF n=24,935						2015 Regular ADF n=52,500					
	No n=21,449			Yes n=3483			No n=46,798			Yes n=5705		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress disorder (PCL-C)												
Probable disorder	357	2288	70.4 (65.4, 75.0)	153	961	29.6 (25.0, 34.6)	162	1190	82.1 (72.3, 88.9)	67	260	17.9 (11.1, 27.7)
Subsyndromal disorder	782	5408	79.6 (76.4, 82.4)	213	1386	20.4 (17.6, 23.6)	997	7748	79.1 (69.8, 86.1)	298	2047	20.9 (13.9, 30.2)
No disorder	2049	13465	92.5 (91.0, 93.8)	173	1089	7.5 (6.2, 9.0)	5568	37,541	91.8 (88.7, 94.1)	541	3349	8.2 (5.9, 11.3)
Probable anxiety/depression (K10)												
Probable disorder	718	5019	74.1 (70.7, 77.3)	261	1751	25.9 (22.7, 29.3)	721	5751	77.9 (66.0, 86.5)	210	1635	22.1 (13.5, 34.0)
Subsyndromal disorder	636	4193	83.8 (80.4, 86.7)	133	811	16.2 (13.3, 19.6)	1062	7771	82.4 (73.7, 88.6)	259	1665	17.6 (11.4, 26.3)
No disorder	1859	12122	93.2 (91.8, 94.4)	148	883	6.8 (5.6, 8.2)	4967	32,651	93.2 (90.4, 95.2)	443	2388	6.8 (4.8, 9.6)
Probable alcohol use disorder (AUDIT)												
Probable disorder	175	1190	72.6 (65.0, 79.0)	65	450	27.4 (21.0, 35.0)	62	525	68.0 (26.2, 92.7)	23	247	32.0 (7.3, 73.8)
Subsyndromal disorder	797	5653	84.1 (81.1, 86.7)	167	1070	15.9 (13.3, 18.9)	1184	9101	87.3 (80.9, 91.8)	209	1318	12.7 (8.2, 19.1)
No disorder	2225	14344	88.2 (86.7, 89.7)	308	1911	11.8 (10.3, 13.3)	5500	36,978	90.0 (86.7, 92.5)	680	4128	10.0 (7.5, 13.3)

	Transitioned ADF n=24,935						2015 Regular ADF n=52,500					
	No n=21,449			Yes n=3483			No n=46,798			Yes n=5705		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable depressive episode (PHQ-9)												
Probable disorder	352	2441	73.1 (68.3, 77.5)	143	897	26.9 (22.5, 31.7)	178	1206	67.2 (41.1, 85.8)	72	588	32.8 (14.2, 58.9)
Subsyndromal disorder	1052	7077	80.6 (77.7, 83.1)	254	1707	19.4 (16.9, 22.3)	1821	13714	81.3 (74.3, 86.7)	423	3158	18.7 (13.3, 25.7)
No disorder	1807	11809	93.2 (91.8, 94.4)	146	857	6.8 (5.6, 8.2)	4758	31,637	94.2 (91.9, 95.9)	416	1939	5.8 (4.1, 8.1)
12-month suicidal ideation and behaviour												
Any suicidality (suicidal ideation or plan)	797	5423	71.9 (68.6, 75.0)	323	2118	28.1 (25.0, 31.4)	701	5346	73.8 (61.9, 83.0)	273	1898	26.2 (17.0, 38.1)
Suicidal ideation	592	4069	74.4 (70.6, 77.9)	211	1398	25.6 (22.1, 29.4)	608	4491	72.2 (58.8, 82.5)	219	1730	27.8 (17.5, 41.2)
Suicidal plan	205	1354	65.3 (58.7, 71.4)	112	720	34.7 (28.6, 41.3)	93	855	83.6 (69.4, 91.9)	54	168	16.4 (8.1, 30.6)
Suicide Attempts	43	310	59.6 (45.6, 72.2)	29	210	40.4 (27.8, 54.4)	19	290	84.2 (58.1, 95.3)	18	54	15.8 (4.7, 41.9)
Probable generalised anxiety disorder												
Above screening cut-off	587	4113	73.8 (70.1, 77.3)	225	1457	26.2 (22.7, 29.9)	449	3348	72.0 (57.0, 83.3)	177	1305	28.0 (16.7, 43.0)
Below screening cut-off	2614	17,104	89.5 (88.1, 90.8)	318	2003	10.5 (9.2, 11.9)	6301	43,190	90.8 (88.0, 93.0)	734	4380	9.2 (7.0, 12.0)

Notes
Denominator: Entire cohort.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

9.5.2 Probable disorder according to the presence or absence of self-reported mental health stigmas

Table 9.12 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF who met the criteria for a probable 30-day disorder on key mental health outcomes and reported using other civilian mental health websites to inform/assess mental health according to the presence or absence of self-reported mental health stigmas.

Overall, there was no association between self-reported stigma and use of other civilian mental health websites to inform/assess mental health among Transitioned ADF and 2015 Regular ADF members with probable PTSD, anxiety/depression, depressive episodes, suicidality or generalised anxiety disorder.

Among those with a probable alcohol disorder, however, a larger proportion of the 2015 Regular ADF with no stigmas reported using other civilian mental health websites to inform/assess mental health compared to 2015 Regular ADF with at least one stigma and Transitioned ADF with no stigma. Because of the small cell sizes, these percentages have not been reported.

9.5.3 Probable disorder according to the presence or absence of perceived barriers to seeking care for a mental health condition

Table 9.13 presents the estimated proportion of Transitioned ADF and 2015 Regular ADF who met the criteria for a probable 30-day disorder on key mental health outcomes and reported using other civilian mental health websites to inform/assess mental health according to the presence or absence of perceived barriers to care.

Overall, there was no association between perceived barriers to care and the use of other civilian mental health websites to inform/assess mental health among Transitioned ADF and 2015 Regular ADF members with probable PTSD, 12-month suicidal ideation and behaviour or generalised anxiety disorder.

Among those with probable anxiety/depression, Transitioned ADF with at least one barrier (28.8%) were more likely to use other civilian mental health websites to inform/assess their mental health compared to those with no perceived barriers to care (18.3%). This was the same pattern for those with a probable depressive episode among the 2015 Regular ADF, whereby those with at least one perceived barrier to care were more likely to use a civilian mental health website to inform/assess their mental health than those with no barriers. In contrast, those with a probable alcohol disorder and no barriers were more likely to use a civilian mental health website to inform/assess their mental health than those with at least one barrier. Because of the small cell sizes, some percentages have not been reported.

Table 9.12 Estimated proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder who did and did not use other civilian mental health websites broken down by those with no stigma and those with at least one stigma

	Transitioned ADF						2015 Regular ADF					
	No stigma			At least one stigma			No stigma			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress disorder (PCL-C)	n=69 (Weighted n=438)			n=441 (Weighted n=2811)			n=25 (Weighted n=114)			n=204 (Weighted n=1336)		
Used other websites	15	85	19.5 (10.8, 32.5)	138	875	31.1 (26.1, 36.7)	#	–	–	64	253	18.9 (11.3, 29.9)
Did not use other websites	54	353	80.5 (67.5, 89.2)	303	1935	68.9 (63.3, 73.9)	22	107	93.2 (82.0, 97.6)	140	1084	81.1 (70.1, 88.7)
Probable anxiety/depression (K10)	n=213 (Weighted n=1420)			n=766 (Weighted n=5350)			n=253 (Weighted n=2504)			n=678 (Weighted n=4882)		
Used other websites	39	285	20.1 (14.2, 27.6)	222	1466	27.4 (23.7, 31.4)	19	370	14.8 (4.7, 37.8)	191	1265	25.9 (15.2, 40.6)
Did not use other websites	174	1135	79.9 (72.4, 85.8)	544	3884	72.6 (68.6, 76.3)	234	2135	85.2 (62.2, 95.3)	487	3617	74.1 (59.4, 84.8)
Probable alcohol use disorder (AUDIT)	n=35 (Weighted n=242)			n=205 (Weighted n=1398)			n=14 (Weighted n=233)			n=71 (Weighted n=540)		
Used other websites	7	35	14.6 (6.1, 30.8)	58	415	29.7 (22.5, 38.1)	#	–	–	19	54	10.0 (3.3, 26.6)
Did not use other websites	28	207	85.4 (69.2, 93.9)	147	983	70.3 (61.9, 77.5)	10	40	17.0 (2.7, 60.1)	52	486	90.0 (73.4, 96.7)
Probable depressive episode (PHQ-9)	n=81 (Weighted n=568)			n=414 (Weighted n=2769)			n=29 (Weighted n=135)			n=221 (Weighted n=1659)		
Used other websites	18	109	19.2 (11.3, 30.6)	125	788	28.4 (23.6, 33.8)	5	12	9.2 (4.2, 19.0)	67	575	34.7 (14.7, 62.1)
Did not use other websites	63	459	80.8 (69.4, 88.7)	289	1982	71.6 (66.2, 76.4)	24	123	90.8 (81.0, 95.8)	154	1083	65.3 (37.9, 85.3)
Any 12-month suicidal ideation and behaviour	n=217 (Weighted n=1416)			n=903 (Weighted n=6125)			n=167 (Weighted n=1087)			n=807 (Weighted n=6157)		
Used other websites	51	319	22.5 (16.7, 29.6)	272	1800	29.4 (25.9, 33.1)	42	261	24.0 (9.0, 50.1)	231	1638	26.6 (16.5, 40.0)
Did not use other websites	166	1097	77.5 (70.4, 83.3)	631	4325	70.6 (66.9, 74.1)	125	827	76.0 (49.9, 91.0)	576	4519	73.4 (60.0, 83.5)

	Transitioned ADF						2015 Regular ADF					
	No stigma			At least one stigma			No stigma			At least one stigma		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable generalised anxiety disorder	n=142 (Weighted n=984)			n=670 (Weighted n=4586)			n=77 (Weighted n=574)			n=549 (Weighted n=4079)		
Used other websites	33	222	22.6 (15.4, 31.9)	192	1235	26.9 (23.1, 31.2)	14	219	38.2 (10.2, 77.0)	163	1086	26.6 (15.2, 42.3)
Did not use other websites	109	762	77.4 (68.1, 84.6)	478	3351	73.1 (68.8, 76.9)	63	355	61.8 (23.0, 89.8)	386	2994	73.4 (57.7, 84.8)

Notes
Denominator: Transitioned and 2015 Regular ADF with a probable disorder.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

Table 9.13 Estimated proportion of Transitioned ADF and 2015 Regular ADF with a probable disorder who did and did not use other civilian mental health websites broken down by those with no barriers and those with at least one barrier

	Transitioned ADF						2015 Regular ADF					
	No barriers			At least one barrier			No barriers			At least one barrier		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Posttraumatic stress disorder (PCL-C)	n=135 (Weighted n=788)			n=375 (Weighted n=2461)			n=25 (Weighted n=117)			n=204 (Weighted n=1334)		
Used other websites	32	185	23.5 (16.2, 32.8)	121	776	31.5 (26.0, 37.6)	#	–	–	64	253	18.9 (11.3, 29.9)
Did not use other websites	103	603	76.5 (67.2, 83.8)	254	1686	68.5 (62.4, 74.0)	22	109	93.4 (82.4, 97.7)	140	1081	81.1 (70.1, 88.7)
Probable anxiety/depression (K10)	n=301 (Weighted n=1877)			n=678 (Weighted n=4983)			n=232 (Weighted n=2683)			n=699 (Weighted n=4703)		
Used other websites	53	343	18.3 (13.5, 24.3)	208	1408	28.8 (24.8, 33.1)	16	360	13.4 (4.1, 36.1)	194	1275	27.1 (16.2, 41.6)
Did not use other websites	248	1534	81.7 (75.7, 86.5)	470	3485	71.2 (66.9, 75.2)	216	2323	86.6 (63.9, 95.9)	505	3428	72.9 (58.4, 83.8)
Probable alcohol use disorder (AUDIT)	n=69 (Weighted n=450)			n=171 (Weighted n=1191)			n=15 (Weighted n=241)			n=70 (Weighted n=532)		
Used other websites	18	115	25.6 (14.9, 40.3)	47	335	28.1 (20.6, 37.2)	#	–	–	19	54	10.2 (3.3, 27.3)
Did not use other websites	51	335	74.4 (59.7, 85.1)	124	856	71.9 (62.8, 79.4)	11	48	19.8 (3.2, 64.4)	51	478	89.8 (72.7, 96.7)
Probable depressive episode (PHQ-9)	n=141 (Weighted n=928)			n=354 (Weighted n=2410)			n=21 (Weighted n=105)			n=229 (Weighted n=1689)		
Used other websites	34	217	23.4 (16.2, 32.5)	109	680	28.2 (23.0, 34.0)	#	–	–	70	583	34.5 (14.8, 61.5)
Did not use other websites	107	711	76.6 (67.5, 83.8)	245	1730	71.8 (66.0, 77.0)	19	100	95.4 (86.0, 98.6)	159	1106	65.5 (38.5, 85.2)
Any 12-month suicidal ideation and behaviour	n=325 (Weighted n=1970)			n=795 (Weighted n=5571)			n=169 (Weighted n=1083)			n=805 (Weighted n=6162)		
Used other websites	77	442	22.4 (17.6, 28.2)	246	1676	30.1 (26.3, 34.1)	37	242	22.3 (7.9, 49.1)	236	1656	26.9 (16.7, 40.2)
Did not use other websites	248	1528	77.6 (71.8, 82.4)	549	3895	69.9 (65.9, 73.7)	132	841	77.7 (50.9, 92.1)	569	4505	73.1 (59.8, 83.3)

	Transitioned ADF						2015 Regular ADF					
	No barriers			At least one barrier			No barriers			At least one barrier		
	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)	n	Weighted n	% (95%CI)
Probable generalised anxiety disorder	n=223 (Weighted n=1387)			n=589 (Weighted n=4182)			n=74 (Weighted n=831)			n=223 (Weighted n=1387)		
Used other websites	47	283	20.4 (14.8, 27.4)	178	1174	28.1 (23.9, 32.6)	13	230	27.7 (5.8, 70.3)	164	1075	28.1 (16.3, 44.0)
Did not use other websites	176	1105	79.6 (72.6, 85.2)	411	3008	71.9 (67.4, 76.1)	61	601	72.3 (29.7, 94.2)	388	2747	71.9 (56.0, 83.7)

Notes
Denominator: Transitioned and 2015 Regular ADF with a probable disorder.
Proportions may not add up to 100% due to rounding and missing values. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.
= Cell size too small to be reported.

10 Technology use and psychological distress in Transitioned ADF members aged 18–25: Comparison with young adults aged 18–25 in the Australian community

Transitioned ADF young adults compared to Australian community young adults (2012 Young and Well cohort)

Frequency and duration of internet use

- All young adults in the Transitioned ADF aged 18–25 and 98.3% of the Young and Well cohort reported using the internet.
- A significantly greater proportion of Transitioned ADF young adults reported using the internet every day or almost every day (98.5%) compared to the Young and Well cohort (91.2%).
- Transitioned ADF young adults (27.2%) were significantly more likely to report that they used the internet for 5 to 9 hours on a week day compared to the Young and Well cohort (15.9%).

Internet use after 11 pm

- Transitioned ADF young adults (46.8%) were significantly less likely to use the internet after 11 pm compared to the Young and Well cohort (66.0%).

Use of internet for mental health

- The Transitioned ADF young adults (27.4%) were significantly less likely to report using the internet to seek help for or manage mental health issues than the Young and Well cohort (41.5%).
- Of those who indicated they had used the internet for mental health issues, the Transitioned ADF young adults were:
  - significantly less likely to find it helpful for getting the kind of information they needed in relation to mental health compared to the Young and Well cohort (very helpful: 7.7% vs 41.2%; not at all helpful: 15.4% vs 1.2%)
  - significantly less likely to report it helped them deal more effectively with mental health problems compared to the Young and Well cohort (helped a little 30.9% vs 53.9%; helped a lot: 6.4% vs 26.2%)

- significantly more likely to endorse being 'somewhat dissatisfied' (20.5% vs 4.2%) and significantly less likely to endorse being 'very satisfied' (7.1% vs 20.7%) with the information they received on the internet in relation to mental health compared to the Young and Well cohort.

Psychological distress and internet use

- Levels of psychological distress in Transitioned ADF young adults were significantly higher than in young adults in the Australian community. For example, nearly one in five of the Transitioned ADF young adults scored in the very high band compared to just over 5% of the Young and Well cohort (18.6% vs 5.4%).
- Of those with moderate/high levels of psychological distress:
  - the Transitioned ADF young adults reported using the internet for a longer duration (5–10+ hours) (38.7%) compared to the Young and Well cohort (20.1%)
  - the Transitioned ADF young adults (50.1%) were significantly less likely to use the internet after 11 pm compared to the Young and Well cohort (70.7%).

Glossary: refer to the Glossary of terms for definitions of key terms.

This chapter compares technology use in the youngest age cohort of Transitioned ADF members (those aged 18–25) with an Australian community sample of males and females aged 18 to 25 who participated in the 2012 Young and Well National Survey (Young and Well cohort). Comparing two different time points presents major methodological difficulties given how rapidly the use of technologies has evolved, and therefore results should be interpreted with caution.

10.1 Young and Well National Survey (2012)

The Young and Well National Surveys aim to assess young people's use of technologies, as well as their overall health and wellbeing. The 2012 survey included questions relating to demographics, general health, mental health and wellbeing, health perceptions of Australian youth, use of the internet, online and communication risks, digital literacy and safety skills.

A cross-sectional computer-assisted telephone interview (CATI) methodology was used to conduct a survey of 1400 participants across Australia. Participants were randomly selected using random-digit dialling. Participants included 700 young men and 700 young women aged between 16 and 25 years (with existing protocols for telephone interviews with people aged below 18 years of age used). Participants were excluded if they had English language difficulties or if they were uncomfortable with the interview being conducted in English. Depending on participant responses, the survey took between 10 and 20 minutes to complete.

Stratification ensured that the sample was representative of the broader population in terms of age, gender and geographic location across all Australian states by selecting respondents to match the current Australian Bureau of Statistics records for age, gender and geographic location (see abs.gov.au). While the survey was designed by the investigators, the telephone interviews were conducted by an independent company, The Social Research Centre (Melbourne, Victoria). Ethical approval was obtained through the University of Sydney's Human Research Ethics Committee.

The survey included a total of 43 items, classified into seven modules, including scoping demographics, demographics, general health and wellbeing including psychological distress, health, happiness and resilience, health perceptions, eating behaviours and body image, and internet use.

10.2 Standardisation methods

To compare technology use estimates in the Transitioned ADF population with an Australian community sample, direct standardisation was applied to estimates within the 2012 Young and Well National Survey data. For comparability, only participants from both the Transitioned ADF and the Young and Well Study who were aged between 18 and 25 years were included. This limited the number of Transitioned ADF participants to 426, which resulted in a weighted sample of 2630. The Young and Well cohort was limited to an unweighted sample of 1123. The Young and Well data were standardised by sex (male or female), employment status (employed or not) and age category (18–21 or 22–25), and estimates were generated on the outcomes of interest.

These standardised rates are not the true rates in the Young and Well sample, but are hypothetical rates that would have been observed if this group had the same age, sex and employment distribution as the Transitioned ADF young adult population. These standardised rates take into account any differences in the age, sex and employment structure of the two populations. Thus, when comparing the two populations using standardised rates, any remaining differences between them cannot be attributed to confounding by these three demographic factors.

Significant differences were determined by calculating confidence intervals on the difference in proportions. If the confidence interval spanned zero, the difference in proportions was considered not significant.

10.3 Comparisons performed in this chapter

For the purpose of this chapter, mean differences in proportions between young adults in the Transitioned ADF and the Young and Well cohort were limited to the following questions from the Mental Health and Wellbeing Transition survey which were comparable with the Young and Well survey:

- How often do you use the internet?
- Approximately how much time would you spend using the internet on a normal work day?
- Do you use the internet after 11 pm at night?
- Do you use the internet to seek help or information for, or manage, mental health issues? And of those responding 'yes':
  - By using the internet, did you get the kind of information you needed in relation to mental health?
  - Did the internet help you deal more effectively with the mental health problem?
  - Overall, how satisfied were you with the information you received on the internet in relation to mental health?

In order to ascertain whether technology use in young adults in the Transitioned ADF and in the Australian community differed according to one's level of psychological distress, frequency of internet use, duration of internet use, internet use after 11 pm and use of the internet for mental health were also examined in those with low (K10 < 16) and moderate/high psychological distress on the K10 (K10 ≥ 16).

10.4 Frequency and duration of internet use in young adults in the Transitioned ADF compared to the young adults in the Australian community

10.4.1 Frequency of internet use

Respondents in the Mental Health and Wellbeing Transition Study were asked 'How often do you use the internet?' and respondents from the Young and Well Study were asked 'Do you use the internet?' and then for those responding 'yes', 'How often do you use the internet?'

Table 10.1 and Figure 10.1 present any use and the frequency of use of the internet in the Transitioned ADF young adults and the 2012 Young and Well cohort.

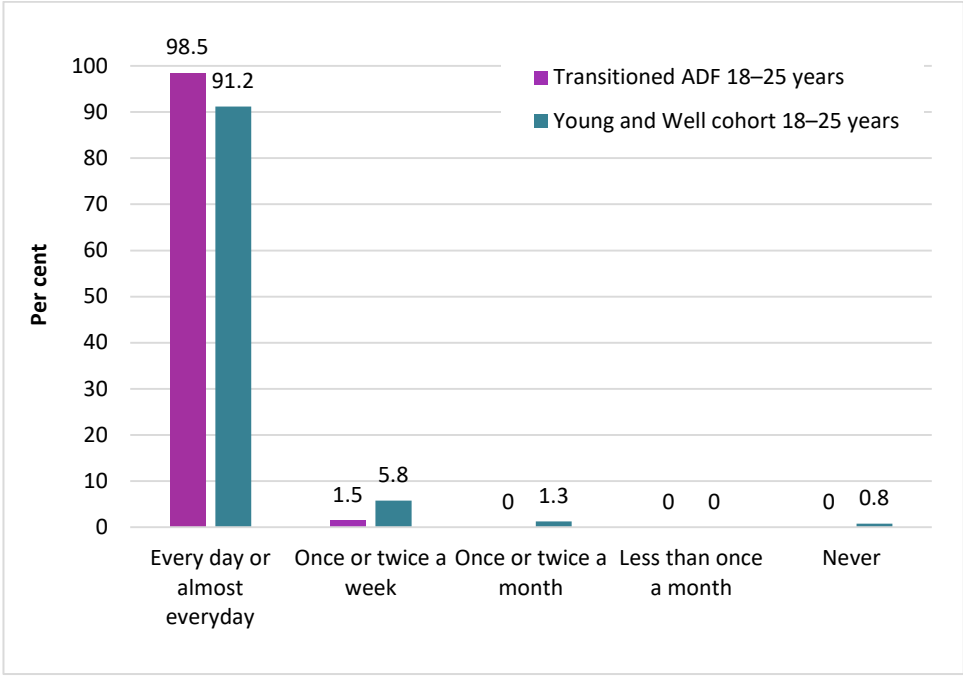
All of the Transitioned ADF young adults and 98.3% of the Young and Well cohort reported using the internet, with a significantly greater proportion of the Transitioned ADF young adults reporting using the internet every day or almost every day (98.5%) compared to the Young and Well cohort (91.2%). In contrast, a significantly greater proportion of the Young and Well cohort (5.8%) reported using the internet once or twice a week compared to the Transitioned ADF (1.5%).

Table 10.1 Frequency of internet use in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1123			Difference		
Frequency of internet use	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
No/Never	0.0	–	–	0.8	0.4	–0.0, 1.6	–0.8	0.4	–1.6, 0.0
Yes	100.0	–	–	98.3	0.4	97.5, 99.1	1.7	0.4	0.9, 2.5
Every day or almost every day	98.5	1.0	94.6, 99.6	91.2	1.5	88.4, 94.0	7.3	1.8	3.9, 10.8
Once or twice a week	1.5	1.0	0.4, 5.5	5.8	1.3	3.3, 8.4	–4.4	1.6	–7.6, –1.2
Once or twice a month	0.0	–	–	1.3	0.7	0.0, 2.6	–1.3	0.7	–2.6, 0.0
Less than once a month	0.0	–	–	0.0	–	–	0.0	–	–
Never	0.0	–	–	0.8	0.4	–0.0, 1.6	–0.8	0.4	–1.6, 0.0

Notes
Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts.
There were no missing values for this question.
95%CI = 95% confidence interval.

Figure 10.1 Frequency of internet use in Transitioned ADF (aged 18–25) compared to the Young and Well cohort



10.4.2 Duration of internet use on a normal work day

Respondents in the Mental Health and Wellbeing Transition Study were asked 'Approximately how much time would you spend using the internet on a normal work day?' and respondents from the Young and Well Study were asked 'Approximately how much time (in hours) would you use the internet on a normal week day/workday?'

Table 10.2 and Figure 10.2 present the time spent using the internet on a normal day by young adults in the Transitioned ADF and the Young and Well cohort.

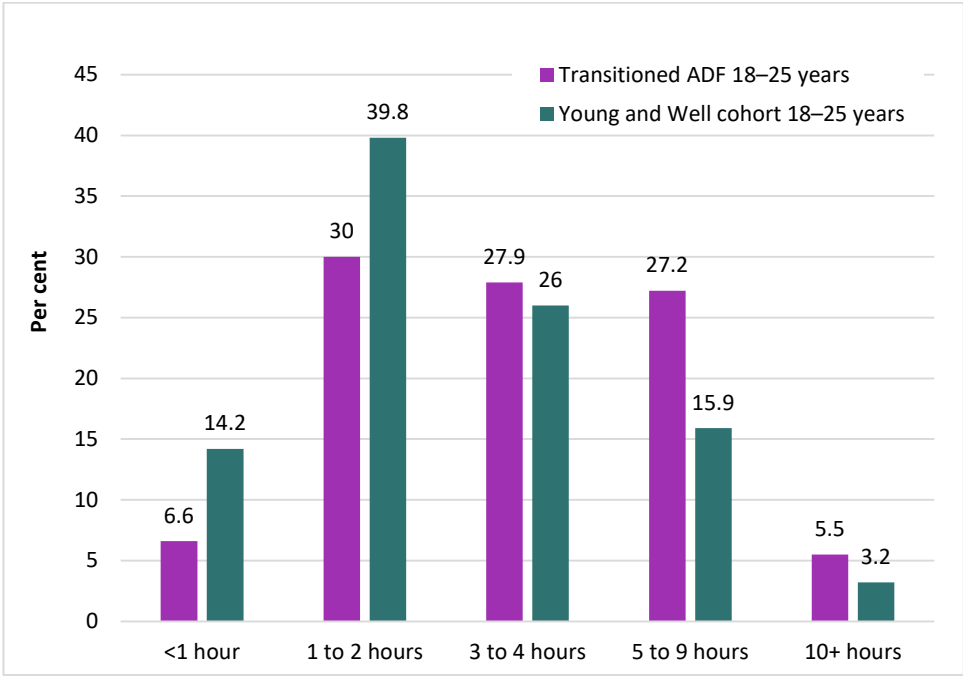
Both Transitioned ADF young adults and the Young and Well cohort were most likely to report using the internet 1 to 2 hours per day during the week (30.0% and 39.8%). Transitioned ADF members (27.2%) were significantly more likely to report that they used the internet for 5 to 9 hours on a week day compared to the Young and Well cohort (15.9%). In contrast, the Transitioned ADF were significantly less likely to report using the internet for 1 to 2 hours per day (30.0% compared to 39.8%) and for less than 1 hour per day (6.6% compared to 14.2%).

Table 10.2 Time spent using the internet on a normal work/week day in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1110			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
<1 hour	6.6	2.1	3.5, 12.3	14.2	1.8	10.6, 17.8	–7.6	2.8	–13.1, –2.1
1 to 2 hours	30.0	3.8	23.1, 38.0	39.8	2.5	34.8, 44.7	–9.7	4.6	–18.7, –0.7
3 to 4 hours	27.9	3.7	21.2, 35.8	26.0	2.3	21.6, 30.4	1.9	4.4	–6.7, 10.4
5 to 9 hours	27.2	3.6	20.8, 34.8	15.9	1.8	12.3, 19.4	11.4	4.0	3.5, 19.2
10+ hours	5.5	1.8	2.9, 10.2	3.2	0.9	1.4, 5.0	2.3	2.0	–1.6, 6.2

Notes
Denominator: Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet.
2.6% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 10.2 Time spent using the internet on a normal work/week day in Transitioned ADF (aged 18–25) compared to the Young and Well cohort



10.4.3 Internet use after 11 pm

Respondents in the Mental Health and Wellbeing Transition Study and respondents from the Young and Well Study were asked 'Do you use the internet after 11 pm at night?'. Responses to this question are described in Table 10.3 and Figure 10.3.

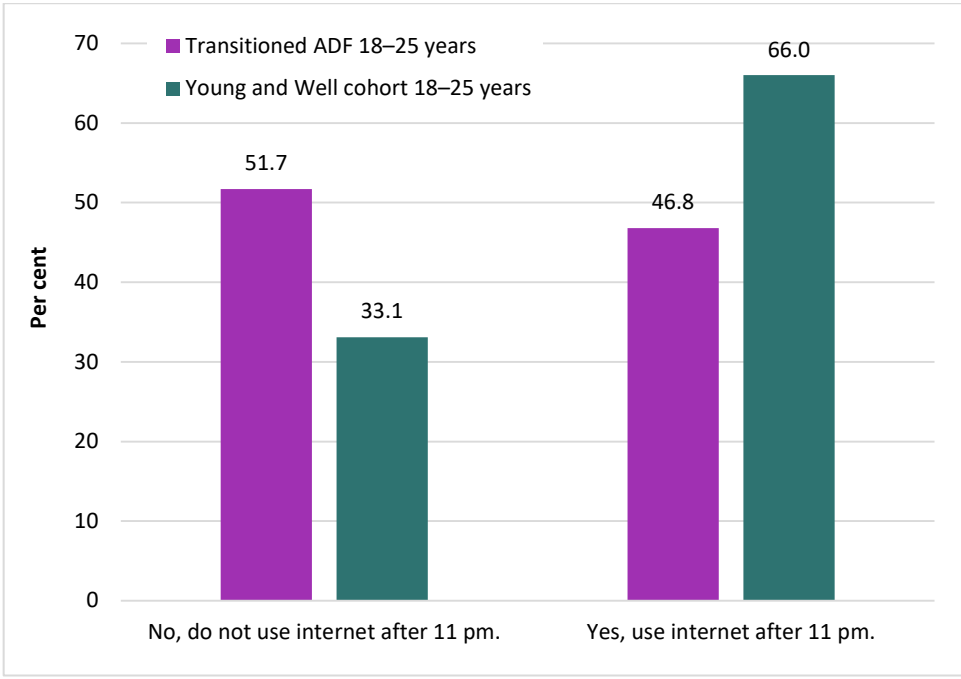
Just under half of the Transitioned ADF young adults (46.8%) and over half (66.0%) of the Young and Well cohort reported using the internet after 11 pm, with Transitioned ADF young adults being significantly less likely to report using the internet after 11 pm compared to the Young and Well cohort.

Table 10.3 Use of the internet after 11 pm in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1110			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
No, do not use internet after 11 pm.	51.7	4.1	43.7, 59.7	33.1	2.4	28.4, 37.7	18.7	4.8	9.3, 28.0
Yes, use internet after 11 pm.	46.8	4.1	38.9, 54.9	66.0	2.4	61.3, 70.6	–19.2	4.8	–28.5, –9.8
Don't know.*	0.0	–	–	0.0	0.0	0.0, 0.1	0.0	0.0	–0.1, 0.0

*Only the Young and Well participants had the option of responding 'Don't know'.
Notes
Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet.
1.5% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 10.3 Use of the internet after 11 pm in Transitioned ADF (aged 18–25) compared to the Young and Well cohort



10.5 Use of the internet to manage mental health in young adults in the Transitioned ADF compared to young adults in the Australian community

10.5.1 Overall use of the internet to manage mental health

Respondents in the Mental Health and Wellbeing Transition Study were asked 'Do you use the internet to seek help or information for, or manage, mental health issues?' and respondents from the Young and Well Study were asked 'Have you ever used the internet to find information for a mental health, alcohol or substance use problem?' Note that while these questions were similar they were not identical, with the Young and Well question being broader and thus potentially more inclusive. For this reason, only frequency data is presented below. Also worth noting is that the questions refer to finding information – which may be relevant to the individual but could also be relevant to seeking information or support for a friend or family member.

Table 10.4 and Figure 10.4 describe the proportions of those who used the internet to manage mental health issues in the Transitioned ADF young adults and the Young and Well cohort.

Approximately 30% of the Transitioned ADF young adults (27.4%) and 40% of the Young and Well cohort (41.5%) reported using the internet to seek help for or manage mental health issues. However, in general, most of the Transitioned ADF young adults (71.6%) and Young and Well cohort (57.1%) did not use the internet to seek help for or manage mental health issues.

Table 10.4 Use of the internet to seek help for or manage mental health issues in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1110			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Yes	27.4	3.6	20.9, 34.9	41.5	2.5	36.6, 46.5	–14.6	4.4	–22.8, –5.6
No	71.6	3.6	64.0, 78.2	57.1	2.5	52.1, 62.1	14.6	4.4	5.8, 23.3
Don't know*	0.0	0.0	0.0, 0.0	0.5	0.4	–0.3, 1.2	–0.4	0.4	–1.2, 0.3

* Only the Young and Well participants had the option of responding 'Don't know'.

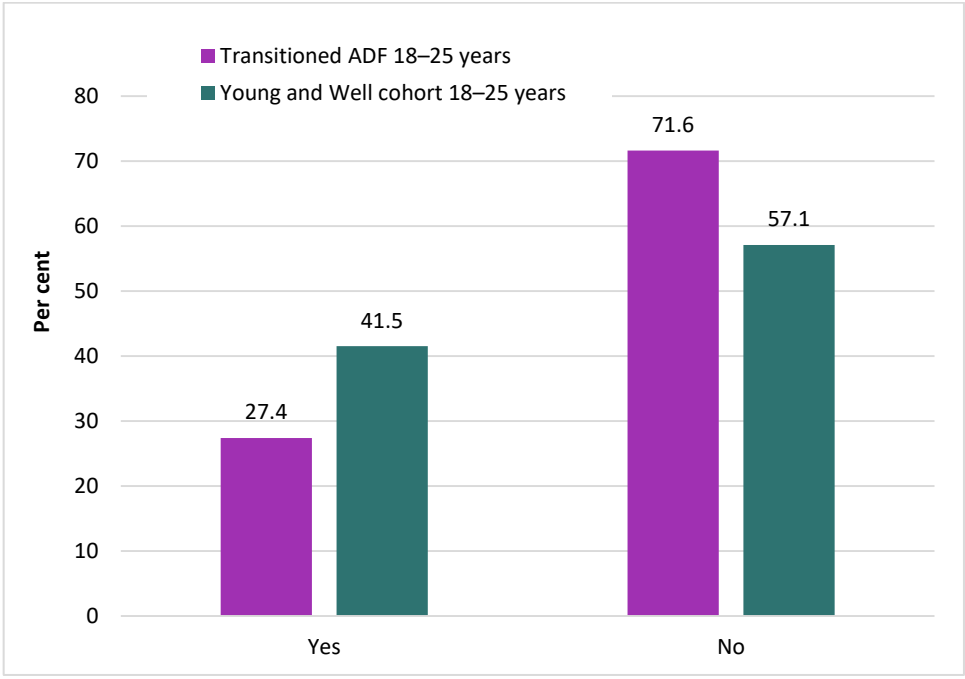
Notes

Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet.

1% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.

95%CI = 95% confidence interval.

Figure 10.4 Use of the internet to seek help for or manage mental health issues in Transitioned ADF (aged 18–25) compared to the Young and Well cohort



10.5.2 Getting the information needed in relation to mental health

Of those who indicated they had used the internet for mental health issues (Mental Health and Wellbeing Transition Study n = 720, Young and Well Study n = 490. See section 10.5.1 for the exact wording of this question in both surveys), respondents in the Mental Health and Wellbeing Transition Study were asked, 'By using the internet, did you get the kind of information you needed in relation to mental health?' whereas respondents from the Young and Well Study were asked, 'By using the internet, did you get the kind of information you needed?'

Table 10.5 and Figure 10.5 describe the proportion of young adults who reported getting the information they needed in relation to mental health via the internet.

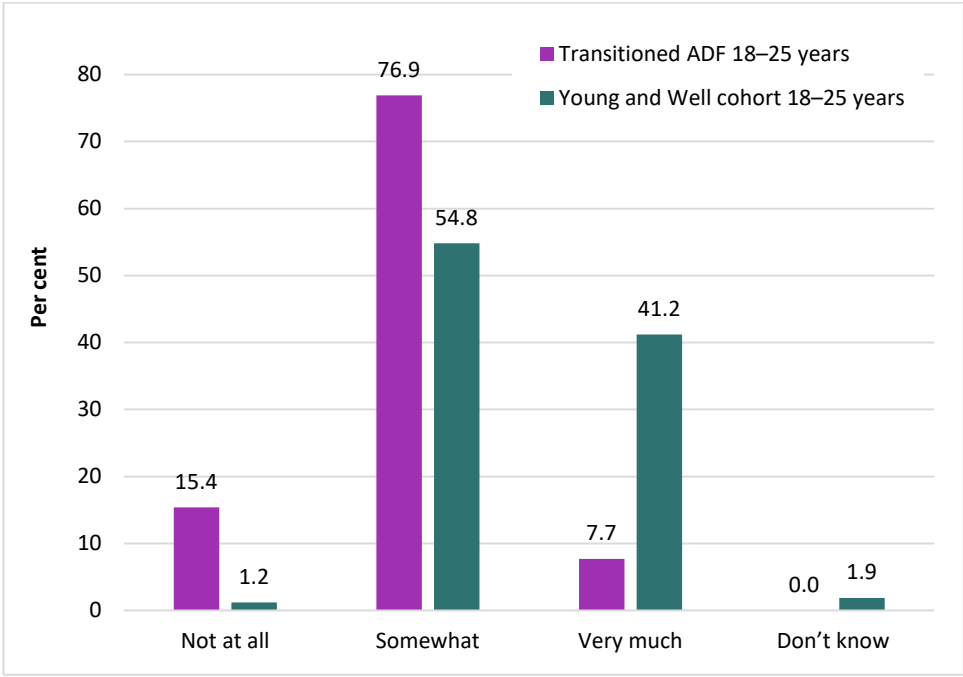
Both Transitioned ADF young adults and the Young and Well cohort were most likely to report that the internet 'somewhat' gave them the kind of information they needed in relation to mental health (76.9% and 54.8%). The Transitioned ADF young adults were significantly more likely than the Young and Well cohort to report that the internet did not help at all (15.4% compared with 1.2%). They were significantly less likely to report that the internet 'very much' gave them the kind of information they needed in relation to mental health compared to the Young and Well cohort (7.7% compared to 41.2%).

Table 10.5 Proportion of Transitioned ADF (aged 18–25) compared to the Young and Well cohort who reported getting the information they needed from the internet in relation to mental health

	Transitioned ADF 18–25 years n=720			Young and Well cohort 18–25 years n=490			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Not at all	15.4	5.9	7.0, 30.5	1.2	0.8	–0.3, 2.7	15.4	5.9	7.0, 30.5
Somewhat	76.9	6.5	62.0, 87.2	54.8	4.0	47.0, 62.7	22.1	7.6	7.2, 37.0
Very much	7.7	3.5	3.1, 17.8	41.2	4.0	33.4, 49.0	–33.5	5.3	–43.9, –23.2
Don't know*	0.0	–	–	1.9	1.2	–0.5, 4.3	–1.9	1.2	–4.3, 0.5

*Only the Young and Well participants had the option of responding 'Don't know'.
Notes
Denominator: Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet for mental health issues.
Note: There were no missing values for this question.
95%CI = 95% confidence interval.

Figure 10.5 Proportion of Transitioned ADF (aged 18–25) compared to the Young and Well cohort who reported getting the information they needed from the internet in relation to mental health



10.5.3 Effectiveness of the internet in helping young adults deal more effectively with mental health problems

Of those who indicated they had used the internet for mental health issues (Mental Health and Wellbeing Transition Study n = 720, Young and Well Study n = 490. See section 10.5.1 for the exact wording of this question in both surveys), respondents in the Mental Health and Wellbeing Transition Study were asked, 'Did the internet help you deal more effectively with mental health problems?' whereas respondents from the Young and Well Study were asked, 'Did the internet help you deal more effectively with the problem?'

Table 10.6 and Figure 10.6 present responses on the effectiveness of the information respondents received in relation to mental health.

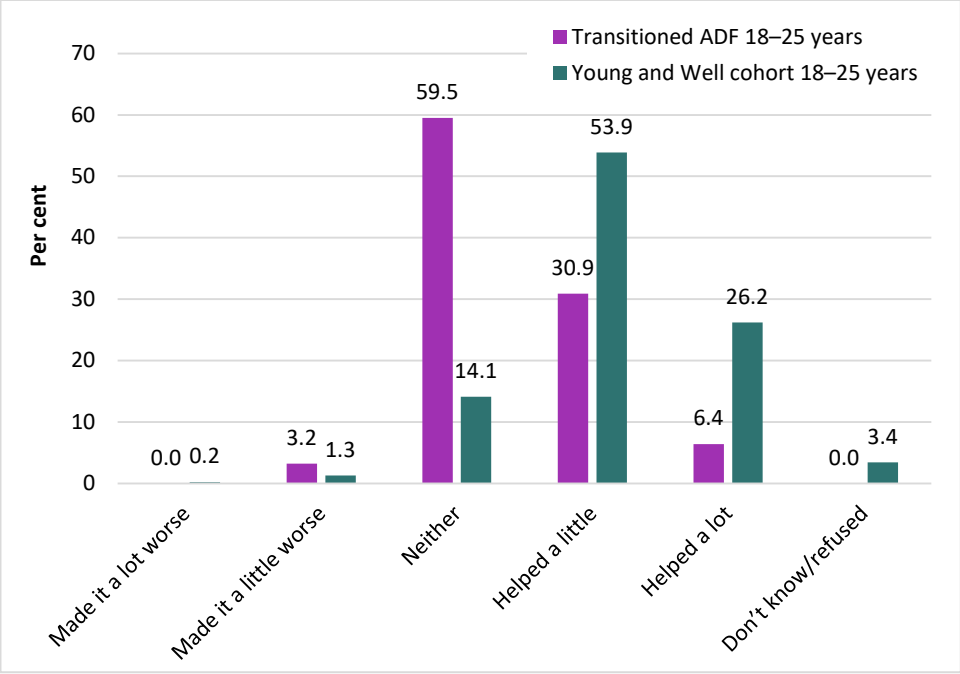
Transitioned ADF young adults were most likely to report that they found the internet neither helped nor made dealing with their mental health problems worse (59.5%), whereas the Young and Well cohort were most likely to report that the internet 'helped a little' (53.9%). Transitioned ADF were also significantly less likely to report they found the internet 'helped a little' (30.9%) and 'helped a lot' (6.4%) compared to the Young and Well cohort (53.9% and 26.2% respectively).

Table 10.6 Effectiveness of the internet in helping young adults deal effectively with mental health problems in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n=720			Young and Well cohort 18–25 years n=490			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Made it a lot worse	0.0	–	–	0.2	0.2	–0.2, 0.5	–0.2	0.2	–0.5, 0.2
Made it a little worse	3.2	1.6	1.1, 8.6	1.3	0.8	–0.2, 2.8	1.9	1.8	–1.7, 5.5
Neither	59.5	7.3	44.7, 72.7	14.1	2.8	8.7, 19.5	45.4	7.9	30.0, 60.8
Helped a little	30.9	6.9	19.2, 45.8	53.9	4.0	46.0, 61.8	–23.0	8.0	–38.7, –7.3
Helped a lot	6.4	3.7	2.0, 18.9	26.2	3.6	19.2, 33.3	–19.8	5.2	–30.0, –9.6
Don't know/refused*	0.0	–	–	3.4	1.6	0.3, 6.4	–3.4	1.6	–6.4, –0.3

*Only the Young and Well participants had the response options of 'Don't know' or 'Refused'.
Notes
Denominator: Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet for mental health issues. There were no missing values for this question.
95%CI = 95% confidence interval.

Figure 10.6 Effectiveness of the internet in helping young adults deal effectively with mental health problems in Transitioned ADF (aged 18–25) compared to the Young and Well cohort



10.5.4 Satisfaction with information received on the internet in relation to mental health

Of those who indicated they had used the internet for mental health issues (The Mental Health and Wellbeing Transition Study n = 720, Young and Well Study n = 490. See section 10.5.1 for the exact wording of this question in both surveys), respondents in the Mental Health and Wellbeing Transition Study were asked, 'Overall, how satisfied were you with the information you received on the internet in relation to mental health?' whereas respondents from the Young and Well Study were asked, 'Overall, how satisfied were you with the information you received on the internet?'.

Table 10.7 and Figure 10.7 show the proportions of the Transitioned ADF young adults and the Young and Well cohort who were satisfied with the information they received on the internet.

Most of the Transitioned ADF young adults (69.1%) and Young and Well cohort (71.9%) reported that they were 'somewhat satisfied' with the information they received on the internet in relation to mental health. Transitioned ADF young adults (20.5%) were significantly more likely to endorse being 'somewhat dissatisfied' with the information they received on the internet in relation to mental health compared to the Young and

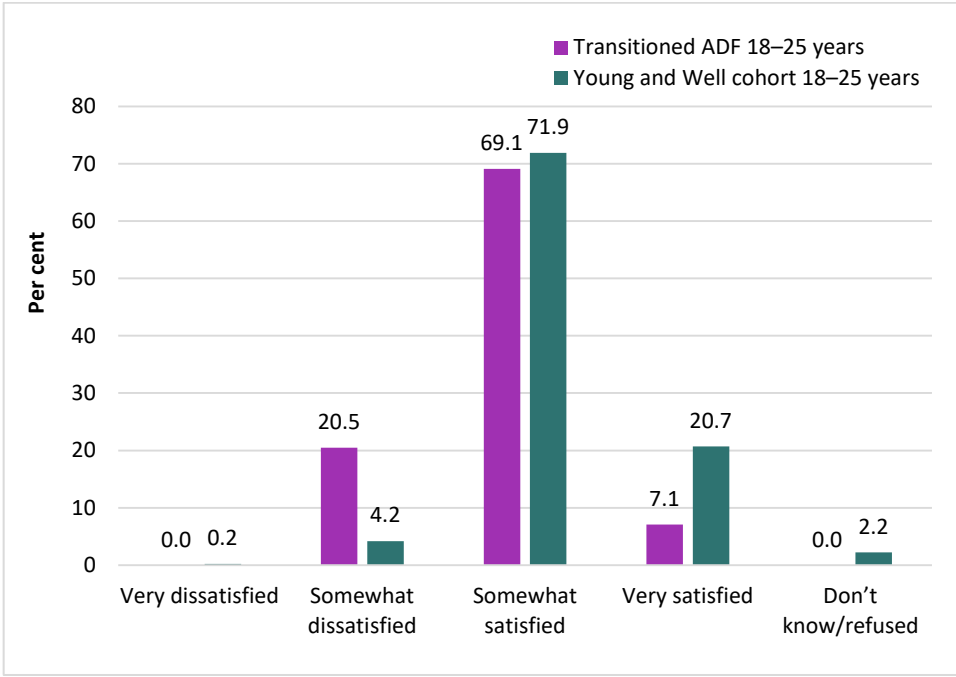
Well cohort (4.2%) and significantly less likely to endorse being 'very satisfied' with the information they received on the internet in relation to mental health (7.1% compared to 20.7%).

Table 10.7 Satisfaction with information received in relation to mental health in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n=720			Young and Well cohort 18–25 years n=490			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Very dissatisfied	0.0	0.0	0.0, 0.0	0.2	0.2	–0.2, 0.5	–0.2	0.2	–0.5, 0.2
Somewhat dissatisfied	20.5	6.3	10.8, 35.4	4.2	1.5	1.3, 7.1	16.3	6.4	3.7, 28.9
Somewhat satisfied	69.1	7.1	53.8, 81.1	71.9	3.5	65.0, 78.8	–2.8	7.9	–18.4, 12.8
Very satisfied	7.1	3.7	2.5, 18.5	20.7	3.2	14.5, 26.9	–13.6	4.8	–23.1, –4.2
Don't know/refused	0.0	0.0	0.0, 0.0	2.2	1.4	–0.5, 4.8	–2.2	1.4	–4.8, 0.5

Notes
Denominator: Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet for mental health issues. 3.3% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 10.7 Satisfaction with information received in relation to mental health in Transitioned ADF (aged 18–25) compared to the Young and Well cohort



10.6 Psychological distress and internet use in young adults in the Transitioned ADF compared to young adults in the Australian community cohort

This section of the report begins with a description of the levels of psychological distress in young adults in the Transitioned ADF and the Australian population. Following this, it examines internet use in the Transitioned ADF aged 18–25 and the Australian community among those with low (K10 < 16) and moderate/high psychological distress on the K10 (K10 ≥ 16) in order to ascertain whether the use of technology, particularly in relation to mental health, differed according to one's level of symptomatology.

10.6.1 Psychological distress

Table 10.8 and Figure 10.8 present the distribution of overall psychological distress (grouped according to the K10 scoring bands used in the 2007 National Survey of Mental Health and Wellbeing) in young adults in the Transitioned ADF and the 2012 Young and Well cohort.

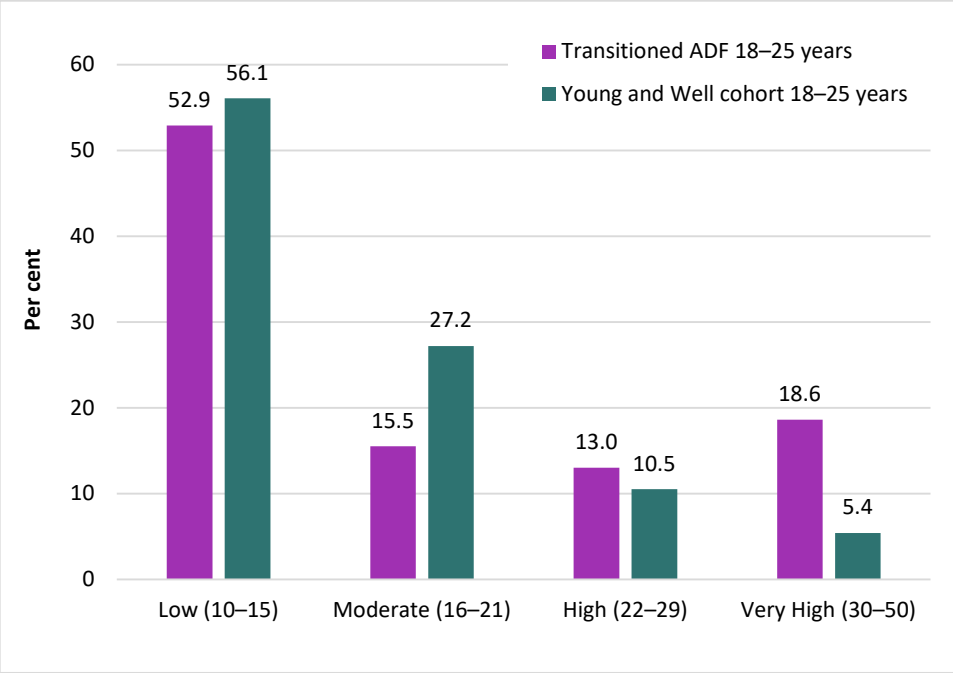
Overall, greater levels of psychological distress were reported in the Transitioned ADF young adults than in the Young and Well cohort (as evidenced by the confidence intervals around the mean difference in proportions not crossing zero). Specifically, the proportion of Transitioned ADF young adults scoring in the moderate band on the K10 (15.5%) was significantly lower than in the Young and Well cohort (27.2%). In contrast, the proportion scoring in the very high band was significantly higher in the Transitioned ADF young adults, with nearly one in five scoring in this band (18.6%) compared to just over 5% of the Young and Well cohort (5.4%).

Table 10.8 Estimated prevalence of psychological distress (K10 scoring bands) in Transitioned ADF (aged 18–25) compared to the Young and Well cohort

	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1123			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Low (10–15)	52.9	4.1	44.8, 60.8	56.1	2.5	51.1, 61.0	–3.2	4.8	–12.6, 6.3
Moderate (16–21)	15.5	3.1	10.4, 22.5	27.2	2.3	22.7, 31.6	–11.6	3.8	–19.1, –4.2
High (22–29)	13.0	2.6	8.6, 19.0	10.5	1.5	7.6, 13.4	2.5	3.0	–3.4, 8.4
Very high (30–50)	18.6	3.1	13.3, 25.5	5.4	1.2	3.1, 7.7	13.2	3.3	6.7, 19.7

Notes
Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts.
Less than 1% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 10.8 Estimated prevalence of psychological distress (K10 scoring bands) in Transitioned ADF (aged 18–25) compared to the Young and Well cohort



10.6.2 Frequency of internet use by level of psychological distress

Table 10.9 and Figure 10.9 present the frequency of internet use in the Transitioned ADF young adults compared to the Young and Well cohort by level of psychological distress.

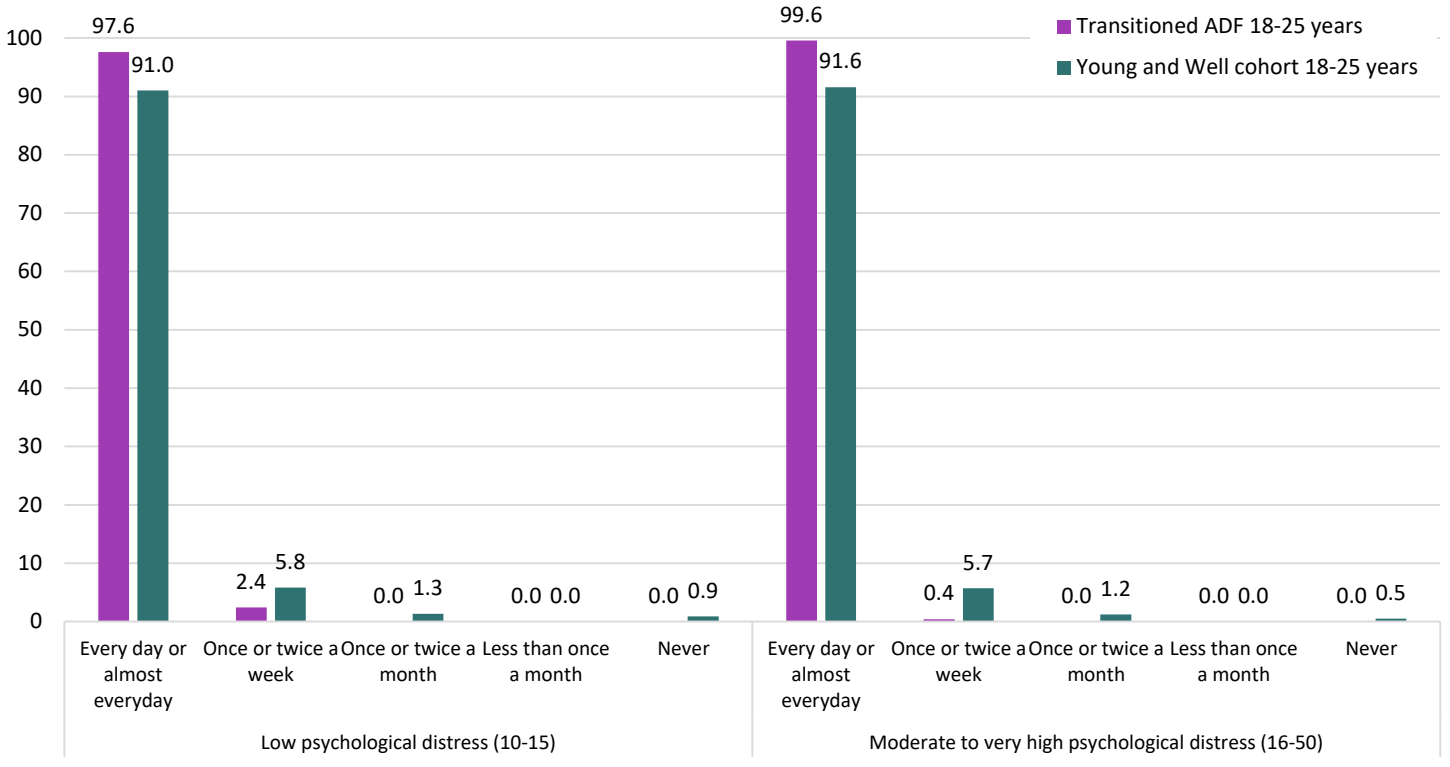
Similar patterns of frequency of internet use were found in Transitioned ADF young adults and the Young and Well cohort, irrespective of whether they had low psychological distress or moderate to very high psychological distress on the K10. More than 90% of participants in all groups reported using the internet every day or almost every day.

Table 10.9 Frequency of internet use in Transitioned ADF (aged 18–25) compared to the Young and Well cohort, by level of psychological distress

	Low psychological distress (K10 scores 10–15)									Moderate to very high psychological distress (K10 scores 16–50)								
	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1123			Difference			Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1123			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
No/Never	0.0	0.0	0.0, 0.0	0.9	0.6	–0.3, 2.2	–0.9	0.6	–2.2, 0.3	0.0	0.0	0.0, 0.0	0.5	0.2	0.1, 1.0	–0.5	0.2	–.0, –0.1
Yes	100.0	0.0	0.0, 0.0	98.2	0.6	96.9, 99.4	1.8	0.6	0.6, 3.1	100.0	0.0	0.0, 0.0	98.6	0.2	98.1, 99.0	1.4	0.2	1.0, 1.9
Every day or almost every day	97.6	1.9	89.7, 99.5	91.0	1.9	87.3, 94.8	6.5	2.7	1.3, 11.7	99.6	0.3	97.9, 99.9	91.6	2.2	87.3, 96.0	8.0	2.3	3.6, 12.4
Once or twice a week	2.4	1.9	0.5, 10.3	5.8	1.7	2.6, 9.1	–3.4	2.5	–8.3, 1.5	0.4	0.3	0.1, 2.1	5.7	2.0	1.8, 9.7	–5.3	2.0	–9.3, –1.3
Once or twice a month	0.0	0.0	0.0, 0.0	1.3	0.9	–0.4, 3.0	–1.3	0.9	–3.0, 0.4	0.0	0.0	0.0, 0.0	1.2	1.0	–0.8, 3.2	–1.2	1.0	–3.2, 0.8
Less than once a month	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0
Never	0.0	0.0	0.0, 0.0	0.9	0.6	–0.3, 2.2	–0.9	0.6	–2.2, 0.3	0.0	0.0	0.0, 0.0	0.5	0.2	0.1, 1.0	–0.5	0.2	–1.0, –0.1

Notes
Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts.
There were no missing values for this question.
95%CI = 95% confidence interval.

Figure 10.9 Frequency of internet use in Transitioned ADF (aged 18–25) compared to the Young and Well cohort, by level of psychological distress



10.6.3 Duration of internet use by level of psychological distress

Table 10.10 and Figure 10.10 show time spent using the internet on a normal work/week day in the Transitioned ADF young adults compared to the Young and Well cohort, by level of psychological distress.

Those with moderate to very high psychological distress on the K10 were more likely to report using the internet for 10+ hours on a normal work/week day in both Transitioned ADF young adults (9.2%) and the Young and Well cohort (4.8%) compared to those with low psychological distress (2.3% and 2.2%respectively).

Overall, it can be seen that Transitioned ADF young adults with moderate to high psychological distress generally reported using the internet for a longer duration (5–10+ hours) (aggregated proportion of 38.7%) than those with low distress (aggregated proportion of 27.3%) and the Young and Well cohort with either moderate to high (aggregated proportion of 20.1%) or low psychological distress (aggregated proportion of 18.4%).

10.6.4 Internet use after 11 pm by level of psychological distress

Table 10.11 and Figure 10.11 show use of the internet after 11 pm in the Transitioned ADF young adults compared to the Young and Well cohort by level of psychological distress.

A larger proportion of those with moderate to very high psychological distress reported using the internet after 11 pm in both the Transitioned ADF young adults (50.1%) and the Young and Well cohort (70.7%) compared to those with low psychological distress (43.7% and 62.4% respectively). When comparing the Transitioned ADF young adults and the Young and Well cohort, the patterns were similar. In both the low and moderate to very high psychological distress groups, a significantly lower proportion of Transitioned ADF young adults reported using the internet after 11 pm compared to the Young and Well cohort (Low distress: 43.7% vs 62.4%; High distress: 50.1% vs 70.7%).

10.6.5 Use of the internet to manage mental health by level of psychological distress

Table 10.12 and Figure 10.12 present the use of the internet to seek help for or manage mental health issues in the Transitioned ADF young adults compared to the Young and Well cohort, by level of psychological distress.

A larger proportion of those with moderate to very high psychological distress reported using the internet to seek help for or to manage mental health issues in both the Transitioned ADF young adults (28.2%) and the Young and Well cohort (52.2%) compared to those with low psychological distress (26.7% and 33.1% respectively), with this effect being more pronounced in the Young and Well cohort. In the moderate to very high psychological distress group only, a significantly higher proportion of the Young and Well cohort reported using the internet to manage mental health compared to the Transitioned ADF young adults (52.2% vs 28.2%).

Table 10.10 Time spent using the internet on a normal work/week day in Transitioned ADF (aged 18–25) compared to the Young and Well cohort, by level of psychological distress

	Low psychological distress (K10 scores 10–15)									Moderate to very high psychological distress (K10 scores 16–50)								
	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1110			Difference			Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1110			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
<1 hour	10.4	3.8	5.0, 20.4	17.5	2.6	12.4, 22.7	–7.1	4.6	–16.1, 1.8	2.4	1.4	0.8, 7.3	9.8	2.6	4.8, 14.8	–7.4	2.9	–13.1, –1.7
1 to 2 hours	25.5	5.0	16.9, 36.5	42.0	3.4	35.4, 48.6	–16.5	6.1	–28.4, –4.6	35.3	5.7	25.0, 47.2	38.0	3.9	30.3, 45.6	–2.7	7.0	–16.3, 10.9
3 to 4 hours	34.5	5.6	24.5, 46.1	21.2	2.8	15.8, 26.6	13.3	6.3	1.1, 25.6	20.6	4.6	13.0, 31.0	31.2	3.6	24.2, 38.3	–10.7	5.8	–22.1, 0.8
5 to 9 hours	25.0	4.7	16.9, 35.2	16.2	2.5	11.3, 21.2	8.8	5.3	–1.7, 19.2	29.5	5.4	20.1, 41.1	15.3	2.6	10.1, 20.5	14.3	6.0	2.4, 26.1
10+ hours	2.3	1.6	0.6, 8.5	2.2	0.9	0.4, 4.0	0.1	1.8	–3.5, 3.7	9.2	3.3	4.5, 17.9	4.8	1.9	1.1, 8.5	4.4	3.8	–3.0, 11.8

Notes
Denominator: Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet.
2.6% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.
95%CI = 95% confidence interval.

Figure 10.10 **Time spent using the internet on a normal work/week day in Transitioned ADF (aged 18–25) compared to the Young and Well 'cohort, by level of psychological distress**

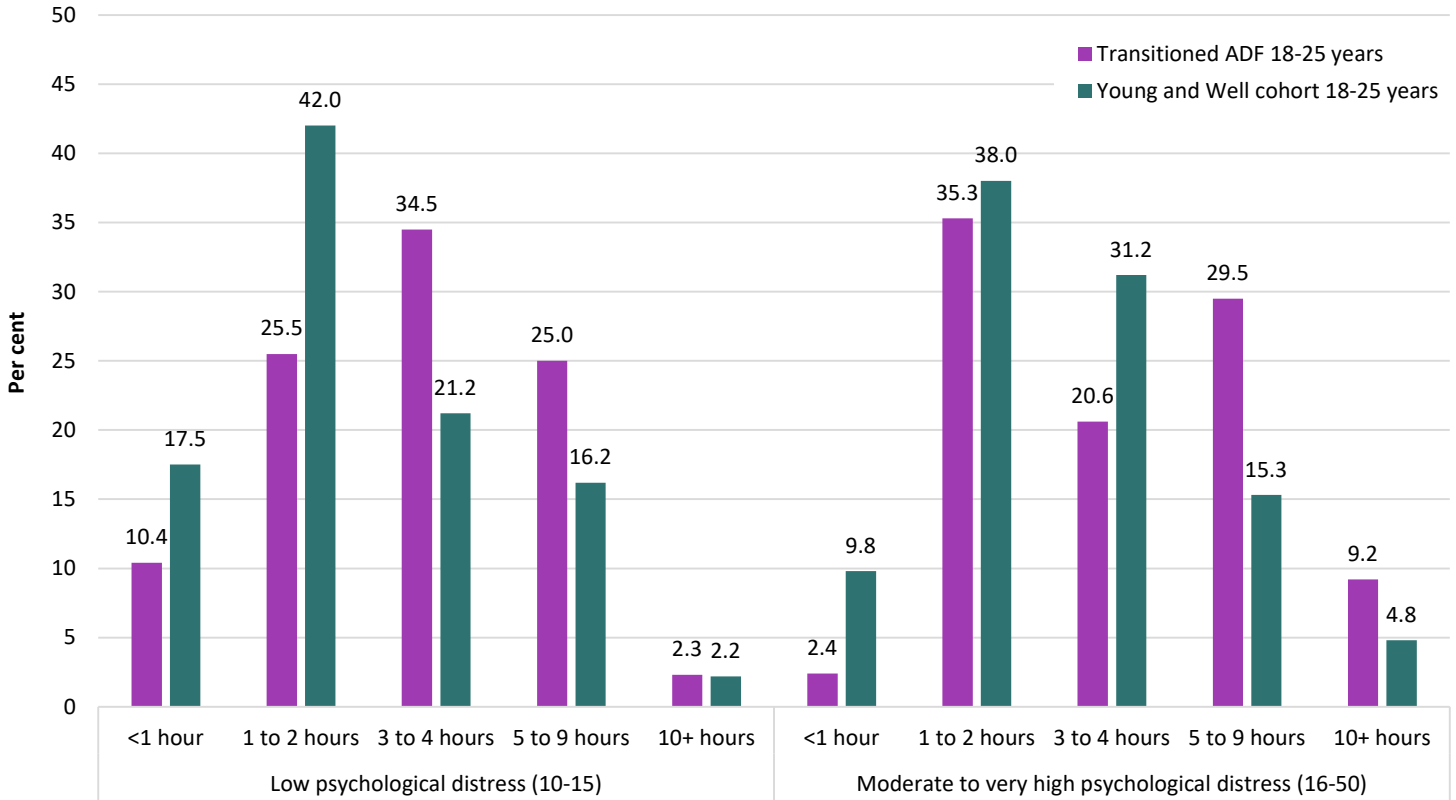


Table 10.11 Use of the internet after 11 pm in Transitioned ADF (aged 18–25) compared to the Young and Well cohort, by level of psychological distress

	Low psychological distress (K10 scores 10–15)									Moderate to very high psychological distress (K10 scores 16–50)								
	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1110			Difference			Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1110			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
No, do not use internet after 11 pm.	54.5	5.8	43.2, 65.4	36.7	3.2	30.5, 42.9	17.8	6.6	4.9, 30.7	48.7	5.9	37.5, 60.2	28.3	3.7	21.2, 35.5	20.4	6.9	6.8, 34.0
Yes, use internet after 11 pm.	43.7	5.7	33.0, 55.1	62.4	3.2	56.1, 68.6	–18.6	6.6	–31.5, –5.8	50.1	5.9	38.7, 61.5	70.7	3.7	63.5, 77.8	–20.6	6.9	–34.2, –7.0
Don't know*	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.0	0.0	0.0, 0.0	0.1	0.1	0.0, 0.2	-0.1	0.1	–0.2, 0.0

*Only the Young and Well participants had the option of responding 'Don't know'.

Notes

Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet.

1.5% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.

95%CI = 95% confidence interval.

Figure 10.11 Use of the internet after 11 pm in Transitioned ADF (aged 18–25) compared to the Young and Well cohort, by level of psychological distress

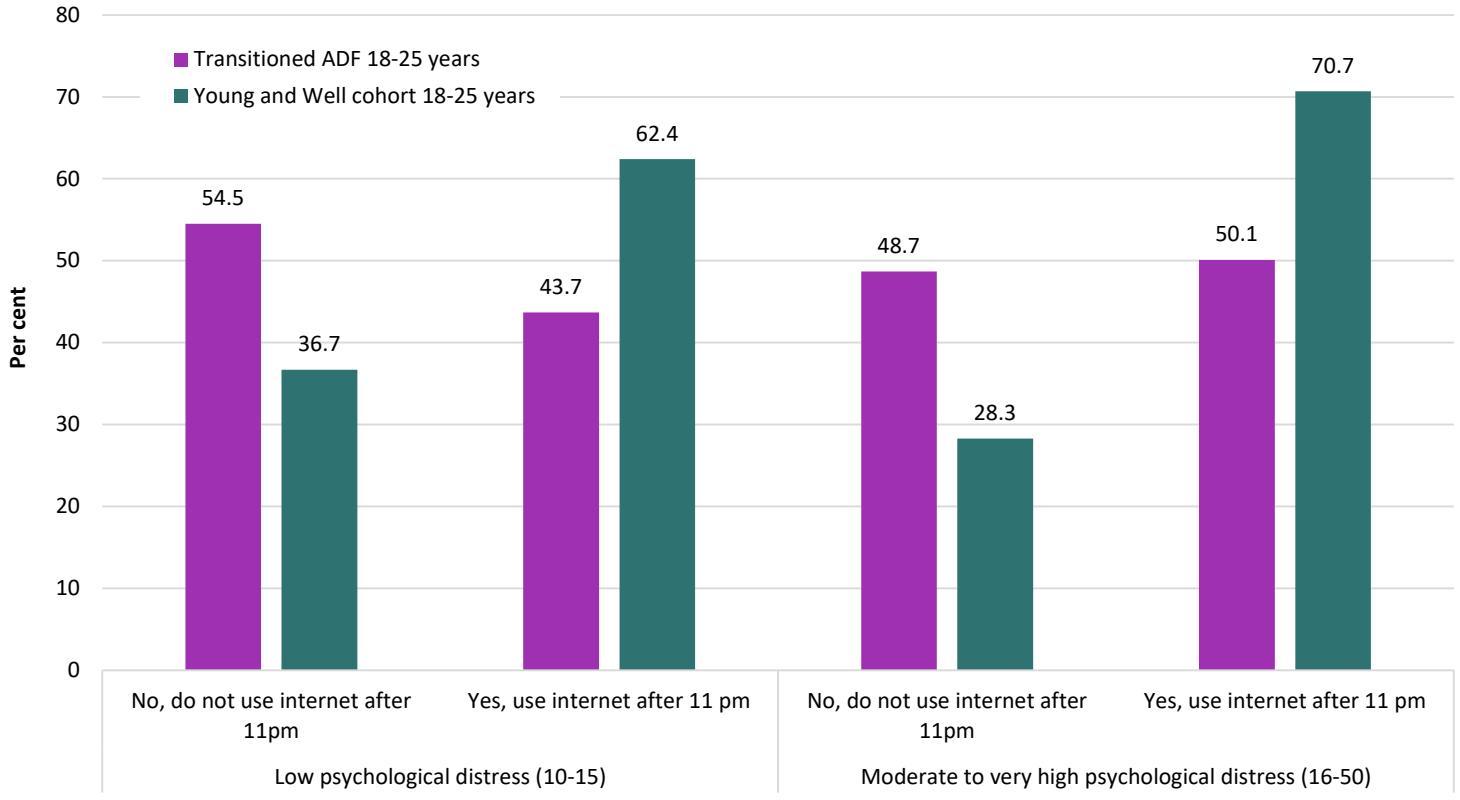


Table 10.12 Use of the internet to seek help for or manage mental health issues in Transitioned ADF (aged 18–25) compared to the Young and Well cohort, by level of psychological distress

	Low psychological distress (K10 scores 10–15)									Moderate to very high psychological distress (K10 scores 16–50)								
	Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1123			Difference			Transitioned ADF 18–25 years n=2630			Young and Well cohort 18–25 years n=1123			Difference		
	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI	%	SE	95% CI
Yes	26.7	5.1	18.0, 37.8	33.1	3.2	26.8, 39.4	–6.4	6.0	–18.2, 5.5	28.2	5.0	19.4, 39.0	52.2	4.1	44.2, 60.1	–24.0	6.5	–36.7, –11.4
No	71.4	5.2	60.2, 80.4	66.0	3.2	59.7, 72.3	5.4	6.1	–6.6, 17.4	71.8	5.0	61.0, 80.6	45.8	4.1	37.8, 53.7	26.1	6.5	13.4, 38.8
Don't know*	0.0	0.0	0.0, 0.0	0.02	0.02	–0.01, 0.05	–0.02	0.02	–0.05, 0.01	0.0	0.0	0.0, 0.0	1.2	1.0	–0.9, 3.2	–1.2	1.0	–3.2, 0.85

*Only the Young and Well participants had the option of responding 'Don't know'.

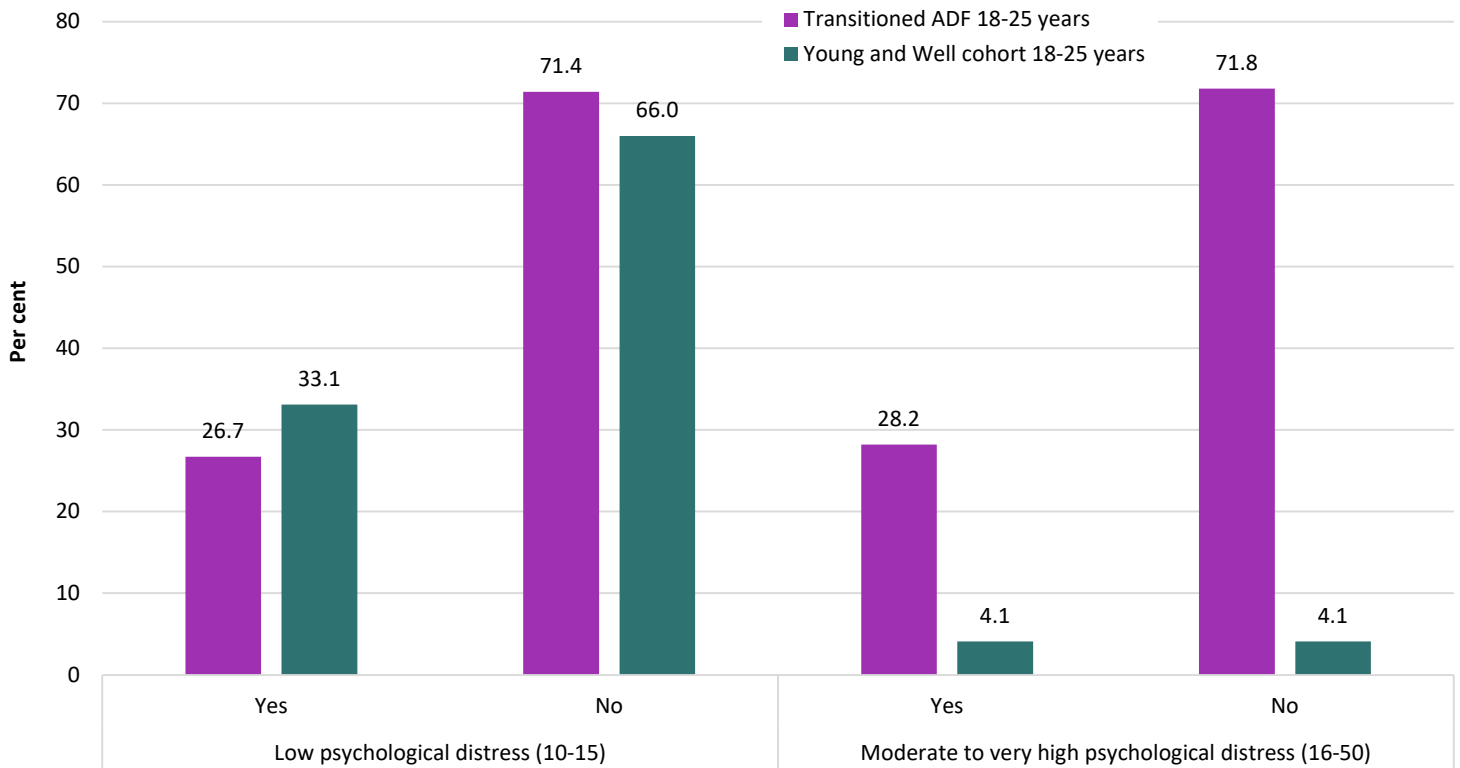
Notes

Denominator: Total Transitioned ADF 18–25 years and Young and Well 18–25 years cohorts who used the internet.

1.0% of the Transitioned ADF cohort had a missing value for this question. However, distributions are calculated by including those with a missing value to allow for correct weighted totals.

95%CI = 95% confidence interval.

Figure 10.12 **Use of the internet to seek help for or manage mental health issues in Transitioned ADF (aged 18–25) compared to the Young and Well cohort, by level of psychological distress**



11 Discussion

Results from the Transition and Wellbeing Research Programme, examining mental health prevalence and pathways to care in the Transitioned ADF and the 2015 Regular ADF, clearly highlighted some major challenges and significant opportunities for the Australian Government in relation to the way support and care is provided to the Transitioned ADF and Regular ADF (Forbes et al. 2018; Van Hooff et al., 2018a).

Overall these reports found:

- As within the broader Australian population, mental health problems were highly prevalent for both the Transitioned ADF and the 2015 Regular ADF.
- Compared to the 2015 Regular ADF, the Transitioned ADF reported significantly higher current mental health symptoms across all domains measured. For example,
- Compared to the 2015 Regular ADF, nearly twice as many Transitioned ADF had high to very high psychological distress (33.1% vs 18.7%).
- Compared to 2015 Regular ADF, nearly three times as many Transitioned ADF had high to very high posttraumatic stress symptoms (24.3% vs 8.7%).
- Awareness and knowledge about mental health services and help seeking were high. In those that reported being concerned about their mental health during their lifetime, 75% of Transitioned ADF and 2015 Regular ADF members reported having ever received assistance for their mental health.
- Satisfaction with the services provided, when they were accessed, for both the Transitioned ADF and the 2015 Regular ADF was generally good to very good.
- Family, friends and peers in both face-to-face and online social networks were avenues for support and often the first to notice early warning signs or symptoms that indicate that a person needs help.
- As with the broader Australian population, self-stigma and perceived barriers to care still exist.
- Despite a relatively high level of mental health literacy, there were gaps in optimal service provision, including the time it took to seek support and the continuity of care delivered, with high attrition rates over time suggesting that only 24% of

Transitioned ADF with a probable 30-day disorder received an evidence-based treatment.

Consistent with the literature for civilian populations, the data from the Transition and Wellbeing Research Programme also provides interesting insight regarding the types of support services the Transitioned ADF and the 2015 Regular ADF want:

- While 60% of Transitioned ADF and 2015 Regular ADF preferred face-to-face services, 30% would like to receive services online.
- Almost 70% of the Transitioned ADF and 60% of the 2015 Regular ADF with a probable disorder who had not sought help preferred to self-manage, 38% of 2015 Regular ADF compared to 15% of Transitioned ADF were receiving help from elsewhere, 77% of 2015 Regular ADF compared to almost 70% of Transitioned ADF were afraid to ask for help, and approximately 60% of Transitioned ADF and 2015 Regular ADF felt that they could still function.
- Use of the DVA and ADF websites was approximately 30–40% in those with probable 30-day disorders.
- The use of military-specific mobile phone applications for mental health was approximately 6%, increasing to approximately 14% for those with a probable 30-day disorder of PTSD.

Building on the results of the first two Transition and Wellbeing Research Programme reports (Forbes et al. 2018; Van Hooff et al., 2018a), this report systematically investigated the patterns of technology use of the Transitioned ADF and 2015 Regular ADF members and how technology, including websites, apps and wearable devices, are being used to support mental health and wellbeing. In doing so, this report more specifically examined:

- What proportion of Transitioned ADF and 2015 Regular ADF use the internet and what are their attitudes to the use of the internet?
- What are the proportions of Transitioned ADF and 2015 Regular ADF who use new and emerging technologies, including apps and wearable devices, and what are their attitudes to the use of new and emerging technologies?
- What proportion of the Transitioned ADF and 2015 Regular ADF use the internet to seek help or information for or to manage mental health issues, and what are the levels of suitability, ability to help and satisfaction with the available information?

- Of those who use the internet to seek help or information, what proportion of the Transitioned ADF and 2015 Regular ADF use the internet to manage their own mental health, and how often do they seek support and who from?

- What are the barriers to using the internet for mental health for the Transitioned ADF and 2015 Regular ADF?

- How do Transitioned ADF young adults compare to the civilian population?

Of particular interest were differences in patterns of use for those who met the criteria for having a current probable 30-day disorder and those who did not for Transitioned ADF and 2015 Regular ADF. Given policy interest in health care models that use stepped care, an additional chapter also explored the use of websites in relation to probable 30-day disorder, subsyndromal disorder and no disorder, with a focus on suicidal behaviour, PTSD, alcohol use, depression and anxiety and psychological distress.

The findings of this report and the subsequent discussion are structured around a holistic approach to health care, with a focus on the use of technology in the promotion of wellbeing and the prevention of illness through self-management, and the use of technology in early identification and intervention, treatment and relapse prevention. Key questions are:

- How can technology be used to support self-management with a focus on the promotion of wellbeing, mental fitness and early intervention?

- How can technologies be used to support service delivery and the design of future services and mental health initiatives with a focus on shared management and stepped care?

- How can technologies be used as an adjunct to face-to-face care, including in assessment, intervention and ongoing measurement of outcomes to determine the impact of evidence-based treatments?

This discussion commences with a summary and interpretation of the findings for each of the above questions before considering the broader policy and practice implications of the findings, and finishes with a concluding statement regarding the current policy climate in Australia in relation to digital transformation and future service design that could enhance the mental health and wellbeing of current serving and transitioned ADF members.

11.1 Summary and interpretations of findings

11.1.1 Use of the internet

Chapter 4 of this report explored the use of the internet and attitudes to its use. Consistent with the overall population, use of the internet was very high, with more than 95% of the Transitioned ADF and the 2015 Regular ADF using the internet at least every day. The majority used a search engine to find information and about 10% deliberately accessed a specific website. The majority of Transitioned ADF and Regular ADF were online for one to four hours per day. Transitioned ADF were more likely to report using the internet after 11 pm than 2015 Regular ADF, which is an expected result given the nature of active military service and the need to be alert and at work early. That said, use of the internet after 11 pm was common in both groups, with one third of the Transitioned ADF and one quarter of the 2015 Regular ADF reporting such use. In the Transitioned ADF and 2015 Regular ADF, approximately one in three with a probable 30-day disorder spent five or more hours per day on the internet. Forty-five per cent of Transitioned ADF with a probable disorder were more likely to use the internet after 11 pm while 33% of the 2015 Regular ADF with a probable disorder used the internet after 11 pm.

Attitudes towards the use of the internet

The Young and Well National Survey (*Game on* report) (Burns et al., 2013) found that the internet is a place where young people can find it easier to 'be themselves' and 'talk about different things'. A particular focus for policy makers and practitioners has been on the potential of the internet as a 'softer, non-stigmatising' entry point to services, allowing people to seek information in their own time and in an environment where they feel safe. The Transition and Wellbeing Research Programme team tested this concept with the Transitioned ADF and the 2015 Regular ADF and found that, overall, about one in four Transitioned ADF and 2015 Regular ADF reported that they felt it easier to be themselves online, could talk about different things and would go online if going through a tough time. Just over 10% of the Transitioned ADF and 2015 Regular ADF indicated they talked about private things with people online which they did not share with people face to face.

Transitioned ADF and the 2015 Regular ADF with a probable 30-day disorder were more likely than those without a disorder to find it easier to be themselves online, talk about different things online and go online if going through a tough time. They also reported that, when going through a difficult time, going online made them feel better.

11.1.2 The use of new and emerging technology

Chapter 5 of this report showed that half of the Transitioned ADF and 2015 Regular ADF reported using apps or wearable technology. Of the 50% of respondents who used emerging technology, more than 80% reported using an app while almost a third

reported using wearable technology. The authors acknowledge that, given that this survey was developed in 2013–14, it is highly likely that, consistent with national and international data, the use of apps and wearable devices has increased. This research highlights the challenges of conducting this type of study particularly in keeping pace with the speed of technology innovation and uptake. Of the 40% of respondents who did not use 'new technology', about three quarters did not use it because they had 'no need or interest'. Other reasons included that it was too confusing or too expensive. Surprisingly, only one in five cited privacy issues as a reason for not using technology.

Of the Transitioned ADF and 2015 Regular ADF who used new technologies, 50% reported that they used them for the purpose of improving their health and wellbeing. Approximately 80% of the Transitioned ADF used them to improve fitness, 60% tracked their progress and 36% used them to stay organised. In the 2015 Regular ADF, almost 90% used them to improve fitness, 56% to track progress and almost 40% to stay organised. About a third of both the Transitioned ADF and the 2015 Regular ADF used them to improve sleep, maintain diet and stay motivated. For those who were not using technology to improve their mental health and wellbeing but were using it for another reason, approximately three quarters of both Transitioned ADF and the 2015 Regular ADF reported using it for fun or recreation, approximately half for study or work and a third to enhance social interaction.

11.1.3 Use of the internet for mental health information, or to seek support

Chapter 6 of this report started to explore how the Transitioned ADF and 2015 Regular ADF used the internet for health information or to seek support, for themselves or for others. The Transition and Wellbeing Research Programme team once again was interested in the idea of soft entry points for stigmatised disorders such as depression, anxiety and PTSD. Given the importance of 'mates', we were also interested in exploring how the internet was used to support ongoing mental health literacy and the idea of 'peer support networks'.

One in four Transitioned ADF and one in six 2015 Regular ADF reported that they used the internet to seek help or information for, or to manage, mental health issues at least once per month. Of the one in four Transitioned ADF who used the internet for mental health issues, almost 50% had a probable 30-day disorder and almost 50% were young men aged 18 to 37. Of the one in six 2015 Regular ADF who used the internet for mental health issues, only 20% had a probable 30-day disorder and more than 50% were young men aged 18 to 37. Transitioned ADF were significantly more likely to use the internet to seek help or information for, or manage, mental health issues compared to the 2015 Regular ADF.

Overall, the majority of Transitioned ADF and 2015 Regular ADF were satisfied with the information they received, reporting that it had helped a little or a lot. Just over a third

reported that it neither helped nor made it worse, while less than 2% reported that it did not help.

11.1.4 Seeking help or information about their own mental health

Chapter 7 specifically asked the Transitioned ADF and 2015 Regular ADF who currently used the internet for health information or to seek support about seeking help or information for their own mental health, with about one third of the Transitioned ADF and one fifth of the 2015 Regular ADF reporting having used it at least once per month. A small minority of the Transitioned ADF and just over 10% of the 2015 Regular ADF reported that they had never used the internet to seek information about their own mental health. In the Transitioned ADF and the 2015 Regular ADF, those with a probable disorder were twice as likely to report using the internet for seeking help or information at least once a month, compared to those with no probable disorder. Among the Transitioned ADF with a probable 30-day disorder, 42.5% reported using the internet to seek help or access information about their own mental health at least once a month, 52.3% reported using it less than once a month and 3.7% reported never using it for this purpose. Among the 2015 Regular ADF with a probable 30-day disorder, 28.6% reported using the internet to seek information about their own mental health at least once a month, 68.8% reported using it less than once a month and 2.1% reported never using the internet for this purpose.

11.1.5 Talking online about their own mental health

Of the Transitioned ADF and 2015 Regular ADF who used the internet to manage mental health, approximately one third talked online with a peer, family member or friend, with 63% of the Transitioned ADF and 75% of the 2015 Regular ADF finding it helpful.

Approximately 10% of the Transitioned ADF and 2015 Regular ADF talked about their mental health with other people online – for example in online forums, chatrooms or on blogs, MSN or Gmail messenger – with approximately 61% of the Transitioned ADF and 88% of the 2015 Regular ADF finding it helpful.

Approximately 10% reported talking online to a psychologist or other mental health professional about their mental health. Approximately 60% found this helpful.

11.1.6 Barriers

In Chapter 8 we were interested in exploring barriers that would prevent someone from talking to someone online. This included a peer, family member or friend, other people (e.g. chatroom) or a professional. For the 50% who did not talk to someone online, the main reason was their preference for face-to-face contact, with about 59% of the Transitioned ADF and 70% of the 2015 Regular ADF citing this as a reason. About 50% of the Transitioned ADF and 2015 Regular ADF who did not talk to someone online

cited concerns about privacy and confidentiality and 40% reported being concerned about the validity of the information. Transitioned ADF were less likely than 2015 Regular ADF to report that a barrier to talking online about mental health was concerns about a lack of privacy or confidentiality. Lack of access to technology, affordability, a lack of skills to use technology and a lack of awareness about available online services were not issues of concern.

11.1.7 Use of the internet for mental health

In Chapter 9 we specifically focused on the use the internet for those with a 30-day probable disorder, those with sub-threshold symptoms and those without any symptoms, across different mental health categories, including suicidal thoughts and plans, PTSD, psychological distress, depressive disorder, generalised anxiety disorder and alcohol use. Overall, for those with a 30-day probable disorder, regardless of the disorder, about 40% used the internet for mental health. For subsyndromal symptoms, approximately 30% of the Transitioned ADF used the internet for mental health while among the 2015 Regular ADF a smaller proportion with psychological distress and alcohol use reported using the internet for mental health.

Transitioned ADF with a probable disorder were more likely to use the DVA or At Ease website (30–40%) compared to the ADF website (10–14%), whereas the proportion of the Regular ADF with a probable mental disorder who used the Defence (17–34%) or DVA website (16–42%) was roughly equal. Overall, approximately 30% of the Transitioned ADF and the 2015 Regular ADF used a community-based website if they had a probable mental disorder. Interestingly, the use of a community-based website was highest among those with a probable depressive episode or generalised anxiety disorder.

11.1.8 Use of the internet to manage mental health in young adults in the Transitioned ADF compared to young adults in the Australian community

In Chapter 10 we compared the use of the internet to manage mental health in young adults in the Transitioned ADF compared to young adults in the Australian community, using data from the Young and Well National Survey. It is important to note that data for the Young and Well National Survey was collected in 2011 whereas the data in this survey was collected in 2015, making comparisons very difficult, if not impossible, due to the pace of technology innovation and the uptake of new technologies. Overall, the Transitioned ADF young adults were less likely to use the internet for mental health when compared to young adults in the Australian community, they were far less likely to find it helpful, and approximately 20% were somewhat dissatisfied with the information they received.

Psychological distress in the Transitioned ADF compared to young adults in the Australian community differed significantly, with almost 20% of the Transitioned ADF

reporting very high psychological distress. This result was not unexpected, with 20% of the Transitioned ADF having been medically discharged, and, while two thirds were in civilian employment, of the one third who were not, 50% having been unemployed for more than three months.

11.2 Broader consideration and service system implications from the findings

Following the 2009 Dunt review, Defence and DVA have prioritised the mental health and wellbeing of Transitioned ADF and Regular ADF, with e-mental health a key pillar of both the ADF and DVA Mental Health Strategies (Australian Government Department of Defence, 2017; Australian Government Department of Veterans' Affairs, 2016). As outlined in the Introduction to this report, a significant investment has been made by both departments, often in collaboration, in developing mental health programs and a suite of online tools and resources. A particular challenge that has been recognised is supporting military personnel as they transition from the ADF to civilian life.

In general, the findings of this study illustrated that Transitioned ADF and 2015 Regular ADF use technologies. For example, at least once a month approximately a quarter of the Transitioned ADF used the internet to source mental health information or to seek support. It is not clear from the data what information they were seeking, or whether that information was for them, a family member or a colleague, friend or peer. However, about half had a probable 30-day disorder while half did not. Of the one in five 2015 Regular ADF who used the internet to source mental health information once a month, 80% did not have a probable 30-day disorder. This finding may indicate that Transitioned ADF and 2015 Regular ADF members are proactively seeking out information to support their own health and that of their peers and families. It could also indicate that overall society is becoming more proactive in engaging with technology and seeking information. Both are important as they suggest prevention and early intervention messages are creating awareness about mental health issues and an appetite for greater information, which potentially could be sourced online. This digitisation of health information could allow a shift away from regular promotional materials like brochures, fact sheets and lectures to a combination of educational resources that reach people through word of mouth and communities, both face to face and online. This area concerning preferences for health information and pathways to care that support earlier help seeking is promising but requires further investigation.

Overall, only 10% of the Transitioned ADF and the Regular ADF had never used the internet to seek help or information about their own mental health. This result was not surprising given the relatively high health and digital literacy of this cohort, along with

their expressed desire to self-manage. For policy makers this creates an opportunity to move from what is often perceived to be a top-down model of care to a model that supports an empowered, educated and aware service user. It also presents an opportunity to move from a reactive model of mental health care where services are provided for those who are ill to a far more proactive strengths-based model focused on keeping people mentally fit, healthy and well – with an emphasis on both mental and physical fitness and the value of both.

For this approach to be successful, the provision of education for health literacy and digital health literacy is a critical element for a model of holistic health care. This requires focused attention on education both for the users of the system – which includes serving and ex-serving ADF members, their families, peers and colleagues – and the multidisciplinary professionals, internal and external to Defence and DVA, who provide services to these populations. In particular, the concepts of self-management and shared management become critical in supporting a workforce in the ADF that is mentally and physically fit, and, as military personnel transition from the ADF to civilian life, in promoting the maintenance of mental health and wellbeing.

11.2.1 Maintaining wellbeing through self-management

The desire to 'manage myself' or 'solve my own problems' is not new and lies at the heart of Australian culture in relation to seeking help for mental health problems (Burns et al., 2015) and indeed is a part of the military culture and value system of self-reliance, strength and resilience even in the face of severe adversity. This is reflected in the mental health strategies of both Defence and DVA, with a move away from models that focus on illness and treatment to models that focus on wellness and the prevention of illness. For providers of services, such as Joint Health Command and Open Arms – Veterans and Families Counselling, this transformational shift has seen a priority placed on defence-centric and veteran-centric models of care with the concepts of self-management and shared-management being very carefully considered in models of stepped care.

The Transition and Wellbeing Research Programme data provides some evidence that the current population of both Transitioned ADF and 2015 Regular ADF are using technologies to support positive behaviours that are known to be protective factors for good mental health – such as physical activity, diet and sleep – and, importantly, are using technology to connect socially. This approach is useful for self-management but is equally important in the shared management of care with a professional. Interestingly, approximately 60% of the Transitioned ADF and the 2015 Regular ADF using new technology reported that they actively monitored and tracked their progress. While the Transition and Wellbeing Research Programme data is very encouraging in terms of both self-management and shared management, the role of new technology in creating greater social cohesion and a sense of purpose through

meaningful participation is also gaining traction as a means of keeping people connected in communities that care, whether online or face to face. While the Transition and Wellbeing Research Programme study provides baseline preliminary data, an area requiring further implementation research is the use of new technology to promote social connectedness, through fun, study, work and community in the serving and ex-serving ADF populations. In modern models of care, this is defined as 'wrap-around support' and highlights the critical role of peers, family and the community in which people live.

In Chapter 9 clear delineations are shown between those without symptoms and those with mild to moderate symptoms and those with a probable 30-day disorder. In self-management, the use of resources such as the At Ease portal and the High Res app promotes resilience and the concept of mental fitness. A major challenge, but also an opportunity, is supporting and promoting self-reflection so that people seek support and care earlier in the course of a disorder. This idea of using data to self-monitor (for example, sleep disturbance or reduction in social connectivity) could be supported by chain of command or primary health care providers promoting the idea of having a regular check-in with their teams focused on resilience and wellbeing or mental fitness rather than mental health. Likewise, following a stressful life event such as deployment, marriage breakdown, death of a loved one, diagnosis of an illness or transition out of the military, pro-active management of mental health concerns could be supported through technologies that monitor early symptoms of distress.

11.2.2 Use of apps, wearables and biometric devices

In Australia, investment by Defence and DVA in the development of apps and e-tools has been high. Use of apps and other wearable technology by Transitioned ADF and 2015 Regular ADF is relatively high, with 50% using them or indicating that they would like to use them. That said, only 6% of the 2015 Regular ADF used Defence-specific and developed apps, although these rates doubled to 14% for those with a probable 30-day PTSD disorder.

In the US, the challenge of implementation of apps and the use of technology such as wearable technologies or biometrics to measure outcomes and promote self-monitoring and shared evaluation has been addressed by the development of Mobile Health Practice Guidelines and an app store accessible through its Department of Veterans Affairs highlighting defence- and veteran-specific apps (https://mobile.va.gov) (Armstrong et al., 2017). Additionally, three US military programs focus on mHealth projects in mental health: the Telemedicine and Advanced Technology Research Center, the Military Operational Medicine Research Program, United States Army Medical Research and Materiel Command, and The National Center for Telehealth and Technology (Shore et al., 2014).

Also of note is the idea of using wearable technologies, such as a biometric wrist band (e.g. Garmin, Fitbit, Apple Watch), to self-monitor and track heart rate, quality of sleep, brain function and blood glucose levels. Important relationships between certain variables such as sleep, exercise and mood – and their relationship to stress, for example – could be used to support self-management. In shared management the use of data from apps and wearable technologies could be used to discuss progress in treatment, responses to medication or evidence-based care, such as CBT, and in recovery. It could also potentially be used to identify early warning signs of relapse such as sleep disturbance, lack of social engagement or a reduction in physical activity.

11.2.3 Integration and coordination of digital content

Increasingly websites focused on raising awareness about mental health are shifting from static information portals to dynamic interactive communities that rely on shared information, the collation of digital content and, where possible, the customisation of information tailored to the individual's needs. Substantial resources are invested in the development of Defence, DVA and civilian mental health websites, often with the same content and messaging. For policy makers seeking to create a seamless system of care across all stages of a military career, and that builds on the concept of 'whole of person' 'whole of life', including the transition to civilian life, it may be worth considering how website content, interfaces and communities can be built that facilitate information sharing across multiple platforms, including social media platforms, face-to-face and online telephone and teleweb services, developed for both the civilian and military populations.

Static websites, even with digital content embedded in them, rely on either word of mouth or strong marketing campaigns to build brand recognition and to ensure reach. At the moment only 10–15% of the ADF serving and ex-serving populations are deliberately accessing websites for their mental health (Forbes et al. 2018). Most people when searching the internet use a search engine, and this is true for the Australian veteran and defence communities. A traditional approach to driving traffic to websites has been through the use of Google Adwords or paid advertising on Facebook or other social networks such as Twitter and LinkedIn. Increasingly, social marketing is using different reach modalities – for example, 'push', where information is sent to people or targeted to specific networks, and 'pull', where campaigns invite people to visit a website or participate in a community – to build communities and promote information sharing via the networks in which people interact. For the ADF serving and ex-serving communities this may be through the Defence Community Organisation, dedicated closed Facebook pages, current services such as Joint Health Command and Open Arms, and the ex-service and community organisations. Critical to the success of building online communities is engendering a culture of trust and the sense that the community is built based on the needs of the people it serves.

Careful consideration should also be given to integrating online services with face-to-face care. The co-design and subsequent co-development with the lived experience community of the Department of Health Head to Health portal and its proposed implementation into primary health care networks is an interesting model. In this example, education and training for primary health and allied health providers should be coupled with awareness campaigns targeting individuals, peers and family members. In the context of the military and veteran populations, this training could focus on the services currently provided through Open Arms and Joint Health Command. Where possible, resources should be promoted jointly, such as with the use of the At Ease or High Res websites or the Joint Health Command Fighting Fit portal to support self-management.

11.2.4 Shared care and bolstering effectiveness of treatment

Data from the Transition and Wellbeing Research Programme suggests that serving and ex-serving ADF members are open to exploring alternative models of service provision, including services provided online or enhanced through apps and wearable technologies or biometric devices. An integrated model of stepped care coupled with clinical staging (see section 11.2.5), focused on the 'right care at the right time' and delivered by the right person and in a mode that suits the individual, is worth exploring.

Most military personnel reported that they were aware of face-to-face services, and approximately three in four Transitioned ADF and 2015 Regular ADF have received assistance for their mental health in their lifetime. Despite high rates of help seeking, only a quarter of those with a probable current disorder were estimated to have received evidence-based care because of high attrition and variability in the treatment services delivered (Forbes et al. 2018). One of the challenges for face-to-face services, particularly in mental health service provision, is that they are usually available only during standard working hours. While the majority of Transitioned ADF and 2015 Regular ADF felt just as comfortable with their face-to-face interactions as they did with their on-line interactions, about 25% felt more comfortable in the online environment – highlighting the importance of there being 'no wrong door' and ensuring that there are multiple ways for individuals to access support.

11.2.5 Stepped care and clinical staging

When an individual has not responded to self-management strategies and has identified that symptoms are not improving or other functions are impaired (e.g. concentration, stress, sleep disturbance), a more intense intervention should be recommended. This may involve psycho-education combined with an evidence-based treatment such as computer-administered CBT, as evidence suggests that psycho-education combined with reduced-intensity CBT can be as effective as complete CBT treatment. Ongoing monitoring to determine an individual's response to intervention

will determine whether a person needs to step up into a more intensive individual therapy. Apps or wearable technologies that measure outcomes such as sleep, activity, stress and social connectivity could all be used to determine when the intensity of the intervention needs to be increased, with reviews conducted in shared management consultations with primary health care providers or case managers.

In longer term individual therapy, which may include secondary and tertiary care, it is important to understand the complex mental and physical health needs of the individual. Access to support may have commenced with a physical health problem which has progressed to a mental health problem and/or other comorbidities such as the use of alcohol or drugs to self-medicate. At this step, multiple modalities of support need to be deployed, including individual and group therapy and the use of technology as an adjunct to care. This is particularly relevant as the person transitions out of the ADF into civilian life.

Stepped care focuses on the pathways to care and stepping individuals up or down, whereas clinical staging focuses on the intensity of intervention and the tailoring of a solution based on needs and recovery. This focus on recovery takes into consideration the willingness to seek support and the capacity to stay in role, as well as the context of the individual's environment, whether they are still in the military or have transitioned into civilian life. It offers a continuum of care from the identification of risk factors prior to the emergence of symptoms (stage 0) through to treatment for chronic, persistent and complex conditions (stage 4). While common practice in the treatment of physical health conditions, models of clinical staging are more recently being proposed in military populations for PTSD (McFarlane et al., 2017) and in civilian populations – models that have relevance for defence personnel in the treatment of panic disorder, alcohol use disorders (Cosci & Fava, 2013) and depression and anxiety in younger cohorts (Cross & Hickie, 2017). Recovery-focused clinical staging considers the clinical stage, functional impairment and other support mechanisms the individual may have in place. Online and face-to-face evidence-based interventions are recommended that increase in intensity with each subsequent clinical stage.

Using a clinical staging model clearly makes distinctions between the individual's needs based on a holistic mental health assessment, their risk and protective factor profile and the availability and quality of services. Increasingly, recovery-focused approaches also look at the support networks that could be drawn on, including peers, family and friends. In addressing complex risk factors, it may be necessary to focus on the initial risk, such as a relationship breakdown, while also treating the symptoms of the disorder.

11.2.6 Other areas requiring exploration

Another possible area for exploration, supported by the data, is that online services, rather than being promoted as 'crisis support', could be promoted as 'care when you need it'. The Open Arms 1800 number and Defence 1800IMSICK number are both available as 24/7 telephone support. A slight reorientation from sickness and crisis support to 'care when you need it' could potentially reach those requiring support outside working hours, or those online after 11 pm seeking support and care. Into the future, choice relating to the type of service provided could be built into a multi-modal channel, allowing Defence personnel and veterans to choose from online information, phone and telehealth options. Smart systems could allow cost-effective triage of responses. An example of this working in practice is the New Zealand system 'Home Care Medical', which provides a backbone infrastructure but promotes a front end relevant to the needs of the population it serves.

A body of literature is growing around the important role that peers can play in supporting mental health and wellbeing. This role can be formal – that is, as a part of a shared management, multidisciplinary team – as is the case with the peer-to-peer support network trial being conducted by Open Arms in Townsville, with early promising results. Peer support networks can also be informal, through social networks that allow people to connect and communicate. Increasingly defence- and veteran-specific forums are providing opportunities for online chats. However, they tend to be non-moderated (without facilitation and rules for engagement). Structured forums with peer facilitation, guided safety recommendations and principles of engagement are one area of support that could be explored further, possibly with an existing organisation such as SANE.

Evidence on the role of videoconferencing highlights its effectiveness and potential to reach those who are geographically or socially isolated. Despite concerns that videoconferencing may have a negative impact on the therapeutic alliance, research suggests that this is not the case. For practitioners and policy makers this result is quite profound when coupled with the Transition and Wellbeing Research Programme study results indicating that 30% of Transitioned ADF and 2015 Regular ADF would like to receive their services online. This approach has usually been put forward as a cost-efficient means of delivering services but it is clear from the data that it is also seen as convenient, non-stigmatising and an opportunity to provide choice about how and where the service is delivered. The quality of the service is especially important, and telehealth in Australia is rapidly improving and will continue to improve with the roll-out of the National Broadband Network and greater diversity of services supported by the Digital Transformation Office and the Digital Health Agency.

This study clearly highlights the importance of choice, a demand for a variety of solutions that support access to care, and the importance of face-to-face contact. While approximately 30% of the Transitioned ADF and the 2015 Regular ADF indicated that they would respond well to flexible care packages, the majority preferred face-to-face contact.

11.2.7 Stigma, beliefs about mental health treatment and barriers to care

While considerable effort in Australia has focused on mental health literacy and stigma reduction in civilian populations and the veteran and defence communities, one third of the Transitioned ADF and 2015 Regular ADF hold four or more negative beliefs about seeking treatment for mental disorders. For those with a probable 30-day disorder, up to 50% hold four or more negative beliefs about seeking care (Forbes et al., 2018). Despite negative beliefs, many accessed support and were able to utilise evidence-based treatments. However, the impact on families, the psychological distress experienced by the individual, the challenges for peers and chain of command and the time taken to access evidence-based care all play a significant role in the overall workplace environment, recovery-focused care and return to work if someone has been absent due to stress or mental illness.

Technology can potentially play a critical role in reducing stigmas and barriers to care through creating clear and consistent messages across multiple channels regarding issues such as self-help strategies and the availability and benefit of treatment. This includes messaging in online environments but also as embedded communications in face-to-face services used by serving and ex-serving military personnel. For example, the Defence and DVA High Res website and app and the Right Mix suite of resources could all be promoted as helpful self-management tools during standard primary health care consultations, alongside the promotion of stories of recovery, simple and appropriate pathways to care and evidence-based treatments backed by both professionals and those with a lived experience. Good examples of current initiatives that promote word-of-mouth mental health literacy include the Defence annual Mental Health Day activities, the At Ease suite of resources developed by Defence and DVA, and the Open Arms series of webinars covering a variety of topics such as PTSD, suicide prevention and peer-to-peer support. Ongoing attention should be given to how wellbeing and mental fitness are promoted in the context of all stages of a military career, with a focus on strengths and capacity, and the critical importance of early help seeking in models of recovery.

11.3 Concluding remarks

Increasingly, we have seen the Australian Government embrace technology, with the establishment of a Digital Transformation Agency and the Digital Service Standard (Australian Government Digital Health Agency, 2018b), responsible for cross-portfolio

collaboration. Likewise, the Defence Mental Health and Wellbeing Strategy and the DVA Mental Health Strategy position the person at the centre of care with a focus on whole of person, whole of life. Innovation has promised many things, and in retail, banking, hospitality and travel we have seen significant disruption with the introduction of online shopping and banking and the introduction of new service models such as Uber and Airbnb. This shift has not occurred in health services and, while this study showcases a readiness for it and an uptake of technology, in digital health we will see maximum impact in the next decade in mental health reform only if attention is given to both empowering individuals to use technologies to manage their own mental health and wellbeing and integrating digital health solutions (including online interventions) with face-to-face services in system-wide reform. Most of the literature in peer-reviewed publications describes the development, implementation and evaluation of single interventions in isolation. In the context of serving and ex-serving ADF members, DVA Evidence Compass Rapid Reviews have highlighted the role of telemedicine (Muir, Meyer, & Thomas, 2017) and stepped care (O'Donnell et al., 2014), but one very important question – and an opportunity for defence- and veteran-specific services – is: How can e-mental health interventions be integrated into current services? Given the challenges, particularly in relation to transition from the ADF to civilian life, the seamless management of health care between and across Joint Health Command and Open Arms provides an opportunity to implement evidence-based digital health solutions, and to test those innovations that could make participatory health a reality for current and ex-serving personnel.

Areas where technology could play a role in supporting the integration and coordination of services that require further exploration are:

- taking a holistic approach to wellness (cultural, spiritual, emotional, social, physical and mental health), including the development and implementation of wellbeing plans for all military personnel
- ongoing and coordinated care throughout the stages of career (recruitment, service, conditioning, deployment, post-deployment and transition into civilian life)
- shared responsibility for mental health and wellbeing – which includes increased agency and autonomy for individuals while they engage wrap-around support through the inclusion of family and the community in which they live and work – and implementation with shared management plans
- a whole-of-organisation system that works across the Navy, Army and Air Force, including a focus on transition into civilian life

- integrated monitoring and improving performance through continuous improvement practices
- building through the use of digital assets a trusted brand and an environment that promotes early help seeking.

Underpinning these principles is the need to have impact across four areas:

- improved experience for serving and ex-serving ADF members – with the aim to be seen as a partner in health care, with improved self-reported experiences of care
- better outcomes – offering a solution that aims to drive early help seeking and support to appropriate mental health care with a focus on improved outcomes, including performance targets, indicators and data with research and evaluation built into service models
- improved workforce experience – a system of care with a workforce operating at 'top of scope' with a focus on attracting and retaining high-quality skilled staff. Workforce training should include training in shared care, person-centred care and clinical staging and the use of technology as an adjunct to care
- lower cost per capita – through a model of stepped care and clinical staging, including the integration of technologies, aiming to reduce the cost per care episode by reducing waste and ensuring efficient care for the healthcare dollar.

This report examined how the Transitioned ADF and 2015 Regular ADF use technology in the context of self-reported poor mental health and the complex interaction between barriers to access to care and stigmatising attitudes. The data presented in this report provides a unique opportunity for Defence and DVA to be thought leaders in the exploration and implementation of an integrated system of care to better support the mental health and wellbeing of currently serving and ex-serving members of the ADF. This change, however, cannot be achieved alone, will take time and needs to be done in partnership with the broader health service system, the defence and veteran communities, industry and academia to create a continuous cycle of research driving practice and policy.

Annex A Mental Health and Wellbeing Transition Study method

This annex outlines the study design, selection criteria, instrumentation, recruitment strategy and statistical procedures used for the Mental Health and Wellbeing Transition Study. Details of the Impact of Combat Study and the Family Wellbeing Study will be outlined in future reports.

A.1 Summary of the research

The Transition and Wellbeing Research Programme is a joint research initiative of the Department of Veterans' Affairs (DVA) and the Department of Defence (Defence) to examine the impact of contemporary military service on the mental, physical and social health of serving and ex-serving Australian Defence Force (ADF) members and their families. It builds on previous research and will inform effective and evidence-based health and mental health service provision.

The Programme was conducted by a consortium of six of Australia's leading research institutions, led by the Centre for Traumatic Stress Studies (CTSS) at the University of Adelaide and the Australian Institute of Family Studies. The consortium included researchers from Phoenix Australia: Centre for Posttraumatic Mental Health, the University of New South Wales, Monash University and the University of Sydney.

The 2010 Military Health Outcomes Program (MilHOP) detailed the prevalence of mental disorder in the 2010 Regular ADF and deployment-related health issues for those deployed to the Middle East Area of Operations (MEAO) between 2010 and 2012. Following the MilHOP, several research gaps were identified, including the mental health of ex-serving ADF members, Reservists, family members and ADF members in high-risk roles, as well as the course of mental disorders and pathways to care for individuals over time.

The Programme aimed to address these research gaps in three separate but related studies:

- Mental Health and Wellbeing Transition Study
- Impact of Combat Study
- Family Wellbeing Study.

A.2 Aims of the Programme

The Transition and Wellbeing Research Programme objectives were to:

- determine the prevalence of mental disorders among ADF members who have transitioned from Regular ADF service between 2010 and 2014
- examine the self-reported mental health status of Transitioned ADF and the 2015 Regular ADF
- examine the physical health status of Transitioned ADF and the 2015 Regular ADF
- assess pathways to care for Transitioned ADF and the 2015 Regular ADF, including those with a diagnosed mental disorder
- examine the factors that contribute to the wellbeing of Transitioned ADF and the 2015 Regular ADF
- conduct predictive modelling of the trajectory of mental health symptoms/disorder of Transitioned ADF and the 2015 Regular ADF, removing the need to rely on estimated rates
- investigate technology and its utility for health and mental health programmes, including implications for future health service delivery
- follow up on the mental, physical and neuro-cognitive health and wellbeing of ADF members who deployed to the MEAO between 2010 and 2012
- investigate the social, physical and mental health and wellbeing of 2015 Ab-initio Reservists (those who joined as Reservists and have served only in the Reserves)
- investigate the impact of ADF service on the health and wellbeing of the families of Transitioned ADF and the 2015 Regular ADF.

These objectives will allow Defence and DVA to:

- build on the 2010 MilHOP research to develop an understanding of how mental health changes and manifests during the readjustment phase post-separation
- develop insights into how to improve communication between contemporary veterans, DVA and Defence
- further develop the research outcomes and optimise the use of existing data sets within DVA and Defence in relation to improving the understanding of the mental health of serving and Ex-Serving members and the access to clinical services and their outcomes
- develop the objective knowledge base of DVA and Defence staff and other interested parties in the mental health of serving and transitioned members

- improve the mental health (and associated physical health) outcomes for serving and ex-serving members across all age cohorts
- review the optimal method of conducting scientifically valid and reliable research with the ADF and ex-serving members that is accepted to the participants, the ex-serving community, the ADF and DVA.

A.3 Sample

To achieve the aims of the broader research Programme, the following five overlapping samples were targeted for data collection.

A.3.1 Sample 1: Transitioned ADF

This sample comprised all ADF members who transitioned from the Regular ADF between 2010 and 2014. This included those who transitioned into the Active and Inactive Reserves as well as those who had discharged completely from the Regular ADF. This sample comprised three groups of transitioned ADF members: (1) MHPWS Transitioned ADF (ADF members who participated in the 2010 ADF Mental Health Prevalence and Wellbeing Study as a Regular ADF member but have since transitioned); (2) Combat Transitioned ADF (ADF members who participated in the MEAO Prospective Health Study between 2010 and 2012 and have since transitioned); and (3) ADF members who have transitioned from the Regular ADF since 2010 who were not part of the 2010 MHPWS or the MEAO Prospective Health Study. Results from these three groups were combined and weighted to represent the Transitioned ADF in 2015.

A.3.2 Sample 2: 2015 Regular ADF

This sample comprises three groups of Regular ADF members in 2015 who were invited to participate in the study: (1) those who participated in the 2010 MHPWS and were Regular ADF members in 2015; (2) those who participated in the MEAO Prospective Health Study between 2010 and 2012 and were Regular ADF members in 2015; and (3) a stratified random sample of Regular ADF members from 2015 who were not part of the 2010 MHPWS or the MEAO Prospective Health Study. Results from these three groups were combined and weighted to represent the 2015 Regular ADF.

A.3.3 Sample 3: Ab-initio Reservists

All ADF members who joined the ADF Reserves and who continue to serve in a Reserve capacity, and who have never been a serving Regular ADF member.

A.3.4 Sample 4: ADF families

A sample of ADF families, nominated by 2015 Regular ADF and ex-serving ADF members participating in the Programme.

Two MilHOP samples, which were incorporated into samples 1 and 2 above for the purposes of analysis, were also followed up as part of an ongoing program of longitudinal health surveillance. These samples are described in A.3.5 and A.3.6 below.

A.3.5 Sample 5: Combat zone

All ADF members who participated in the MEAO Prospective Health Study, comprising members who were deployed to the MEAO after June 2010 and returned from deployment by June 2012.

A.3.6 Sample 6: MHPWS

All individuals who participated in the 2010 MHPWS component of MilHOP (2010 ADF). This sample comprised two groups: (1) MHPWS Transitioned ADF (ADF members who participated in the 2010 MHPWS as a Regular ADF member but have since transitioned); and (2) MHPWS 2015 ADF (Regular ADF members who participated in the 2010 MHPWS and were in the 2015 Regular ADF).

DVA and Defence have commissioned several reports from the research Programme, and Table A.1 presents the samples each report will cover. All samples were drawn from the Military and Veteran Research Study Roll (Study Roll), which is described in section A.11.2 of this annex.

A.4 Population comparison samples

A.4.1 Sample 7: 2010 Regular ADF comparison

Results drawn from the 2010 MHPWS report were directly imputed into this report to provide an indication of the change in self-reported mental health between the 2010 Regular ADF and the 2015 Regular ADF. These results should be interpreted with caution because of the overlapping of these two populations.

A.4.2 Sample 8: Comparison of Transitioned ADF with the Australian community (2014–2015)

To enable comparison of estimates in the Transitioned ADF with an Australian community population, direct standardisation was applied to estimates within the 2014–2015 ABS National Health Survey (NHS) data. The NHS is the most recent in a series of Australia-wide ABS health surveys, assessing various aspects of the health of Australians, including long-term health conditions, health risk factors and health service use. The NHS data were restricted to those aged 18–71 (consistent with the Transitioned ADF). The NHS data were standardised by sex, employment status (employed or not) and age category (18–27, 28–37, 38–47, 48–57 and 58+), and estimates were generated on the outcomes of interest. Standard errors for the NHS data were estimated using the replication weights provided in the NHS data file.

Table A.1 Commissioned reports

Report	Programme goal	Samples	Data collection
Mental Health Prevalence Report: findings from the 2015 Mental Health and Wellbeing Transition Study	Establish baseline prevalence rates of mental disorders among ADF members who transitioned from full-time ADF service	• ADF members who transitioned from full-time ADF service between 2010 and 2014 • 2015 Regular ADF • Comparison with 2010 ADF and community, where appropriate	• Self-report questionnaire • CIDI (subgroup)
Pathways to Care Report: findings from the 2015 Mental Health and Wellbeing Transition Study	Pathways to mental health care for serving and Transitioned ADF members, including those with a mental health disorder, including: • how care is accessed • use patterns • stigmas and barriers	• ADF members who transitioned from full-time ADF service between 2010 and 2014 • 2015 Regular ADF	• Self-report survey
Physical Health Status Report: findings from the 2015 Mental Health and Wellbeing Transition Study	Physical health status of members of 2015 Regular ADF and Transitioned ADF, including: • symptom reporting, including pain and sleep • doctor-diagnosed medical conditions • physical injuries • satisfaction with health	• ADF members who transitioned from full-time ADF service between 2010 and 2014 • 2015 Regular ADF	• Self-report survey
Family Wellbeing Report: findings from the 2015 Family Wellbeing Study	Experiences and perspective of family members on: • impact of military service on families • pathways to available care	• Nominated family members of serving Regular ADF members and ADF members who transitioned from full-time service between 2010 and 2014	• Self-report survey (quantitative component) • Semi-structured telephone interviews (qualitative component)
Technology Use and Wellbeing Report: findings from the 2015 Mental Health and Wellbeing Transition Study	Utility of technology for mental health and mental health programs, including implications for future health service delivery	• ADF members who transitioned from full-time service between 2010 and 2014 • 2015 Regular ADF	• Self-report survey
Impact of Combat Report: findings from the 2015 Impact of Combat Study	• Longitudinal impact of deployment to MEAO on psychological, biological and social factors • risk and protective factors • traumatic brain injury	• Serving and ex-serving ADF members who deployed to the MEAO between June 2010 and June 2012 and participated in MilHOP (Combat Zone sample)	• Self-report survey • CIDI (sub-group) • Neurocognitive and/or biological tests (subgroups) • MRI (subgroup)
Mental Health Changes Over Time: a Longitudinal Perspective Report: findings from the 2015 Mental Health and Wellbeing Transition Study	Longitudinal disorder development: • changes in symptom and disorder status over two time-points • predictors/outcomes of these changes	• 2015 Regular ADF • Transitioned ADF members who previously participated in MilHOP (MHPWS CIDI sample)	• Self-report questionnaire • CIDI (subgroup)
Transition and Wellbeing Research Programme Key Findings Report	Key findings across the Programme and implications for Defence and DVA	All	All

A.5 Response rates

A.5.1 Survey responders

Overall, there was a response rate of 29.1% for the entire survey across both the Transitioned ADF and Regular ADF (total responders/total invited). At 15 December 2015, 18.0% (4326) of the 23,974 Transitioned ADF members invited to participate had completed a survey. In contrast, response rates in the invited 2015 Regular ADF (20,031) were much higher, with 42.3% of the 2015 Regular ADF who were invited to participate completing a survey. However, it is important to note that not all Regular ADF members were invited to participate in the survey, with invitations restricted to a stratified random sample of 5040 ADF members and Regular ADF members who previously participated in MilHOP. Similarly, 958 Transitioned ADF members were not invited to participate in the survey because they had opted out of the Study Roll or opted out of being contacted further, or there was insufficient address information.

Table A.2 and Figure A.1 summarise the breakdown of Transitioned ADF and 2015 Regular ADF members with enough data to be included in the survey. Table A.3 describes the demographic profile of this group.

Table A.2 Survey response rates by service, sex, rank and medical fitness for the Transitioned ADF and the 2015 Regular ADF

	Transitioned ADF (n=24,932)				2015 Regular ADF (n=52,500)			
	Population	Invited	Responders	Response rate %	Population	Invited	Responders	Response rate %
Service								
Navy	5671	5495	863	15.7	13,282	5113	2040	39.9
Army	15,038	14,465	2463	17.0	25,798	8067	3500	43.4
Air Force	4223	4014	1000	24.9	13,420	6851	2940	42.9
Sex								
Male	21,671	20,713	3646	17.6	47,645	15,176	6693	44.1
Female	3261	3261	380	20.9	4855	4855	1787	36.8
Rank								
OFFR	4063	3939	1259	32.0	13,444	7847	3538	45.1
NCO	7866	7393	2097	28.4	17,491	9117	4336	47.6
Other Ranks	13,003	12,642	970	7.7	21,565	3067	606	19.7
Medical fitness								
Fit	18,273	17,525	2981	17.0	46,022	17,097	7116	41.6
Unfit	6659	6449	1345	20.9	6478	2934	1364	46.5
Total	24,932	23,974[a]	4326	18.0	52,500	20,031	8480	42.3

Notes
Unweighted data.
95%CI = 95% confidence interval.

The characteristics of survey respondents were as follows:

Sex – Consistent with the Transitioned ADF population, the sample was predominantly male, with transitioned females being significantly more likely to respond than transitioned males. In the 2015 Regular ADF population, females were less likely to respond than males.

Age – Transitioned ADF survey responders (mean age 41.9 [SE 0.18]) were similar in age to the 2015 Regular ADF responders (mean age 41.1 [SE 0.1]).

Rank – Survey responders from the Transitioned ADF comprised 29.1% Officers, 48.5% Non-Commissioned Officers and 22.4% Other Ranks. In the 2015 Regular ADF, there was a similar distribution, with 41.7% Officers, 51.1% Non-Commissioned Officers and 7.2% Other Ranks. The Transitioned ADF population had significantly lower response rates for Officers and Non-Commissioned Officers, but significantly higher response rates in the Other Ranks compared to the 2015 Regular ADF. In both groups, the lower ranks were the poorest responders.

Service – In the Transitioned ADF survey group, 19.9% of survey responders were Navy, 56.9% were Army and 23.1% were Air Force. However, for the Regular 2015 ADF, 34.7% of survey responders were Navy, 41.3% were Army and 24.1% were Air Force. When response rates in the different services were compared, Transitioned Air Force members were most likely to respond, whereas Transitioned Army and Transitioned Navy members were least likely to respond. In the 2015 Regular ADF, Army had the highest response rate at 41.3%.

Medical fitness – Transitioned ADF who were medically unfit on transition from the 2015 Regular ADF were slightly over-represented in the responder group (31.1%) compared to the 2015 Regular ADF population (16.1%). Transitioned ADF who were medically unfit had a response rate of 21.0% compared to 46.5% in the 2015 Regular ADF population.

Figure A.1 Survey response rates for Transitioned ADF and 2015 Regular ADF

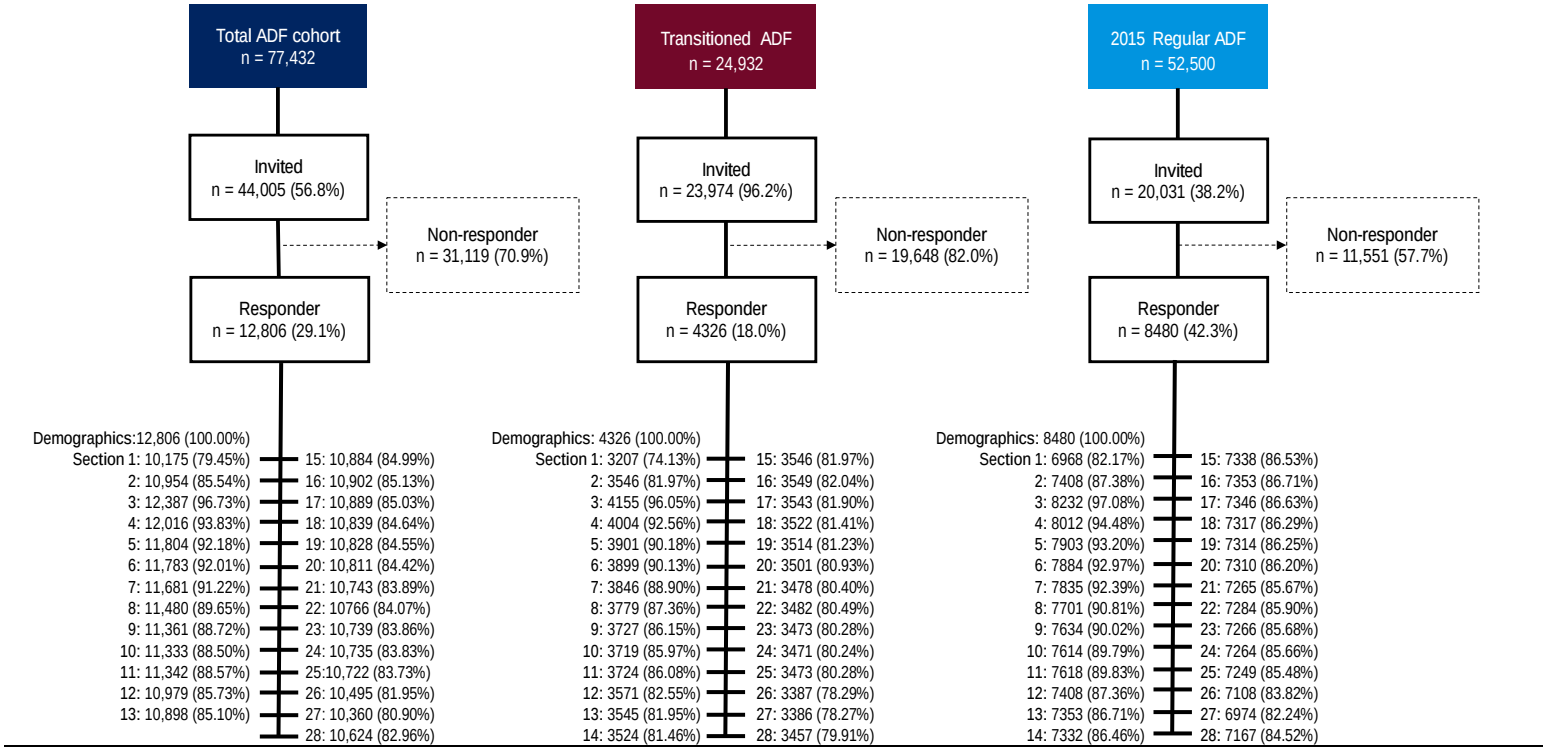


Table A.3 Unweighted demographic characteristics of responders by Transitioned ADF and 2015 Regular ADF

	Transitioned ADF (n=4326)			2015 Regular ADF (n=8480)		
	n	%	95% CI	n	%	95% CI
Age (M, SE)	41.9	0.2		41.1	0.1	
Age group						
18–27	471	10.9	(10.0 – 11.9)	602	7.1	(6.6 – 7.7)
28–37	1262	29.2	(27.8 – 30.5)	2484	29.3	(28.3 – 30.3)
38–47	1119	25.9	(24.6 – 27.2)	2976	35.1	(34.1 – 36.1)
48–57	871	20.1	(19.0 – 21.4)	2069	24.4	(23.5 – 25.3)
58+	548	12.7	(11.7 – 13.7)	201	2.4	(2.1 – 2.7)
Sex						
Male	3646	84.3	(83.2 – 85.3)	6693	78.9	(78.0 – 79.8)
Female	680	15.7	(14.7 – 16.8)	1787	21.1	(20.2 – 22.0)
Rank						
OFFR	1259	29.1	(27.8 – 30.5)	3538	41.7	(40.7 – 42.8)
NCO	2097	48.5	(47.0 – 50.0)	4336	51.1	(50.1 – 52.2)
Other Ranks	970	22.4	(21.2 – 23.7)	606	7.2	(6.6 – 7.7)
Service						
Navy	863	20.0	(18.8 – 21.2)	2940	34.7	(33.7 – 35.7)
Army	2463	56.9	(55.5 – 58.4)	3500	41.3	(40.2 – 42.3)
Air Force	1000	23.1	(21.9 – 24.4)	2040	24.1	(23.2 – 25.0)
Medical fitness						
Fit	2981	68.9	(67.5 – 70.3)	7116	83.9	(83.1 – 84.7)
Unfit	1345	31.1	(29.7 – 32.5)	1364	16.1	(15.3 – 16.9)

Notes
Denominator: Those who were invited and responded to the survey.
Unweighted data.
95%CI = 95% confidence interval.

A.5.2 CIDI responders

In phase 2 of the research, a sub-sample of 1384 individuals from the stratified Transitioned ADF group, 1088 individuals from the MHPWS group and 183 from the Combat Zone group were selected to participate in a one-hour telephone interview using the World Mental Health Survey Initiative Version of the World Health Organization Composite International Diagnostic Interview – version 3.0 (CIDI) (Kessler & Ustun, 2004). Data from all three groups was used to estimate prevalence of mental disorder in the Transitioned ADF.

Stratified Transitioned ADF

A total of 1384 participants were stratified and sought for participation (selected) in the CIDI 3.0. Of those selected, 53.8% (745) completed the interview. Table A.4 describes the response rates for the stratified Transitioned ADF undertaking the CIDI interview and Table A.5 describes the demographic profile of this group.

Table A.4 CIDI response rates for stratified Transitioned ADF by service, sex, rank and MEC status

	Stratified Transitioned ADF CIDI (n=1384 (selected); n=745 (responded))			
	Population	Selected	Responders	Response rate (%)
Service				
Navy	5671	285	150	52.6
Army	15,038	795	424	53.3
Air Force	4223	304	171	56.3
Sex				
Male	21,671	1140	631	55.4
Female	3261	235	109	45.0
Rank				
OFFR	4063	423	252	59.6
NCO	7866	694	389	56.1
Other Ranks	13,003	267	104	39.0
Medical fitness				
Fit	18,273	932	521	55.9
Unfit	6659	443	219	49.4
Total	24,932	1384	745	53.8

Notes
Denominator: Transitioned ADF Invited to participate in the CIDI interview.
Unweighted data.
95%CI = 95% confidence interval.

The characteristics of Transitioned CIDI respondents were as follows:

Sex – Consistent with the Transitioned ADF population, the CIDI sample was predominantly male; however, transitioned females were less likely to complete a CIDI interview than transitioned males.

Age – Transitioned CIDI responders were significantly older (45.6 [SE=0.4]) than non-responders 40.4 (SE 0.5).

Rank – CIDI responders comprised 33.8% Officers, 52.2% Non-Commissioned Officers and 14.0% Other Ranks. ADF members in the Other Ranks had a significantly lower response rate (39.0%) compared to above 50% for those invited in Non-Commissioned Officers and Officers who were more likely to respond.

Service – 20.1% of CIDI responders were Navy, 56.9% were Army and 23.0% were Air Force. There was no significant difference between CIDI responders and non-responders in relation to service.

Medical fitness – Transitioned ADF who were medically unfit on transition from the Regular ADF comprised 29.4% of CIDI responders.

Table A.5 Demographic characteristics of stratified Transitioned ADF CIDI responders

	Stratified Transitioned ADF CIDI responders (n=745)		
	n	%	95% CI
Age (M, SE)	45.6	0.4	
Age group			
18–27	50	6.7	(5.1, 8.7)
28–37	171	23.0	(20.1, 26.1)
38–47	177	23.0	(20.8, 26.9)
48–57	179	24.0	(21.1, 27.2)
58+	163	21.9	(19.1, 25.0)
Sex			
Male	631	84.7	(81.9, 87.1)
Female	109	14.6	(12.3, 17.4)
Rank			
OFFR	252	33.8	(30.5, 37.3)
NCO	389	52.2	(48.6, 55.8)
Other Ranks	104	14.0	(11.7, 16.6)
Service			
Navy	150	20.1	(17.4, 23.2)
Army	424	56.9	(53.3, 60.4)
Air Force	171	23.0	(20.1, 26.1)
Medical fitness			
Fit	521	69.9	(66.5, 73.1)
Unfit	219	29.4	(26.2, 32.8)

Notes
Denominator: Transitioned ADF Invited to participate in the CIDI interview.
Unweighted data.
95% CI = 95% confidence interval.

Mental Health Prevalence and Wellbeing Study group

A total of 1088 participants from this group were invited to participate in the CIDI 3.0. Of those invited, 76.8% (835) completed the interview. Table A.6 describes the response rates for this group.

Table A.6 CIDI response rates for the MHPWS group, by service, sex, rank and Medical Employment Classification status

	MHPWS CIDI (n=1088 (invited); n=835 (responded)		
	Invited	Responders	Response rate (%)
Service			
Navy	237	175	73.8
Army	462	349	75.5
Air Force	389	311	80.0
Sex			
Male	903	698	77.3
Female	182	135	74.2
Missing	3	2	66.7
Rank			
OFFR	451	375	83.2
NCO	576	425	73.8
Other Ranks	61	35	57.4
Medical fitness			
Fit	758	590	77.8
Unfit	327	243	74.3
Missing	3	2	66.7
Total	1088	835	76.8

Notes
Denominator: MHPWS sample invited to participate in the CIDI interview.
Unweighted data.
95% CI = 95% confidence interval.

The characteristics of the MHPWS group CIDI respondents were as follows:

- **Sex** – The MHPWS sample consisted of both 2015 Regular and Transitioned ADF members. Consistent with the ADF population, the CIDI sample was predominantly male, with females being less likely to respond than males.
- **Rank –** CIDI responders in this group comprised 44.9% Officers, 50.9% Non-Commissioned Officers and 4.2% Other Ranks. Other Ranks were less likely to respond than the other two ranking categories.
- **Service –** 21.0% of survey responders were Navy, 41.8% were Army and 37.2% were Air Force. There was no difference between CIDI responders and non-responders in relation to service.
- **Medical fitness** – ADF members who were medically unfit were similarly represented in the CIDI responder group (29.1%) compared to those selected (30.1%). ADF members who were medically fit were also similarly represented in the CIDI responder group (70.7%) compared with the invited population (69.7%).

Therefore, the responder sample was representative in terms of medical fitness of the selected group.

Combat Zone group

A total of 183 participants from this group were invited to participate in the CIDI 3.0. Of those invited, 76.5% (140) completed the interview. Table A.7 describes the response rates for this group.

Table A.7 CIDI response rates for the Combat Zone group, by service, sex, rank and Medical Employment Classification status

	Combat Zone group CIDI (n=183 (invited); n=140 (responded))		
	Invited	Responders	Response rate (%)
Service			
Navy	10	10	100
Army	143	111	77.6
Air Force	0	0	0.0
Missing	30	19	63.3
Sex			
Male	148	118	79.7
Female	2	2	100.0
Missing	33	20	60.6
Rank			
OFFR	20	16	80.0
NCO	101	77	76.2
Other Ranks	47	39	83.0
Missing	15	8	53.3
Medical fitness			
Fit	130	103	79.2
Unfit	21	17	81.0
Missing	32	20	62.5
Total	183	140	76.5

Notes
Denominator: Combat zone sample invited to participate in the CIDI interview.
Unweighted data.
95% CI = 95% confidence interval.

The characteristics of the Combat Zone group CIDI respondents were as follows:

- **Sex** – The Combat Zone CIDI sample consisted of both 2015 Regular ADF and Transitioned ADF members. Consistent with the ADF population, the CIDI sample was almost entirely male. Of the two females selected, both responded.
- **Rank –** CIDI responders in this group comprised 11.4% Officers, 55.0% Non-Commissioned Officers and 27.9% Other Ranks. Other Ranks were less likely to respond than the other two ranking categories.

- **Service –** 7.1% of survey responders were Navy, 79.3% were Army and 0% were Air Force. There was no difference between CIDI responders and non-responders in relation to service.

- **Medical fitness –** ADF members who were medically unfit were similarly represented in the CIDI responder group (12.14%) compared to those selected (11.5%). ADF members who were medically fit were also similarly represented in the CIDI responder group (73.6%) compared to the invited population (71.0%). Therefore, the responder sample was representative in terms of medical fitness of the selected group.

A.6 Study overview

Prevalence estimates were obtained using a two-phase design. This is a well-accepted approach to epidemiological research (Salim & Welsh, 2009), which was utilised in the 2010 Mental Health Prevalence Wellbeing Study (McFarlane et al., 2011). In the first phase, participants completed a screening questionnaire. This provided the research team with a clear picture of psychological symptoms from a dimensional perspective.

Based on certain key results from the survey and specific demographic factors, a subset of participants was also selected to participate in a 1-hour diagnostic mental health telephone interview. Additional biological, neurocognitive testing and magnetic resonance imaging (MRI) was undertaken by participants in the Combat Zone sample. A detailed description of this additional testing is not provided here but will be provided in a later report.

Interview data for the Transitioned ADF was weighted to ensure the representativeness of the prevalence estimates for key subgroups within the total Transitioned ADF population. Self-report survey data were also weighted to be representative of both the Transitioned ADF and the 2015 Regular ADF.

A.7 Measures

A.7.1 Phase 1: Self-report survey

In phase 1 of the Mental Health and Wellbeing Transition Study, Transitioned ADF and 2015 Regular ADF members were screened for mental health problems, psychological distress, physical health problems, wellbeing factors, pathways to care and occupational exposures using a 60-minute self-report questionnaire which was completed either online or in hard copy. This survey was developed at the beginning of the study period in close consultation with DVA and Defence. Survey anonymity was preserved by allocating a unique study ID number to each participant. Participants who

had previously completed a survey as part of the 2010 Mental Health Prevalence Wellbeing Study were allocated their same MilHOP study ID number.

Participants were able to complete the survey in one of two ways:

- online – participants were sent an email which included a secure link to an online invitation package containing the web-based survey. Participants could access the survey only by entering their unique study ID number and the password provided to them in the invitation email
- in hardcopy – participants could opt to complete a hard copy version of the questionnaire, which was then mailed to their current postal address.

Each participating sample received a slightly different questionnaire relevant to their current ADF status: Transitioned ADF member, 2015 Regular ADF member, Ab-initio Reservist. In regard to demographics, service and deployment history, however, the core-validated measures of psychological and physical health remained the same, and replicated where possible the measures previously administered as part of the MHPWS in 2010. This component of the design is critical to the longitudinal comparisons across time and highlights the importance of a consistent approach to the oversight of research design of military and veteran populations over time.

Prior to roll-out, the online and hardcopy versions of the self-report survey were piloted with a select group of 2015 Regular ADF and ex-serving ADF members. Individuals in the pilot group were asked to provide detailed feedback pertinent to the content and adequacy of the survey and the usability of the system/form. Their comments and feedback were then incorporated in the final version of the survey. This ensured that there were no mistakes in the survey or glitches in the system prior to the study rolling out.

Please note, details of the survey provided to participants belonging to the Combat Zone sample are not provided here, but will be provided in a later report.

Part 1: Demographics and Service details

Part 1 of the survey was completed by all samples and comprised the major sections described below.

Demographic information

Participants were asked to provide demographic information for gender, date of birth and highest educational qualification attained. These items were taken directly from the 2010 MHPWS (McFarlane et al., 2011).

Household and family structure

Participants were asked questions about their relationship status, household structure and children. Items in this section were derived from several sources including the Timor-Leste Family Study (McGuire et al., 2012), the Household, Income and Labour Dynamics in Australia (HILDA) Survey (Watson & Wooden, 2002) and the 2014 Vietnam Veterans Family Study conducted by DVA (Forrest, Edwards, & Daraganova, 2014).

Financial status

Items assessing participants' current financial status, including financial hardship, were taken from the HILDA Survey (Watson & Wooden, 2002) and the Health and Wellbeing Survey of Serving and Ex-Serving Personnel of the UK Armed Forces: Phase 2 (Fear et al., 2010).

Homelessness

This section of the survey comprised eight questions from the 2010 ABS General Social Survey (GSS) (Australian Bureau of Statistics, 2011) that addressed lifetime and recent episodes of homelessness. Items looked at:

- participants' experiences of homelessness
- reasons for homelessness
- frequency of homelessness
- details about their most recent experience of homelessness (reason for homelessness, time frame, recency)
- assistance sought during period(s) of homelessness/helpfulness of these services
- barriers to seeking support.

ADF service details

Participants were asked a series of questions specific to their employment with the ADF, including the number of years served, current service status, hours worked per week, rank and service. Depending on their rank and service, participants were also asked a series of questions pertaining to their specialty and specific role within the ADF. Items in this section were taken from the Australian Bureau of Statistics *2007 National Survey of Mental Health and Wellbeing: Summary of Results* (Australian Bureau of Statistics, 2008) and the 2011 Australian Defence Force Exit Survey (Shirt, 2012).

Feelings about the ADF

This section of the survey aimed to assess participants' level of organisational commitment. Four items were taken from Allen and Meyer's Affective Commitment

Scale (Allen & John, 1990) and the other four items were developed by researchers for the study.

Transitioned ADF members were also asked additional questions in part 1 pertaining to the categories set out below.

Employment status

In this section of the survey participants were asked about their current employment activities. Examples of options included 'full time work greater than or equal to 30 hours paid employment per week', 'home duties' and 'unemployed/looking for work'. Unemployed members were also required to provide a reason for their unemployed status. Items in this section were taken from the Young and Well Cooperative Research Centre standard suite of measures (Burns et al., 2013) and the Health and Wellbeing Survey of Serving and Ex-Serving Personnel of the UK Armed Forces: Phase 2 (Fear et al., 2010).

Participants were also required to provide details about their current civilian employment, including the number of hours worked per week, the industry of employment and their main source of income. Items in this section were derived from the Health and Wellbeing Survey of Serving and Ex-Serving Personnel of the UK Armed Forces: Phase 2 (Fear et al., 2010), the Australian Defence Force Exit Survey (Shirt, 2012) and the Household, Income and Labour Dynamics in Australia (HILDA) Survey (Watson & Wooden, 2002). Participants were also asked to indicate whether they had experienced a period of unemployment greater than three months since transitioning, and when this period began. This item was taken from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

Reservist status

In this section of the survey participants were asked about their Reservist status and, where relevant, to provide details pertaining to their Reservist employment, including their full-time/part-time status, the number of hours worked and weeks away for Reservist work. Items in this section were taken from the Soldier Wellbeing Survey (Riviere, 2011; Thomas, 2010).

Year of transition

Participants were asked to indicate what year they transitioned into Active Reserves/Inactive Reserves/out of the ADF. These questions were taken from the Health and Wellbeing Survey of Serving and Ex-Serving Personnel of the UK Armed Forces: Phase 2 (Fear et al., 2010) and the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

Change in relationship status

Participants were asked to indicate whether their relationship status had changed since transitioning from full-time Regular ADF service. If divorced, separated or widowed since transition, participants were asked to provide a date. This item in the survey was taken from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

ADF separation details

This section of the survey comprised two parts. Firstly, participants were asked about their discharge/resignation category. Examples of options included 'medical discharge', 'compassionate grounds' and 'end of fixed period engagement'. In part 2, participants were provided with a comprehensive list of reasons for leaving the ADF and asked to mark all that played a role in their decision to leave. Participants were also asked to indicate the main reason of those selected. Items in this section were based on the current exit survey utilised by the ADF (Shirt, 2012).

ADF Reservists were also asked additional questions pertaining to the categories set out below.

Reservist details

Participants were asked to provide details in relation to the following: length of time served as a Reservist, Reservist status, periods of continuous full-time service, hours worked per week in the past month, weeks away in the past five years, and satisfaction with participation in the Reserves. Items in this section were derived from the Soldier Wellbeing Survey (Riviere, 2011; Thomas, 2010), the Health and Wellbeing Survey of Serving and Ex-Serving Personnel of the UK Armed Forces: Phase 2 (Fear et al., 2010) and the RAND Guard/Reserve Survey of Officer and Enlisted Personnel (Kirby & Naftel, 1998). Other items were developed specifically by researchers for use in the study.

Civilian employment

Participants were asked a series of questions about the following in relation to their civilian role (if relevant): employer knowledge of Reservist role, employer attendance at Reservist events, employer support of military affiliation, impact of Reservist duties on civilian role, and a comparison of duties and responsibilities across Reservist and civilian roles. Items in this section were derived from the Soldier Wellbeing Survey (Riviere, 2011; Thomas, 2010), The Middle East Area of Operations (MEAO) Health Study: Prospective Study (Davy et al., 2012) and the ADF Exit Survey (Shirt, 2012). Information about current employment activities and details of civilian employment was also collected as described in the previous section about transitioned members.

Contribution to the ADF

Participants' perceptions of their contribution to the ADF was measured using a single item – 'How important do you think your contribution is towards the ADF?' Anchors

ranged from 'not at all important' to 'very important'. This item was taken from the RAND Guard/Reserve Survey of Officer and Enlisted Personnel (Kirby & Naftel, 1998).

How the ADF deals with Reservists

Participants' perceptions of how well the ADF deals with, understands and accepts Reservists were assessed using three items measured on a 5-point scale ranging from 'very poor' to 'very good'.

Getting Help (Reservist-specific)

This section of the survey was developed by researchers and looked at the following: mental health problems resulting from Reservist experience, help sought for these problems, help sought and received from ADF services/non-Defence organisations, benefits sought and received from DVA.

Part 2: Health and Wellbeing Survey

Part 2 of the survey was completed by all samples specific to the Mental Health and Wellbeing Transition Study and included the factors described in the following sections.

Deployments

In this section of the survey, participants were asked to provide detailed information about their deployment history with the ADF. Deployments were grouped into the following categories: war-like/active service, non-war-like (peacekeeping) service, humanitarian/disaster relief, Defence aid and border protection. For each applicable deployment listed, participants were asked to indicate which country they were deployed to, the name of the operation, the dates they were deployed, the number of times they were deployed, the total number of months deployed, and whether they were deployed in a combat capacity. Items in this section were adapted from the 2010 Mental Health Prevalence Wellbeing Study (McFarlane et al., 2011).

Deployment exposure

Participants were presented with a list of deployment exposures and asked to indicate how many times they had experienced each one during their military career. Response categories ranged from 'never' to '10+ times'. Examples of events included exposure to 'hazardous materials', 'discharge of weapon in direct combat', and 'handled or saw dead bodies'. Items in this section were drawn from the MEAO Census Study (Dobson et al., 2012).

Quality of life

This section of the survey comprised three items that assessed general health, satisfaction with health and quality of life. General health was measured using the first item of the Short Form 36 Health Survey (SF36) (Ware & Sherbourne, 1992), referred to as the Form 1 (SF1). The SF1 is a single item that is increasingly being utilised in

population studies as an indicator of overall health status. Items assessing general health and satisfaction with health were taken from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

Depression

Self-reported depression was examined using the Patient Health Questionnaire-9 (PHQ-9) (Kroenke et al., 2001). The nine items of the PHQ-9 are scored from 0 to 3 and summed to give a total score between 0 and 27. The PHQ-9 provides various levels of diagnostic severity, with higher scores indicating higher levels of depression symptoms.

Generalised anxiety disorder

Generalised anxiety disorder was measured via the Generalised Anxiety Disorder 7 (GAD-7) (Spitzer et al., 2006). Each of the seven items is scored from 1 to 3, providing a total generalised anxiety score ranging between 0 and 21. Participants were asked to rate each item in the GAD-7 in relation to last two weeks only.

Sleep problems

Self-perceived insomnia was examined via the Insomnia Severity Index (ISI) (Bastien, Vallieres, & Morin, 2001). The ISI comprises seven items assessing the severity of sleep-onset and sleep-maintenance difficulties, satisfaction with current sleep pattern, interference with daily functioning, noticeability of impairment attributed to the sleep problem, and degree of distress or concern caused by the sleep problem.

Each item is rated on a 0–4 scale and the total score ranges from 0 to 28. A higher score suggests more severe insomnia.

General psychological distress

The Kessler Psychological Distress Scale (K10) (Kessler et al., 2002) is a short 10-item screening questionnaire that yields a global measure of psychological distress based on symptoms of anxiety and depression experienced in the most recent four-week period. Items are scored from 1 to 5 and are summed to give a total score between 10 and 50. Various methods have been used to stratify the scores of the K10. The categories of low (10–15), moderate (16–21), high (22–29) and very high (30–50) that are used in this report are derived from the cut-offs of the K10 that were used in the 2007 ABS Australian National Mental Health and Wellbeing Survey (Slade, Johnston, Oakley Browne, Andrews, & Whiteford, 2009) and were used to identify levels of psychological distress in the 2010 ADF Mental Health Prevalence and Wellbeing Study (McFarlane et al., 2011).

Anger

The Dimensions of Anger Reactions Scale (DAR-5) (Forbes et al., 2004) is a concise measure of anger. It consists of five items that address anger frequency, intensity, duration, aggression, and interference with social functioning. Items are scored on a 5-

point Likert scale generating a severity score ranging from 5 to 25, with higher scores indicative of worse symptomatology. This scale has been used previously to assess Australian Vietnam veterans, as well as US Afghanistan and Iraq veterans, and shows strong unidimensionality and high levels of internal consistency and criterion validity.

Physical violence

Items addressing participants' personal experiences with physical violence or threatened violence were taken from the 2010 Mental Health Prevalence Wellbeing Study (McFarlane et al., 2011).

Suicidal ideation and behaviour

12-month suicidal ideation and behaviour was assessed via four items that looked specifically at suicidal thoughts, plans and attempts. Three of the items in this section were adapted from the National Survey of Mental Health and Wellbeing (Australian Bureau of Statistics, 2008) and the final item was devised by researchers for use in the current study.

Perceptions of mental health

Items addressing participants' perceptions of their current and future physical and mental health were developed by researchers for use in the study.

Lifetime exposure to traumatic events

Lifetime exposure to trauma was examined as part of the posttraumatic stress disorder module of the CIDI 3.0 (Haro et al., 2006). Participants were asked to indicate whether or not they had experienced the following traumatic events: combat (military or organised non-military group); being a peacekeeper in a war zone or a place of ongoing terror; being an unarmed civilian in a place of war, revolution, military coup or invasion; living as a civilian in a place of ongoing terror for political, ethnic, religious or other reasons; being a refugee; being kidnapped or held captive; being exposed to a toxic chemical that could cause serious harm; being in a life-threatening automobile accident; being in any other life-threatening accident; being in a major natural disaster; being in a man-made disaster; having a life-threatening illness; being beaten by a spouse or romantic partner; being badly beaten by anyone else; being mugged, held up or threatened with a weapon; being raped; being sexually assaulted; being stalked; having someone close to you die; having a child with a life-threatening illness or injury; witnessing serious physical fights at home as a child; having someone close experience a traumatic event; witnessing someone badly injured or killed or unexpectedly seeing a dead body; accidentally injuring or killing someone; purposefully injuring, torturing or killing someone; seeing atrocities or carnage such as mutilated bodies or mass killings; experiencing any other traumatic event. For each applicable event, participants were required to provide further information regarding the following: their age the first and last time the event took place, the number of times each event took place, and the

number of times each event was related to their ADF service. Participants were then required to indicate which of the events they indicated 'yes' to was their worst event.

Posttraumatic stress disorder

The Posttraumatic Stress Disorder Checklist – civilian version (PCL-C) (Weathers et al., 1993) is a 17-item self-report measure designed to assess the symptomatic criteria of PTSD according to the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM-IV). The 17 questions of the PCL-C are scored from 1 to 5 and are summed to give a total symptom severity score of between 17 and 85. An additional four items from the newly released PCL-5 were also included, giving researchers flexibility to also measure PTSD symptoms according to the most recent definitional criteria.

Recent life events

Participants completed a modified, 15-item version of the List of Threatening Experiences (Brugha, Bebbington, Tennant, & Hurry, 1985). This brief questionnaire is frequently used to assess recent stressful life events. Participants were asked to indicate 'yes' if the event had occurred in the last 12 months, and whether or not it was still having an effect on their life. Examples of events include 'your parent, child or spouse died', 'you had a major financial crisis' and 'you broke off a steady relationship'.

Alcohol use

Alcohol consumption and problem drinking was examined using the Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993), a brief self-report screening instrument developed by the World Health Organization. This instrument consists of 10 questions to examine the quantity and frequency of alcohol consumption, possible symptoms of dependence and reactions or problems related to alcohol. The AUDIT is an instrument that is widely used in epidemiological and clinical practice for defining at-risk patterns of drinking (Babor et al., 2001). Currently the recommended World Health Organization (WHO) risk categories are utilised with ADF populations and are also therefore the scoring categories utilised in this study. This process identifies four bands of risk: Band 1 (scores of 0–7) represents those who would benefit from alcohol education; Band 2 (scores of 8–15) represents those that are likely to require simple advice; Band 3 (scores of 16–19) comprises those where counselling and continued monitoring is recommended; Band 4 (scores of 20–40) represents those requiring diagnostic evaluation and treatment, including counselling and monitoring (Babor, de la Fuente, Saunders, & Grant, 1989; Babor et al., 2001).

Two additional supplementary items of the AUDIT were also included in the questionnaire, as well as additional items on consumption to ensure comparability with the Australian National Health Survey 2011–2012 (Australian Bureau of Statistics, 2012).

Tobacco use

Items assessing tobacco usage were taken from the 2013 National Drug Strategy Survey (Australian Institute of Health and Welfare, 2014) and the 2010 Mental Health Prevalence Wellbeing Study (McFarlane et al., 2011). Participants were asked a series of questions about their past and present tobacco usage, including frequency of use, the ages they started and stopped smoking daily, and the types of tobacco products they had smoked in the last year.

Drug use

12-month and lifetime drug use in the Transitioned ADF only was measured using modified Items from the 2013 National Drug Strategy Survey (Australian Institute of Health and Welfare, 2014). Transitioned ADF were asked a series of questions about two categories of drugs: (1) illicit drugs (including meth/amphetamines, marijuana, heroin, methadone or buprenorphine, cocaine, hallucinogens, ecstasy, ketamine, GHB, inhalants, opiates, opioids) and (2) prescription drugs (including painkillers/analgesics, tranquilisers/sleeping pills) for non-medical purposes (where the term 'non-medical purposes' was defined as either alone or with other drugs in order to induce or enhance a drug experience). Participants were asked whether they had ever used these drugs in their lifetime or the last 12 months, and the age that they first used them.

Functioning

Functional impairment was assessed via the Sheehan Disability Scale (Sheehan, 1983), a 5-item self-report measure of disability due to mental health symptoms in three inter-related domains: work/school, social life and family life. The three items assessing impairment in the three domains are scored from 0 to 10 and can yield a total global functional impairment score of between 0 and 30.

Getting help

This section of the survey was developed by key study investigators with specific knowledge and experience within the field. Other items were taken from the Australian Bureau of Statistics (2008), the CIDI 3.O (Haro et al., 2006) and the 2010 Mental Health Wellbeing Prevalence Study (MHPWS) (McFarlane et al., 2011) and modified by investigators to suit the current research.

- Means of informing/assessing and maintaining mental health

  The first series of questions looked at specific help-seeking strategies utilised by participants to inform/assess and maintain their mental health in the last 12 months, and whether or not they found these strategies to be helpful. The 32 items looking at ways in which people informed/assessed their mental health were developed specifically for the study by researchers. The four items looking at the

ways in which people maintained their mental health were taken from the CIDI 3.0 (Haro et al., 2006).

A single item asked participants to indicate their preferred means of receiving information about their mental health. Options included by telephone, over the internet and in person (face to face). This item was developed by researchers for use in the study.

- Barriers and stigmas to care

  Participants were asked to rate on a 5-point scale the degree to which a list of 'concerns' might affect their decision to seek help. Anchors ranged from 'strongly disagree' to 'strongly agree'. Items in this section were taken from the 2010 Mental Health Prevalence Wellbeing Study (McFarlane et al., 2011), the Canadian Air Forces Recruit Mental Health Service Use Questionnaire (Fikretoglu et al., 2014) and the Solider Wellbeing Survey (Riviere, 2011; Thomas, 2010), with several additions by investigators. Examples of items include 'I wouldn't know where to get help', 'it's too expensive' and 'I don't trust mental health professionals'.

  This section of the survey also included a question that tapped into unmet needs for help. This question targeted individuals who expressed concerns about their mental health but never sought help. Participants were presented with a list of seven barriers and asked to indicate how much they disagreed or agreed with each one on a 5-point scale ranging from 'strongly disagree' to 'strongly agree'. Examples of statements include 'I can still function effectively' and 'I didn't know where to get help'.

  Items addressing barriers to care in both of sets of questions listed above fell into the following categories:

  – perceived control
  – self-stigma
  – public stigma
  – perceived stigma
  – mental health literacy
  – physical barrier to care
  – career barriers

- Concerns about mental health

  Items addressing participants' concerns about their mental health were developed specifically for the study by investigators.

- Assistance with mental health

  Items addressing assistance sought for mental health were taken from the 2010 Mental Health Prevalence Wellbeing Study (McFarlane et al., 2011).

- Help received/pathways into care

  Participants were asked whether they had ever sought or received help from the following list of doctors or professionals for their own mental health in the past 12 months or outside the past 12 months:

  – general practitioner/medical officer
  – psychologist
  – psychiatrist
  – other mental health professional

  For each of the professionals listed above, participants were asked to indicate what services they received, whether they were satisfied with the services and what compensation (if any) was received. These items were taken from the CIDI (Haro et al., 2006) and adapted for use in the current study.

  Participants were also asked whether they had ever utilised the following services in the past 12 months or outside the past 12 months:

  – inpatient treatment, hospital admission
  – hospital-based PTSD program
  – residential alcohol and other drug program

  For each of the treatments/programs listed above, participants were asked to indicate whether they were satisfied with the service and how the service was paid for. These items were taken from the CIDI (Haro et al., 2006) and adapted for use in the current study.

- Satisfaction with mental health services received

  Participants were asked to rate their satisfaction/dissatisfaction with a series of factors associated with receiving mental health care/services. Items included accessibility, cost, location, effectiveness, health professional competence, health professional friendliness, convenience, confidentiality and Medicare cap. Participants were required to provide answers in relation to their experiences in the past 12 months only.

- Doctor-diagnosed mental health conditions

  This section of the survey asked participants about mental health problems or conditions that they had ever been diagnosed with or treated for by a medical doctor over their lifetime. If a participant said yes to any of the items listed, they were also asked to specify the year they were first diagnosed, whether they had been treated by a doctor for the condition in the past year, and finally whether they had taken medication for the condition in the past month. Items in this section were derived from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

- Undiagnosed mental health conditions

  Participants were presented with a list of mental disorders and asked to indicate whether they currently had (or ever had) each disorder without having been diagnosed or treated for it. Conditions included alcohol abuse or dependence, drug abuse or dependency, stress or anxiety, depression, PTSD. This question was developed by researchers at CTSS to tap into undiagnosed mental conditions.

- Help seeking latency

  In order to assess help seeking latency, participants were asked to indicate when they first sought help for their own mental health. Options included 'within 3 months of becoming concerned' or 'within 1 year of becoming concerned'. Alternatively, participants were able to specify the number of years since becoming concerned. This item was developed by researchers for use in the study.

- Recommendation to seek help/assistance with seeking help

  This section of the survey comprised two questions. The first item asked participants whether someone else suggested that they seek help for their mental health condition. The second item asked participants whether someone else practically assisted them in seeking care. Options included their GP, medical officer, partner, other family member, friend/colleague, or their supervisor/manager/commander. These questions were developed by researchers for specific use in the study.

- Reasons for seeking care

  Participants were asked to indicate what primary and secondary reason lead them to seeking care. Examples included 'anger', 'depression' and 'gambling'. These two questions were developed by researchers for specific use in the study.

Health professionals

In this section of the survey, participants were presented with an exhaustive list of health professionals and asked to indicate which of them they had consulted for their own health in the past 12 months. Participants were also asked to indicate how many times they had consulted a general practitioner and/or specialist doctor in the past two weeks. All items in this section were taken from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

Family and children

This section of the survey comprised several scales looking at participants' relationships with their family and children.

- Family support and strain was assessed using items of relevance from an adapted version of the Schuster Social Support Scale (Schuster, Kessler, & Aseltine, 1990). Affective support was indicated by responses to questions about how often family made them feel cared for and how often family expressed interest in how they were doing. Negative interactions were indicated by responses to questions about how often family made too many demands on them, how often they criticised them and how often they created tensions or arguments with them. All items were answered on a 4-point Likert-type scale ranging from 'often' to 'never'.

- Items assessing participants' relationship with their current partner, arguments with their current partner and abuse experienced by partner were taken from the Timor-Leste Family Study (McGuire et al., 2012).

- A single item looking at how often participants had contact with family members not living with them was taken from the 2014 Vietnam Veterans Family Study (Forrest et al., 2014).

- Items assessing the impact of military service on participants' relationships, employment, physical health, mental health and financial situation were also taken from the 2014 Vietnam Veterans Family Study (Forrest et al., 2014).

- Two items assessing relationship satisfaction were taken from the Household, Income and Labour Dynamics in Australia (HILDA) Survey (Watson & Wooden, 2002). Participants were required to rate their relationship with their partner and their children on an 11-point Likert-type scale ranging from 'completely dissatisfied' to 'completely satisfied'.

- Items measuring conflict during childhood, parental mental health and parental substance abuse were taken from the Longitudinal Study of Australian Children (Gray, 2005).

- Global parental self-efficacy was assessed using a single item taken from the Longitudinal Study of Australian Children (Gray, 2005). Participants were required to rate their competency as a parent on a 5-point Likert-type scale ranging from 'not very good at being a parent' to 'a very good parent'.

- Parental warmth was measured using six items from the Child Rearing Questionnaire (Paterson & Sanson, 1999). These items were also utilised in the Longitudinal Study of Australian Children (Gray, 2005). Participants were required to answer questions in this section thinking about their first-born child aged between 4 and 17 who lived with them 50% or more of the time in the past six months. Participants were required to indicate how often each listed event took place on a 5-point Likert-type scale ranging from 'never/almost never' to 'always/almost always'. Examples of events include 'how often did you hug or hold this child for no particular reason' and 'how often did you enjoy listening to this child and doing things with him/her'.

- Parental anger was measured using five items from the National Longitudinal Study of Children & Youth (Statistics Canada, 2003). Participants were required to indicate how often each listed event took place on a 5-point Likert-type scale ranging from 'never/almost never' to 'all the time'. Examples of events included 'how often are you angry when you punish this child' and 'how often do you tell this child that he/she is not as good as the others'.

Friends and other social contacts

This section of the survey comprised several scales that looked at participants' friends and social contacts.

- Social support and strain was assessed using items of relevance from an adapted version of the Schuster Social Support Scale (Schuster et al., 1990). Affective support was indicated by responses to questions about how often friends made them feel cared for and how often friends expressed interest in how they were doing. Negative interactions were indicated by responses to questions about how often friends made too many demands on them, how often they criticised them, and how often they created tensions or arguments with them. All items were answered on a 4-point Likert-type scale ranging from 'often' to 'never'.

- A single item looking at how often participants had contact with friends not living with them was taken from the 2014 Vietnam Veterans Family Study conducted by the Department of Veterans' Affairs (Forrest et al., 2014).

- A single item assessing how satisfied participants were with their friendships was taken from the Household, Income and Labour Dynamics in Australia (HILDA) Survey (Watson & Wooden, 2002). Participants were required to rate their

relationship on an 11-point Likert-type scale ranging from 'completely dissatisfied' to 'completely satisfied'.

- Questions looking at how many ex-service organisations participants belonged to and how these ex-service organisations benefited them were taken from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

Resilience

The Ohio State University Brief Resilience Scale (BRS) (Smith et al., 2008) was included to asses participants' ability to bounce back or recover from stress. Participants were asked to indicate the extent to which they agreed or disagreed with six anchored statements. The BRS is scored by reverse coding items 2, 6, and 6 and finding the mean of the six items.

The final item in this section assessed global happiness using the Delighted–Terrible scale (Andrews & Crandall, 1976), one of the more common approaches to collecting subjective quality-of-life data.

Gambling

The Problem Gambling Severity Index (PGSI) (Stinchfield, 2007) is a widely used nine-item scale for measuring the severity of gambling problems in the general population. Each item is scored from 0 to 3. The higher the total score, the greater the risk of problem gambling behaviour.

Driving

Items examining risky driving were sourced from the Australian Institute of Family Studies (Smart et al., 2005) and looked specifically at driving over the speed limit and driving while affected by alcohol. Participants were asked to consider the last 10 times they drove, and how many times in that period they engaged in risky driving behaviour.

Experience with the law

Participants were asked a series of questions about their experiences with the law, including whether they had ever been arrested, whether they had ever been convicted of a crime in a court of law, and finally whether they had ever been sent to prison. For any of these that applied, participants were also asked to indicate whether the event occurred prior to entry into the ADF, prior to transition from Regular ADF service, or since transition from Regular ADF service. Items in this section of the survey were sourced from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

Internet usage

This section of the survey aimed to ascertain what role the internet played in improving the mental health and wellbeing of participants. Items looking at internet usage were taken from the Young and Well National Survey (Burns et al., 2013) and looked specifically at internet usage patterns, means of accessing the internet, the use of the internet for social support, the use of the internet for obtaining information relating to mental health, the use of the internet for managing mental health, barriers to using the internet for mental health and the efficacy of the internet in meeting needs.

Emerging technologies

The use of new and emerging technologies for health and wellbeing was assessed via a series of items developed by Young and Well Co-operative Research Centre (Burns et al., 2013; Young and Well Cooperative Research Centre, 2013). Questions looked at participants' current usage of new and emerging technologies, barriers to usage, types of new and emerging technologies utilised, the use of new and emerging technologies for health and wellbeing improvement, reasons for using new and emerging technologies for health and wellbeing, other reasons for using new and emerging technologies, the types of new and emerging technologies participants would utilise if money was not a factor, and finally the early adoption of new technologies.

Head injuries

This section of the survey comprised two scales. The first was a self-report version of the Ohio State University Traumatic Brain Injury Identification Method (OSU TBI-ID) (Corrigan & Bogner, 2007), which was adapted by researchers for specific use in the current Programme. The OSU TBI-ID is a standardised measure designed to elicit an individual's lifetime history of traumatic brain injury (TBI). Questions focused on the types of head/neck injuries incurred, symptoms experienced (e.g. loss of consciousness, being dazed and confused, loss of memory), age the first and last time the symptoms occurred, frequency of symptoms, loss of consciousness related to a drug overdose or being choked, and finally the occurrence of multiple blows to the head in relation to a history of abuse, contact sports or ADF training/ deployment. The second scale was a modified version of the Post-concussion Syndrome Checklist (PCS) (Gouvier et al., 1992), which was utilised as part of the 2012 Middle East Area of Operations Health Study (Davy et al., 2012). This modified version of the scale required participants to indicate the degree to which they had experienced a list of 11 symptoms in the past four weeks as a result of an injury to their head or neck.

Physical exercise

In order to assess physical activity, participants were asked to complete the Short Last 7 Days Self-Administered version of the International Physical Activity Questionnaire (IPAQ, 2002). Questions asked participants to indicate the number of days, the number

of times, and the amount of time they spent doing vigorous, moderate and light physical activity in the last seven days, as well as the amount of time they spent sedentary.

Pain

Items assessing pain intensity and disability were taken from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015). Participants were asked to answer a series of questions on a scale of 1 to 10 about their current pain, worst pain and average pain in the last six-month period. Participants were also asked to indicate how much their pain had interfered with their daily activities, their recreational/social activities and their ability to work in the last six months.

Injuries

This section of the survey was developed by researchers for the current Programme and looked at injuries sustained during an individual's military career that required time off work. For each injury type, participants were asked to specify how many injuries were sustained during their military career, how many were sustained while on deployment and how many were sustained during training. Participants were also asked to indicate all the body sites where the injuries occurred.

Respiratory health

This section of the survey asked participants about any respiratory symptoms experienced in the last 12 months. Items were derived from the European Community Respiratory Health Survey 1 (Burney, Luczynska, Chinn, & Jarvis, 1994). Examples of symptoms that were assessed include wheezing or whistling, breathlessness, tightness in the chest, shortness of breath, coughing, phlegm, nasal allergies and asthma.

Physical health

Items assessing current physical health were taken from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015). This 67-item adapted version of the self-report symptom questionnaire included respiratory, cardiovascular, musculoskeletal, dermatological, gastrointestinal, genitourinary, neurological and cognitive symptoms. For every symptom experienced within the past month, participants were also required to provide an indication of symptom severity on a 3-point Likert scale (mild, moderate, severe).

Doctor-diagnosed medical conditions

This 44-item self-report questionnaire asked participants about medical problems or conditions they had been diagnosed with or treated for by a medical doctor over their lifetime. If a participant said yes to any of the items listed, they were also asked to specify the year they were first diagnosed, whether they had been treated by a doctor for the condition in the past year and, finally, whether they had taken medications for

the condition in the past month. Items in this section were derived from the Australian Gulf War Veterans' Health Study 2011 follow-up (Sim et al., 2015).

For more detail about the individual measures listed in the previous section, including information about scoring, please refer to the relevant chapters in each commissioned report.

A.7.2 Phase 2: Diagnostic interview

In phase 2 of the research, a sub-sample of individuals was selected to participate in a one-hour telephone interview using the CIDI (Kessler & Ustun, 2004).

The CIDI provided the research team with an assessment of mental disorders based on the definitions and criteria of two classification systems: the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV) and the International Statistical Classification of Diseases and Related Health Problems – 10th Revision (ICD-10) (World Health Organization, 1994). The CIDI was selected because of its highly structured nature and its vast use in epidemiological studies worldwide, including the 2010 Mental Health Wellbeing Prevalence Study conducted by CTSS and the 2007 National Survey of Mental Health and Wellbeing, conducted by the Australian Bureau of Statistics.

The CIDI was administered to consenting participants by a team of trained interviewers from the Hunter Research Foundation in Newcastle, NSW. Their diagnostic inter-rater reliability was closely monitored by supervisors based at the research centre throughout the study period.

12-month and lifetime ICD-10 mental disorders

The CIDI was used to assess the 12-month and lifetime ICD-10 rates for depressive episode, dysthymia, bipolar affective disorder, panic attack, panic disorder, agoraphobia, social phobia, specific phobia, GAD, obsessive-compulsive disorder, PTSD, adult separation disorder, harmful alcohol use and dependence, suicidal ideation and behaviour, and intermittent explosive disorder. Clinical calibration studies report that the CIDI has good validity (Haro et al., 2006). Throughout the report, ICD-10 prevalence rates have been presented with hierarchy rules applied to directly compare them with the Australian national rates (Slade et al., 2009). For all ICD-10 disorders, the standard CIDI algorithms were applied; therefore, to qualify for a 12-month diagnosis, individuals would be required to meet the lifetime criteria initially and then have reported symptoms in the 12 months before the interview.

Lifetime trauma exposure

Lifetime exposure to trauma was examined as part of the PTSD module of the CIDI. The following criterion A events listed in the CIDI were examined: combat (military or

organised non-military group); being a peacekeeper in a war zone or place of ongoing terror; being an unarmed civilian in a place of war, revolution, military coup or invasion; living as a civilian in a place of ongoing terror for political, ethnic, religious or other reasons; being a refugee; being kidnapped or held captive; being exposed to a toxic chemical that could cause serious harm; being in a life-threatening motor vehicle accident; being in any other life-threatening accident; being in a major natural disaster; being in a man-made disaster; having a life-threatening illness; being beaten by a parent or guardian as a child; being beaten by a spouse or romantic partner; being badly beaten by anyone else; being mugged, held up, or threatened with a weapon; being raped; being sexually assaulted; being stalked; having someone close to you die; having a child with a life-threatening illness or injury; witnessing serious physical fights at home as a child; having someone close experience a traumatic event; witnessing someone badly injured or killed or unexpectedly seeing a dead body; accidentally injuring or killing someone; purposefully injuring, torturing or killing someone; seeing atrocities or carnage such as mutilated bodies or mass killings; experiencing any other traumatic event; and experiencing any other event that the participant did not want to talk about.

A.8 Stratification procedure

In phase 2 of the research, 1807 Transitioned ADF members were invited to participate in a one-hour telephone interview using the CIDI (Kessler & Ustun, 2004). In addition to two subgroups of Transitioned ADF in Sample 5 (Combat Zone) and Sample 6 (MHPWS), who were all eligible to complete a CIDI, CIDI invitations preferenced groups accounting for the smallest proportion of the actual population (for example, females) and those with high scores on the Posttraumatic Stress Disorder Checklist (PCL) and AUDIT to increase representativeness of the sample and optimise the ability to capture low prevalence mental disorders.

For these reasons, these participants were selected for a CIDI interview based on rank, sex, service and scores on the PCL and AUDIT, with screening scores on the PCL and AUDIT categorised into the following three bands:

- Band 3 = PCL > 27, AUDIT > 9
- Band 2 = PCL 21–27, AUDIT 7–9
- Band 1 = PCL < =20, AUDIT < = 6

Using the method proposed by (Salim & Welsh, 2009), the stratification procedure aimed to oversample those respondents in Band 3 (greatest likelihood of disorder). A smaller proportion from bands 1 and 2 were also sampled, to control for the possibility of over-inflated mental disorder estimates. Transitioned ADF in samples 5 and 6 were

also allocated a band, as can be seen in Table A.8, to ensure they were accounted for during sampling.

Based on the predicted proportions of Transitioned ADF survey responders who would score in each band on the PCL and AUDIT, according to the population characteristics of sex, rank and service, the following stratification algorithm was used to generate lists of eligible CIDI participants from among Transitioned ADF survey completers who consented to complete a CIDI:

- Band 3
- Female Band 2
- Female Band 1
- Male Navy Band 2
- Male Navy Band 3
- Male Army Band 3
- Male Army Band 1
- Male RAAF Band 2

Table A.8 Stratification characteristics of Transitioned ADF CIDI sample

	Transitioned ADF CIDI							
	No Band*		Band 1		Band 2		Band 3	
	Invited (n=110)	Completed (n=72)	Invited (n=408)	Completed (n=258)	Invited (n=335)	Completed (n=225)	Invited (n=954)	Completed (n=494)
Navy								
Male	20	8	73	43	57	41	140	71
Female	1	1	17	10	8	4	40	20
Army								
Male	52	37	152	94	155	109	515	272
Female	15	10	35	19	31	15	66	25
Air Force								
Male	17	13	104	77	74	50	152	86
Female	4	3	25	14	8	5	34	16
Missing	1	–	2	1	2	1	7	4

*Includes Combat Zone and MHPWS participants who were invited to participate but were not stratified.

Table A.8 shows the final distribution of eligible Transitioned ADF across the strata used for selection into the CIDI, and the number who responded. Of the 1049 Transitioned ADF who completed a CIDI, 47.1% were in Band 3, 21.4% in Band 2 and 24.6% in Band 1. The final sample comprised 55.4% Army, 18.9% Navy and 25.2% Air Force, with the majority of respondents being male (85.9%). A total of 78 CIDI responders were missing band, sex or service, and were excluded from the final weighted population.

A.9 Weighting

The statistical weighting process used in the Mental Health and Wellbeing Transition Study replicated that used in the MHPWS, and allowed for the inference of results for the Transitioned ADF and 2015 Regular ADF populations. The two types of weights used in the study were:

- the survey responder weights, which corrected for differential non-response on the survey for Transitioned ADF and 2015 Regular ADF
- two-phase CIDI responder weights, which compensated for differential non-response on the survey, and for oversampling or under-sampling of specific cases where participants went on to be interviewed with the CIDI. These weights apply to the Transitioned ADF only, and were used to generate 12-month and lifetime ICD-10 mental disorder prevalence estimates for the entire Transitioned ADF.

The weighting procedure involves the allocation of a representative value or 'weight' to the data for each responder, based on key variables that are known for the entire population (including both responders and non-responders). This weight indicates how many individuals in the entire population are represented by each actual responder. Weighting data allows for inference of results for an entire population – in this case, the Transitioned ADF – by assigning a representative value to each 'actual' case (responder) in the data. If a case has a weight of 4, it means that case counts in the data as 4 identical cases. By using known characteristics about each individual within the population (in this case, age, sex, rank and medical fitness), the weight assigned to responders indicates how many 'like' individuals in the entire population (based on those characteristics) each responder represents.

Weighting is used to correct for differential non-response and to account for systematic biases that may be present in study responders (e.g., oversampling of high scorers for CIDI). Both types of weights were used in this study.

These two types of weights were combined to give each responder a single weight within the data. This methodology provides representative weights for the population, improving the accuracy of the estimated data, and requires that every individual within the population has actual data on the key variables that determine representativeness.

The Transitioned ADF weights were derived from the distinct strata of sex, service, rank and medical fitness, a dichotomous variable derived from Medical Employment Classification status (see details of reclassification below). Constraints due to consent meant that MEC status was missing for a number of participants. As Medical Fitness was a key weighting variable both in providing a proxy health status for each individual in the population and to enable comparisons with the 2010 ADF Mental Health

Prevalence and Wellbeing Study, a data perturbation approach was taken to deal with the missing data (see section A.10 on perturbation approach). Once missing MEC status was addressed, there remained 313 (1.2%) of the Transitioned ADF with missing information on the strata variables and therefore the final population was 24,932, with all weighted analyses of the Transitioned ADF summing to this.

The 2015 Regular ADF weights were derived from the distinct strata of sex, service, rank, medical fitness and whether the individual completed a study as part of MilHOP. The inclusion of this additional stratification variable was to account for the targeted sampling of the MilHOP cohort, who were then over-represented within the current serving responders. A MilHOP flag variable (yes/no = 1/0) was therefore created and used in the weighting process in order to reduce this bias. There were 192 (0.4%) 2015 Regular ADF with missing information on the strata variables, reducing the final weighted population for analysis to 52,500. Tables B.14, B.15 and B.16 present the study population and responders within each stratum used for weighting, and show approximately how many persons within each subpopulation each study responder represents.

A.9.1 Reclassification of MEC for study

MEC is an administrative system designed to monitor physical fitness and medical standards in the ADF, and is divided into the following four levels (either current or on discharge from the Regular ADF):

- MEC 1 – members are medically fit for employment in a deployed or seagoing environment without restriction.
- MEC 2 – members have medical conditions that require access to various levels of medical support or employment restrictions; however, they remain medically fit for duties in their occupation in a deployed or seagoing environment. In allocation of sub-classifications of MEC 2, access to the level of medical support will always take precedence over specified employment restrictions.
- MEC 3 – members have medical conditions that make them medically unfit for duties in their occupation in a deployed or seagoing environment. The member so classified should be medically managed towards recovery and should be receiving active medical management with the intention of regaining MEC 1 or 2 within 12 months of allocation of MEC 3. After a maximum of 12 months their MEC is to be reviewed. If still medically unfit for military duties in any operational environment, they are to be downgraded to MEC 4 or, if appropriate, referred to a Medical Employment Classification Review Board (MECRB) for consideration of an extension to remain MEC 3.

- MEC 4 – Members who are medically unfit for deployment or seagoing service in the long term. Members who are classified as MEC 4 for their military occupation will be subject to review and confirmation of their classification by an MECRB.

MEC status was collapsed to create a new variable, 'Medical Fitness', which was utilised in the current Programme of research. Medical fitness was defined accordingly:

- Fit – those who are categorised as fully employable and deployable, or deployable with restrictions. Participants are classified as fit if they fall into MEC 1 or MEC 2, or are assigned a perturbed MEC value of 'fit'.

- Unfit – those who are not fit for deployment, original occupation and/or further service. 'Unfit' can include those who are undergoing rehabilitation, transitioning to alternative return-to-work arrangements or are in the process of being medically discharged from the ADF. Participants are classified as unfit if they fall into MEC 3 or MEC 4, or are assigned a perturbed MEC value of 'unfit'.

A.9.2 Estimates from survey

To maximise the actual real data available for analysis, *survey* weights were calculated for each section of the survey separately. This addressed the issue of differential response to various sections of the survey, whereby individuals potentially completed some but not all parts of the survey. A 'survey section responder' was defined as anyone who answered at least one question in that particular section of the survey. There was a total of 29 section responder weight variables. For the purpose of analysis, the weights used were always for the primary outcome variable of interest.

A.9.3 Estimates from CIDI

CIDI weights were derived for the Transitioned ADF based on strata including band (cut-offs based on PCL and AUDIT), sex and service. These strata were used to weight the CIDI responses to the entire population. Within each stratum, the weight was calculated as the population size divided by the number of CIDI respondents for that stratum. As there was no band for non-respondents, the population size within each stratum was estimated by multiplying the known sex by service population total by the observed proportion belonging to the band of interest in the corresponding stratum. A finite population correction was also applied to adjust the variance estimates for the reasonably large sampling fraction in each stratum.

Post-stratification by the variables of sex, service and rank was used to adjust the weights so that the estimates reproduced the known population totals, and to correct for differential non-response by rank.

A.10 Unit level perturbation of Medical Employment Classification values

A.10.1 Methodology

Due to the nature of the consent provided for individuals on the Study Roll, access to identified data for weighting purposes required the consent of the individual participants. The Australian Institute of Health and Welfare (AIHW) carried out a perturbation approach that provided each non-consenting record with a releasable MEC value. Perturbation used the observed values of MEC for the non-consenters to give an appropriate value to each non-consenting record. This was achieved simply by fitting a model using releasable data items as predictors in a model of MEC using the non-consenters. The model used was a logistic regression model. This resulted in a set of probabilities of each record taking on MEC values. A Monte Carlo approach used these probabilities to randomly assign a synthetic MEC value to each record. These synthetic MEC values reflect each individual's characteristics. The generation was constrained so that aggregate totals remained consistent with totals of unperturbed values.

The perturbation approach allowed the unit records to better reflect the MEC status of individuals. This allowed researchers to use the unit records to undertake more accurate analyses and tabulations.

The unit record perturbation allowed for tabulation and analyses. The perturbed values did not assume a broad level of homogeneity within the combinations of variables as an aggregate weighting approach, but rather allowed the individual characteristic of each person to inform the perturbed value that they were assigned.

A.10.2 Results

The perturbation process was constrained at the source level. Tables A.9 and A.10 show that this was achieved, as the counts of 'fit', 'unfit' and 'missing' were the same for both the original and perturbed values.

The missing values were assumed to happen at random within the source file. This meant that a participant's original missing value could be given to any other participant, regardless of their gender, service, rank or age. Therefore, the number of 'fit' and 'unfit' totals at these constraining levels for the perturbed data do not exactly line up with the original totals (see Table A.10 for totals by service type).

Table A.9 Counts of categories by source

Source	Original MEC value			Perturbed MEC value		
	Fit	Unfit	Missing	Fit	Unfit	Missing
ABIN	138	7	0	138	7	0
CURR	891	196	2	891	196	2
TRAN	271	159	1	271	159	1

Table A.10 Counts of categories by service type

Service	Original MEC value			Perturbed MEC value		
	Fit	Unfit	Missing	Fit	Unfit	Missing
Navy	613	191	3	614	193	0
Army	254	63	0	255	60	2
Air Force	433	108	0	431	109	1

A.11 Contact strategy and recruitment methods

A.11.1 Promoting the study

Before the research team made initial direct contact, the following strategies were used to promote the study to participants.

Advertising in print media

The study team developed promotional posters, which were placed in service newspapers, on DVA and Defence internet and intranet sites, on bases, at ex-service organisations (ESOs) and on the University of Adelaide website.

Ministerial media release

On 11 June 2014, the Hon. Michael Ronaldson, the then Minister for Veterans' Affairs, issued a media release launching the study to the wider community, disseminating information and generating interest among ADF members. The Executive Dean of the Faculty of Health Sciences, members of the Scientific Advisory Committee and members of the investigative team were all present. The launch and media release generated enquiries, which the CTSS research team responded to promptly and effectively, following strict protocol.

Targeted briefs to ADF leadership

Information sessions were held to brief commanders and other key influencers in the broader Defence community about the importance of the research.

Letter to ex-service organisations

A letter introducing the Transition and Wellbeing Research Programme and an accompanying fact sheet were sent to all relevant ESOs to disseminate information and generate support for the study.

Distribution of study briefing packs

Briefing packs containing study/promotional materials were distributed to ESOs as another means of promoting the study to the target population.

Social media strategy

A series of social media conversations, promotions and advertisements were rolled out using the Transition and Wellbeing Research Programme's Facebook page (Facebook/aumilresearch) and Twitter account (@aumilresearch) throughout the study period. These accounts were managed by the CTSS research team. The primary objectives of the social media campaign were to raise awareness of the research Programme among 2015 Regular ADF and Ex-Serving ADF members, their families and their social networks; engage other advocates and key stakeholders; provide another platform for participants to engage with the research team; and disseminate previous military research conducted by CTSS.

A.11.2 Development of the Military and Veteran Health Research Study Roll

Participants' contact details and demographic information were obtained through the creation of the Military and Veteran Health Research Study Roll (Study Roll), which was created by the AIHW, in collaboration with DVA and Defence. This process involved integrating contact information from:

- Defence's PMKeyS database
- DVA client databases
- the National Death Index (NDI)
- ComSuper's member database
- the MilHOP dataset.

To ensure the information was current and reflected the most recent posting cycles, a final PMKeys download was received immediately before the study began and integrated into the dataset.

This integrated dataset was passed on to the research team only after an opt-out process was conducted. This involved DVA and Defence contacting participants via their websites, email, hard copy letter, service newspapers and a media campaign, and

providing them with detailed information about the Study Roll and its broader purpose. The contact information, basic service history and demographic information of individuals who did not opt out of this process within four weeks of the campaign commencing were then passed on to CTSS for the Transition and Wellbeing Research Programme. Participants could still opt out of the Study Roll after the four-week campaign, via an opt-out website or email managed by Defence. This website was open for three months. Individuals who opted out of the Study Roll through this website were excluded from sampling.

To prevent the families of deceased Defence members being approached, the Study Roll was cross-checked against the NDI before the opt-out email was sent to individuals and again approximately four weeks before data collection began. All new deaths recorded by Defence were immediately communicated to the research team.

A.11.3 Self-selection procedure

Details of eligible ex-serving members who were not passed on to CTSS at the beginning of the study period but who subsequently self-selected into the study were sent to AIHW for inclusion in the Study Roll. These members were sent an invitation package, following the standard study protocol. Proposed participants that Defence deemed ineligible were required to provide proof of their service to CTSS to participate. Reservists who self-selected into the study were included in the dataset only if they appeared on the original Study Roll.

A.11.4 Sampling by data integrator

Before recruitment, AIHW created appropriate samples for the research Programme, including:

- all members who transitioned from full-time Regular ADF service between 2010 and 2014
- all ADF members who participated in the MilHOP, excluding members who indicated they did not wish to be contacted for further research
- a stratified random sample of 5040 2015 Regular ADF members
- 22,638 currently serving Ab-initio Reservists. Note: only Reservists with contact information were invited to participate (22,638).

The stratified random sample of 5040 2015 Regular ADF members was drawn from the remainder of members not already listed as MilHOP participants. This sample did not include those who were deceased or who opted out of the Transition and Wellbeing Research Programme.

Stratification was based on:

- service (Navy, Army, Air Force)
- sex
- rank code (Officer/enlistee).

The contact information and demographics for each of the subpopulations listed above, with the exception of individuals who opted out of the Study Roll, were then passed on to CTSS researchers for recruitment and weighting purposes.

A.11.5 Phase 1: Distribution of self-report survey

Recruitment for the study was staggered across the entire data collection period. Online invitation packages were distributed to participants in batches. The first batch of invitation emails was rolled out to participants in June 2015. Each email contained a unique study ID number and token password, as well as a secure link to an online invitation package. This package contained the self-report survey and all associated study materials, including information sheets and consent forms. Invitation packs were uniquely tailored to participants' current serving status and eligibility criteria. Where email addresses were not available, or upon request, hard copy versions of the invitation package were posted to participants.

Follow-up of survey non-respondents

A multifaceted approach to following up survey non-respondents was used to maximise participation rates, as set out below.

- Reminder emails

  Email reminders were sent to all non-responders two, four and six weeks after the invitation package was distributed, and one month before the survey was closed. Participants who preferred to complete a hard copy version of the survey were directed to call or email the study team. This was specified in all reminder email correspondence.

- SMS reminders

  SMS reminders were sent to all non-responders concurrently to alert them to their emails. This included members who had not yet begun the survey, as well as individuals who had partially completed it.

- Targeted telephone follow-up

  A selection of high-priority participants was targeted via a structured telephone follow-up process. These participants were members of the MHPWS CIDI cohort. It

was important to maximise the response rate for this longitudinal cohort with existing data points to enable mapping of the trajectory of disorder. Telephone follow-up was also extended to participants without email addresses, partial completers and other target groups with low response rates, to ensure representativeness. Specifically, this included:

- Transitioned ADF members with a landline phone number but no email address or mobile number
- Transitioned ADF members with a landline phone number and Defence email address only but no mobile phone number
- partial completers from all cohorts
- participants with bounced emails from sole non-Defence email addresses, with a landline phone number but no mobile number
- participants who nominated family members for Family Study but did not provide contact details for family
- all other Transitioned ADF members and Ab-initio Reservists who had not begun the survey.

  Trained research staff at CTSS made the phone calls following a structured script. The calls were made at a variety of times during the day and evening to maximise contact opportunities. A maximum of 10 attempts were made to speak to each participant twice. Where no contact was made, and a telephone message service was available, a reminder message was left on two of these 10 occasions only, along with the study free-call number and email address.

- Hard copy letters

  Hard copy invitation letters containing the study free-call number and email address as well as a link to the online survey were sent to:

  - all Transitioned ADF non-responders
  - all Ab-initio Reservist non-responders
  - all 2015 Regular ADF non-responders who did not participate in MilHOP.

A.11.6 Phase 2: Diagnostic interview

Selection

In phase 2, a sub-group of Transitioned and Regular ADF members from eligible samples was targeted to participate in a 1-hour telephone interview using The World Mental Health Survey Initiative version of the WHO-CIDI 3.0. To be eligible for recruitment, potential interviewees must have completed the self-report measures, and have provided consent in the Mental Health and Wellbeing Transition Study consent form to being contacted to participate in a telephone interview. The following groups were targeted for phase 2:

- a stratified sample of ADF members who had transitioned out of full-time Service since 2010. Transitioned ADF survey responders were invited to complete a CIDI based on their scores on the PCL and AUDIT screening measures, and demographic characteristics were used to further preference participants to ensure the CIDI sample represented the entire cross-section of population characteristics as far as was possible.

- all MHPWS ADF members who were interviewed using the CIDI in 2010. This included individuals who met ICD-10 diagnostic criteria for either a 12-month ICD-10 affective, anxiety or alcohol disorder in 2010, as well as individuals who were subsyndromal or who had no disorder.

- a sample of ADF members who participated in the MEAO Prospective Health Study between 2010 and 2012.

Recruitment

Recruitment calls were made by trained interviewers at the Hunter Research Foundation, who couldn't see the scores of participants on the self-report measures. Telephone calls were made at a variety of times during the day and evening, taking into account participants' preferences so as to maximise contact opportunities.

To ensure that the most recent contact details were used, a download of current phone numbers was obtained from PMKeyS immediately before the study began and intermittently throughout the interview period.

Participants were contacted by telephone using contact details obtained through:

- participants providing contact details/alternative contact details either online or in hard copy as part of phase 1 of the Mental Health and Wellbeing Transition Study

- AIHW

- PMKeyS

- participants providing contact details and alternative contact details, either online or in hard copy, as part of the MilHOP study.

The first telephone call was made using the primary phone number provided in the contact information sheet completed in phase 1. In the absence of this information, a phone number obtained from one of the sources listed above was used.

A maximum of 10 attempts were made to speak to the participant before that participant was removed from the pool. When no contact was made, a reminder message was left on two of the 10 occasions, along with the study's free-call number and email address.

Where telephone contact was made, research officers explained the aims, purpose and requirements of the interview, and, if agreement was granted, an interview time was arranged.

Interview

At the beginning of each interview participants were reminded that participation was voluntary, they could stop the interview at any point, and could withdraw from the study at any time without any impact on their career or entitlements.

If the participant agreed to proceed with the interview, verbal consent was obtained and recorded. Following this, the highly structured interview was undertaken.

At the end of the structured interview, participants were provided with sufficient time to debrief and ask questions, and provided interview-related feedback. If at any time the participant indicated that they were feeling distressed or suicidal, interviewers implemented the relevant duty-of-care protocols.

A.12 Medicare and Pharmaceutical Benefits Scheme/Repatriation Pharmaceutical Benefits Scheme data linkage

As part of the broader research Programme, participants were also invited to fill out a consent form authorising the study to access complete Medicare, Pharmaceutical Benefit Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) data. Data for each consenting participant was obtained for a five-year period before their scheduled interview date and included information about their medical visits, procedures, associated costs and medication prescriptions filled at pharmacies. Consent forms for this component of the research were sent securely to the Department of Human Services, which holds this information confidentially.

A.13 Statistical analysis

Analyses were conducted in Stata version 13.1 or SAS version 9.2. All analyses were conducted using weighted estimates of totals, means and proportions, except where specified otherwise. Standard errors were estimated using linearisation, except where specified otherwise.

Subgroup analyses were conducted on each of the 12-month ICD-10 mental disorders using demographic and deployment history predictors, including sex (male, female), age (18–27, 28–37, 38–47, 48–57, 58+), 2015 Regular ADF service or service at transition (Navy, Army, Air Force), 2015 Regular ADF rank or rank on transition (Officer, Non-Commissioned Officer, Other Ranks), years of service in the Regular ADF (< 3 months, 3 months – 3.9 years, 4–7.9 years, 8–11.9 years, 12–15.9 years, 16–19.9 years, 20+ years), deployment status (ever deployed, never deployed). For members of the Transitioned ADF, specific transition factors were included: transition status (Ex-Serving, Inactive Reservist, Active Reservist), reason for discharge (medical discharge, other reason), years since transition (0, 1, 2, 3, 4, 5) and DVA client status (DVA client, not a DVA client).

Comparisons between the prevalence of 12-month ICD-10 disorders among subgroups were analysed using weighted logistic regressions. All regressions involved variables for age, sex, service and rank. Comparisons between the prevalence of 12-month ICD-10 disorder classes (affective disorders, anxiety disorders, alcohol disorders) among subgroups were analysed using a weighted multinomial logistic regression, with number of disorder classes as the outcome. The regression involved the co-variates of age, sex, service and rank. Comparisons between the prevalence of self-reported suicidal behaviour among subgroups were analysed using weighted logistic regressions. All regressions included the co-variates of age, sex, service and rank.

For the self-report measures, the proportion (n [%]) of ADF members in each subgroup is presented. Comparisons between the mean total scores among subgroups were also analysed where appropriate, using weighted multiple linear regressions. All regressions included the co-variates of age, sex, service and rank. Comparisons between the prevalence of self-reported alcohol consumption and problems with drinking were analysed using weighted logistic regressions. A proportional odds model was considered for analysis. However, the main assumption of this approach was violated, so the ordinal response was dichotomised by means of several cut-offs. All regressions included the co-variates of age, sex, service and rank.

To compare the mental health and wellbeing of the 2015 Regular ADF with the 2010 Regular ADF, a direct numerical comparison was performed. This did not include standardisation or tests of statistical significance. As these two samples cannot be considered independent, between-group differences should be interpreted with

caution, noting that some members of the 2015 Regular ADF sample were also represented in the 2010 Regular ADF sample. The issue of individual change in symptoms and disorder over time in this group will be addressed in the future longitudinal report.

To compare estimates in the Transitioned ADF with estimates for the Australian community, direct standardisation was applied to estimates in the 2014–15 NHS. The NHS data were restricted to those aged 18–71 (consistent with the Transition and Wellbeing Research Programme transition population). The data were standardised by sex, employment status (employed or not) and age category (18–27, 28–37, 38–47, 48–57 and 58+). Standard errors for the NHS data were estimated using the replication weights provided in the NHS data file.

A.14 Ethical considerations

In order to combat potential risks and ensure that participation in the study was completely free from coercion, participants were made explicitly aware that their involvement in the study was voluntary and that they could decline to participate and/or were free to withdraw from the project at any time. This was emphasised in all study materials. Secondly, whether or not an individual chose to participate in the study was not communicated to senior staff in the ADF, nor were members asked directly to participate in the study by a uniformed officer. This also ensured that recruitment was free from coercion.

In order to manage potential risks to participants in relation to both phase 1 and phase 2 of the research, a duty-of-care protocol was established and strictly adhered to by the research team.

A.15 Ethical approvals

The study protocol was approved by the DVA Human Research Ethics Committee (E014/018) and was mutually recognised by the Directorate, Defence Health Research, and the University of Adelaide Human Research Ethics Committee. The study protocol was also submitted to Australian Institute of Health and Welfare Ethics Committee and received approval accordingly (EO 2015/1/163).

Annex B Odds ratio tables

Table B.1 Odds ratios for comparisons of Transitioned vs 2015 Regular ADF and DVA client vs Non-DVA client (stratified by Transitioned and 2015 Regular ADF)

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
4. INTERNET USE AND ATTITUDES TO USING THE INTERNET IN TRANSITIONED AND 2015 REGULAR ADF					
Table 4.4	Internet usage after 11 pm	Transitioned ADF vs 2015 Regular ADF	1.45 (1.11, 1.90)	Transitioned ADF were 45% more likely to use the internet after 11 pm	Weak
Table 4.5	Find it easier to be myself when online than when I am with people face to face	Transitioned ADF vs 2015 Regular ADF	1.41 (1.05, 1.90)	Transitioned ADF were 41% more likely find it 'easier to be themselves online'	Weak
Table 4.6	Talk about different things with people when online than I do when face to face	Transitioned ADF vs 2015 Regular ADF	0.95 (0.70, 1.29)	No association	–
Table 4.7	When online, I talk about private things that I do not share with people face to face	Transitioned ADF vs 2015 Regular ADF	1.07 (0.72, 1.59)	No association	–
Table 4.8	Go online much more on the weekends than I do on a regular work day	Transitioned ADF vs 2015 Regular ADF	0.47 (0.37, 0.60)	Transitioned ADF were 53% less likely to go online much more on the weekends than on a regular work day	Strong
Table 4.9	Going through a difficult time, I go online more often	Transitioned ADF vs 2015 Regular ADF	1.14 (0.86, 1.53)	No association	–
Table 4.10	When going through a difficult time, going online makes me feel better'	Transitioned ADF vs 2015 Regular ADF	1.05 (0.78, 1.42)	No association	–
Table 4.11	Internet use after 11 pm	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder	2.02 (1.64, 2.49)	Transitioned ADF with probable disorder were 2.02 times more likely to use the internet after 11 pm	Moderate

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 4.11	Internet use after 11 pm	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder	1.40 (0.78, 2.51)	No association	–
Table 4.12	Find it easier to be myself when online than when I am with people face to face	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder	2.84 (2.28, 3.54)	Transitioned ADF with probable disorder were 2.84 times more likely to report they 'find it easier to be myself when online than when I am with people face to face'	Moderate
Table 4.12	Find it easier to be myself when online than when I am with people face to face	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder	2.37 (1.33, 4.23)	2015 Regular ADF with probable disorder were 2.37 times more likely to report they 'find it easier to be myself when online than when I am with people face to face'	Moderate
Table 4.12	Talk about different things with people when online than I do when face to face	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder	2.09 (1.67, 2.62)	Transitioned ADF with probable disorder were 2.09 times more likely to report they 'talk about different things with people when online than I do when face to face'	Moderate
Table 4.12	Talk about different things with people when online than I do when face to face	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder	0.97 (0.52, 1.82)	No association	–
Table 4.12	When online, I talk about private things that I do not share with people face to face	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder	2.17 (1.64, 2.85)	Transitioned ADF with probable disorder were 2.17 times more likely to report that 'when online, I talk about private things that I do not share with people face to face'	Moderate
Table 4.12	When online, I talk about private things that I do not share with people face to face	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder	2.31 (1.07, 4.96)	2015 Regular ADF with probable disorder were 2.31 times more likely to report that 'when online, I talk about private things that I do not share with people face to face'	Moderate
Table 4.12	Go online much more on the weekends than I do on a regular work day	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder	0.82 (0.66, 1.02)	No association	–
Table 4.12	Go online much more on the weekends than I do on a regular work day	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder	0.94 (0.56, 1.59)	No association	–
Table 4.12	When going through a difficult time, I go online more often	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder	2.56 (2.06, 3.18)	Transitioned ADF with probable disorder were 2.56 times more likely to report that 'when going through a difficult time, I go online more often'	Moderate

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 4.12	When going through a difficult time, I go online more often	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder	1.72 (0.92, 3.20)	No association	–
Table 4.12	When going through a difficult time, going online makes me feel better	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder	2.16 (1.72, 2.70)	Transitioned ADF with probable disorder were 2.16 times more likely to report that 'when going through a difficult time, going online makes me feel better'	Moderate
Table 4.12	When going through a difficult time, going online makes me feel better	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder	1.70 (0.92, 3.17)	No association	–
5. USE OF NEW AND EMERGING TECHNOLOGY IN TRANSITIONED AND 2015 REGULAR ADF					
Table 5.1	Currently use emerging technologies	Transitioned ADF vs 2015 Regular ADF	0.73 (0.46, 1.15)	No association	–
Table 5.2	Current use of emerging technologies: Smartwatch	Transitioned ADF vs 2015 Regular ADF (In those who do use technologies)	0.47 (0.25, 0.90)	Transitioned ADF were 53% less likely to use a 'Smart watch' than 2015 Regular ADF	Moderate
Table 5.2	Current use of emerging technologies: apps	Transitioned ADF vs 2015 Regular ADF (In those who do use technologies)	0.86 (0.58, 1.27)	No association	–
Table 5.2	Current use of emerging technologies: Wearable technology	Transitioned ADF vs 2015 Regular ADF (In those who do use technologies)	0.83 (0.59, 1.16)	No association	–
Table 5.2	Current use of emerging technologies: Other technology	Transitioned ADF vs 2015 Regular ADF (In those who do use technologies)	0.95 (0.44, 2.06)	No association	–
Table 5.3	Barriers to using new or emerging technologies: No need or interest	Transitioned ADF vs 2015 Regular ADF (In those who do not use technologies)	1.34 (0.86, 2.08)	No association	–
Table 5.3	Barriers to using new or emerging technologies: No time	Transitioned ADF vs 2015 Regular ADF (In those who do not use technologies)	0.93 (0.58, 1.48)	No association	–
Table 5.3	Barriers to using new or emerging technologies: Too confusing	Transitioned ADF vs 2015 Regular ADF (In those who do not use technologies)	0.81 (0.45, 1.46)	No association	–
Table 5.3	Barriers to using new or emerging technologies: Too expensive	Transitioned ADF vs 2015 Regular ADF (In those who do not use technologies)	0.79 (0.51, 1.23)	No association	–
Table 5.3	Barriers to using new or emerging technologies: Upgrades too often	Transitioned ADF vs 2015 Regular ADF (In those who do not use technologies)	0.87 (0.51, 1.48)	No association	–
Table 5.3	Barriers to using new or emerging technologies: Privacy Issues	Transitioned ADF vs 2015 Regular ADF (In those who do not use technologies)	0.78 (0.47, 1.29)	No association	–

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 5.3	Barriers to using new or emerging technologies: No tech other	Transitioned ADF vs 2015 Regular ADF (In those who do not use technologies)	0.76 (0.38, 1.51)	No association	–
Table 5.4	In an ideal world, which new and emerging technologies you would like to use: Any emerging technology	Transitioned ADF vs 2015 Regular ADF	1.08 (0.79, 1.49)	No association	–
Table 5.4	In an ideal world, which new and emerging technologies you would like to use: Smartwatch	Transitioned ADF vs 2015 Regular ADF	0.86 (0.68, 1.10)	No association	–
Table 5.4	In an ideal world, which new and emerging technologies you would like to use: apps	Transitioned ADF vs 2015 Regular ADF	1.11 (0.88, 1.40)	No association	–
Table 5.4	In an ideal world, which new and emerging technologies you would like to use: Wearable technology	Transitioned ADF vs 2015 Regular ADF	0.87 (0.69, 1.09)	No association	–
Table 5.4	In an ideal world, which new and emerging technologies you would like to use: Other tech	Transitioned ADF vs 2015 Regular ADF	0.91 (0.50, 1.66)	No association	–
Table 5.6	Use any new or emerging technologies to improve health and wellbeing	Transitioned ADF vs 2015 Regular ADF	0.73 (0.46, 1.15)	No association	–
Table 5.7	Ways in which emerging technologies are used to improve health and wellbeing: Improve my fitness	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.56 (0.33, 0.94)	No association	–
Table 5.7	Ways in which emerging technologies are used to improve health and wellbeing: Improve my mood	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.79 (0.40, 1.56)	No association	–
Table 5.7	Ways in which emerging technologies are used to improve health and wellbeing: Improve my sleep	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.10 (0.66, 1.83)	No association	–

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 5.7	Ways in which emerging technologies are used to improve health and wellbeing: keep me organised	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.97 (0.60, 1.59)	No association	–
Table 5.7	Ways in which emerging technologies are used to improve health and wellbeing: Maintain my diet/track food intake	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.54 (1.16, 2.03)	Transitioned ADF who used emerging technologies were 1.54 times more likely to use emerging technologies to maintain their diet/track their food	Moderate
Table 5.7	Ways in which emerging technologies are used to improve health and wellbeing: To keep me motivated	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.41 (1.07, 1.86)	Transitioned ADF who used emerging technologies were 1.41 times more likely to use emerging technologies to keep them motivated	Weak
Table 5.7	Ways in which emerging technologies are used to improve health and wellbeing: Track my progress	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.31 (0.86, 1.98)	No association	–
Table 5.7	Ways in which emerging technologies are used to improve health and wellbeing: Other	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.77 (0.24, 2.51)	No association	–
Table 5.8	Other reasons for using new and emerging technologies: Enhance social interaction	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	1.01 (0.59, 1.75)	No association	–
Table 5.8	Other reasons for using new and emerging technologies: Fun or recreation	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	0.67 (0.39, 1.13)	No association	–
Table 5.8	Other reasons for using new and emerging technologies: Study or work	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	1.88 (1.13, 3.11)	Transitioned ADF who used emerging technologies for other reasons were 1.9 times more likely to use them for study or work	Moderate
Table 5.8	Other reasons for using new and emerging technologies: To make videos or take photos	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	0.93 (0.50, 1.71)	No association	–
Table 5.8	Other reasons for using new and emerging technologies: Other	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	1.30 (0.49, 3.49)	No association	–

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 5.8	Use the internet to seek help or information for, or manage, mental health issues	Transitioned ADF vs 2015 Regular ADF (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	1.61 (1.21, 2.13)	Transitioned ADF who used the internet for mental health issues were 60% more likely to use the internet to seek help or information for, or manage, mental health issues	Moderate
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Improve my fitness	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.41 (0.25, 0.67)	Transitioned ADF with probable disorder were 59% less likely to use emerging technologies to improve their fitness	Moderate
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Improve my fitness	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.17 (0.68, 2.00)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Improve my mood	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.86 (1.06, 3.27)	Transitioned ADF with probable disorder were 86% more likely to use emerging technologies to improve their mood	Moderate
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Improve my mood	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.42 (0.68, 2.95)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Improve my sleep	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.33 (0.84, 2.12)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Improve my sleep	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.26 (0.81, 1.96)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: keep me organised	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.20 (0.77, 1.86)	No association	–

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: keep me organised	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.41 (0.81, 2.45)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Maintain my diet/track food intake	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.23 (0.77, 1.97)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Maintain my diet/track food intake	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.92 (0.60, 1.41)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: To keep me motivated	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.79 (0.48, 1.30)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: To keep me motivated	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	1.33 (0.89, 1.99)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Track my progress	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.69 (0.45, 1.06)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Track my progress	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.74 (0.45, 1.22)	No association	–
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Other	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.75 (0.28, 1.96)	No association	–

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 5.9	Ways in which emerging technologies are used to improve health and wellbeing: Other	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies to improve their health and wellbeing)	0.61 (0.19, 1.92)	No association	–
Table 5.10	Other reasons for using new and emerging technologies: Enhance social interaction	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	1.12 (0.69, 1.82)	No association	–
Table 5.10	Other reasons for using new and emerging technologies: Enhance social interaction	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	1.17 (0.37, 3.67)	No association	–
Table 5.10	Other reasons for using new and emerging technologies: Fun or recreation	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	0.51 (0.33, 0.78)	Transitioned ADF with probable disorder were 49% less likely to use emerging technologies for fun and recreation	Moderate
Table 5.10	Other reasons for using new and emerging technologies: Fun or recreation	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	0.46 (0.16, 1.32)	No association	–
Table 5.10	Other reasons for using new and emerging technologies: Study or work	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	0.77 (0.51, 1.16)	No association	–
Table 5.10	Other reasons for using new and emerging technologies: Study or work	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	0.58 (0.20, 1.70)	No association	–
Table 5.10	Other reasons for using new and emerging technologies: To make videos or take photos	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	1.54 (0.91, 2.61)	No association	–

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 5.10	Other reasons for using new and emerging technologies: To make videos or take photos	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	0.28 (0.12, 0.69)	2015 Regular ADF with probable disorder were 72% less likely to use emerging technologies to make videos or take photos	Strong
Table 5.10	Other reasons for using new and emerging technologies: Other	Transitioned ADF with probable disorder vs Transitioned ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	1.18 (0.56, 2.46)	No association	–
Table 5.10	Other reasons for using new and emerging technologies: Other	2015 Regular ADF with probable disorder vs 2015 Regular ADF with no probable disorder (In those who currently use new and emerging technologies for reasons other than to improve their health and wellbeing)	0.56 (0.14, 2.16)	No association	–
6. USE OF THE INTERNET TO SEEK HELP OR INFORMATION FOR OR TO MANAGE MENTAL HEALTH ISSUES MORE BROADLY					
Table 6.1	Use the internet to seek help or information for, or manage, mental health issues	Transitioned ADF vs 2015 Regular ADF	1.61 (1.21, 2.13)	Transitioned ADF (24.5%) were 60% more likely to use internet for mental health	Moderate
Table 6.4	Received the kind of information needed in relation to mental health	Transitioned ADF vs 2015 Regular ADF (In those who used the internet to seek help or information or manage mental health issues)	0.89 (0.28, 2.88)	No association	–
Table 6.6	The internet helped deal more effectively with mental health problems	Transitioned ADF vs 2015 Regular ADF (In those who used the internet to seek help or information or manage mental health issues)	0.72 (0.41, 1.28)	No association	–
Table 6.8	Satisfaction with the information received on the internet in relation to mental health	Transitioned ADF vs 2015 Regular ADF (In those who used the internet to seek help or information or manage mental health issues)	0.72 (0.33, 1.59)	No association	–
7. USE OF THE INTERNET FOR ONE'S OWN MENTAL HEALTH					
Table 7.1	Frequency of use of the internet to seek help or access information about mental health	Transitioned ADF vs 2015 Regular ADF	1.50 (0.81, 2.80)	No association	–
Table 7.3	Time most likely to use the internet to seek help or access information about mental health	Transitioned ADF vs 2015 Regular ADF (In those who used the internet to seek help or information or manage mental health issues)	0.68 (0.40, 1.15)	No association	–

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 7.5	Talked about your mental health on the internet with peer, family member or friend	Transitioned ADF vs 2015 Regular ADF (In those who used the internet to seek help or information or manage mental health issues)	1.21 (0.70, 2.09)	No association	–
Table 7.7	Talked about your mental health on the internet with other people (e.g. online forums, chatrooms, blogs, MSN or Gmail messenger)	Transitioned ADF vs 2015 Regular ADF (In those who used the internet to seek help or information or manage mental health issues)	1.85 (1.01, 3.38)	Transitioned ADF who used the internet for mental health issues were 85% more likely to talk about their mental health on the internet to others	Moderate
Table 7.9	Talked about your mental health on the internet with psychologist or other mental health professional	Transitioned ADF vs 2015 Regular ADF (In those who used the internet to seek help or information or manage mental health issues)	0.73 (0.33, 1.62)	No association	–
8. BARRIERS TO TALKING ONLINE ABOUT MENTAL HEALTH					
Table 8.1	Barriers that might prevent talking about mental health issues online: Concerns with validity	Transitioned ADF vs 2015 Regular ADF (In those who did not talk about their own mental health online)	1.12 (0.66, 1.90)	No association	–
Table 8.1	Barriers that might prevent talking about mental health issues online: Concerns with privacy	Transitioned ADF vs 2015 Regular ADF (In those who did not talk about their own mental health online)	0.53 (0.31, 0.90)	Transitioned ADF who used the internet for mental health issues were 47% less likely to respond that a barrier to talking online about mental health was 'Concerns about a lack of privacy/confidentiality'	Moderate
Table 8.1	Barriers that might prevent talking about mental health issues online: Concern with security	Transitioned ADF vs 2015 Regular ADF (In those who did not talk about their own mental health online)	0.82 (0.49, 1.39)	No association	–
Table 8.1	Barriers that might prevent talking about mental health issues online: Lack of access	Transitioned ADF vs 2015 Regular ADF (In those who did not talk about their own mental health online)	2.25 (0.53, 9.50)	No association	–
Table 8.1	Barriers that might prevent talking about mental health issues online: Lack of awareness	Transitioned ADF vs 2015 Regular ADF (In those who did not talk about their own mental health online)	0.82 (0.22, 3.11)	No association	–
Table 8.1	Barriers that might prevent talking about mental health issues online: Lack of skills	Transitioned ADF vs 2015 Regular ADF (In those who did not talk about their own mental health online)	1.33 (0.52, 3.43)	No association	–
Table 8.1	Barriers that might prevent talking about mental health issues online: Prefer face to face	Transitioned ADF vs 2015 Regular ADF (In those who did not talk about their own mental health online)	0.63 (0.37, 1.08)	No association	–

Results Table	Outcome (comparison)	Cohort (comparison)	Adjusted OR (95% CI)	Interpretation	Strength of association
Table 8.1	Barriers that might prevent talking about mental health issues online: Unaffordable	Transitioned ADF vs 2015 Regular ADF (In those who did not talk about their own mental health online)	3.65 (1.30, 10.29)	Transitioned ADF were 3.7 times more likely to respond that a barrier to talking online about mental health was 'Unaffordable technology'	Strong

Annex C Detailed tables

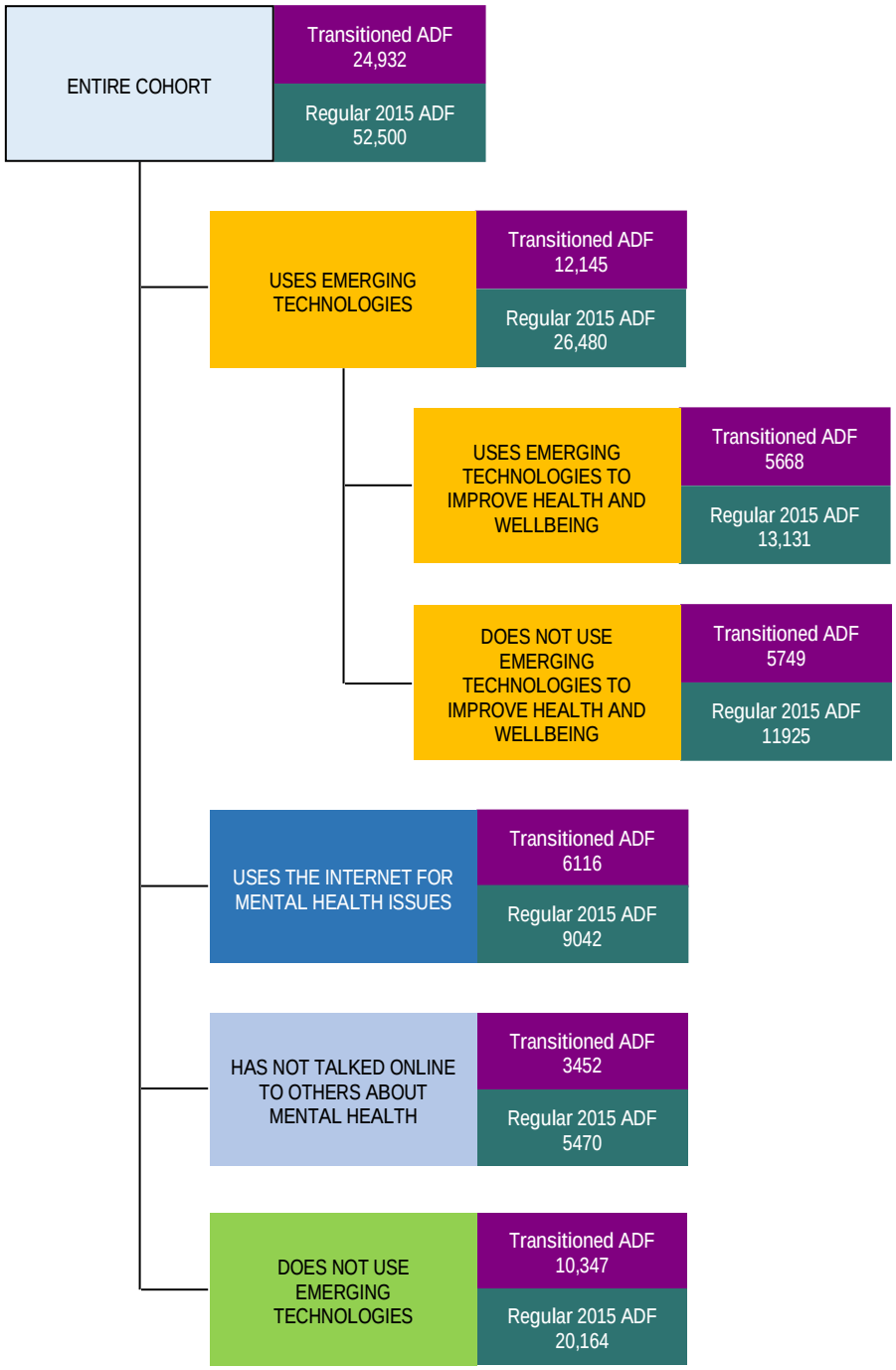
C.1 Denominators used in the analyses

Table C.1 Denominators

Cohort	Sample	Tables in report that use the denominator
Entire cohort		
2015 Regular ADF	52,500	Chapter 3: 3.1, 3.2, 3.3, 3.4, 3.5,
Transitioned ADF	24,932	Chapter 4: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.14, 4.15, 4.19, 4.21 Chapter 5: 5.1, 5.2, Chapter 8: 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15
Uses emerging technologies		
2015 Regular ADF	26,480	Chapter 4: 4.12, 4.16, 4.20
Transitioned ADF	12,145	
Does not use emerging technologies		
2015 Regular ADF	20,164	Chapter 4: 4.13
Transitioned ADF	10,347	
Uses emerging technologies to improve health and wellbeing		
2015 Regular ADF	13,131	Chapter 4: 4.17
Transitioned ADF	5668	
Does not use emerging technologies to improve health and wellbeing		
2015 Regular ADF	11,925	Chapter 4: 4.18
Transitioned ADF	5749	
Uses the internet to seek help or manage mental health Issues		
2015 Regular ADF	9042	Chapter 5: 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9
Transitioned ADF	6116	Chapter 6: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10
Has not talked on the internet about mental health to other people (No to Q10,11,12)		
2015 Regular ADF	5470	Chapter 7: 7.1
Transitioned ADF	3452	

Note: Tables not listed use sub-populations within the cohorts listed above, and therefore are not listed here

Figure C.1 Denominator cascade 2015



C.2 Methodological interpretive tables

Table C.2 Strata description – MilHOP Regular ADF

Strata Sex | Rank | Medical fitness | Service	2015 Regular ADF Population	Responder	%	No. of persons in population each responder represents
MilHOP				
Female | OFFR | fit | Navy	170	88	51.8	1.9
Female | OFFR| fit | Army	237	120	50.6	2.0
Female | OFFR | fit | Air Force	249	121	48.6	2.1
Female | OFFR | unfit | Navy	48	27	56.3	1.8
Female | OFFR | unfit | Army	75	39	52.0	1.9
Female | OFFR | unfit | Air Force	76	34	44.7	2.2
Female | NCO | fit | Navy	197	71	36.0	2.8
Female | NCO | fit | Army	245	99	40.4	2.5
Female | NCO | fit | Air Force	255	110	43.1	2.3
Female | NCO | unfit | Navy	65	23	35.4	2.8
Female | NCO | unfit | Army	117	49	41.9	2.4
Female | NCO | unfit | Air Force	100	37	37.0	2.7
Female | Other Rank | fit | Navy	41	12	29.3	3.4
Female | Other Rank | fit | Army	33	4	12.1	8.3
Female | Other Rank | fit | Air Force	51	18	35.3	2.8
Female | Other Rank | unfit | Navy	31	5	16.1	6.2
Female | Other Rank | unfit | Army	19	9	47.4	2.1
Female | Other Rank | unfit | Air Force	31	5	16.1	6.2
Male | OFFR | fit | Navy	902	418	46.3	2.2
Male | OFFR | fit | Army	1585	723	45.6	2.2
Male | OFFR | fit | Air Force	1428	596	41.7	2.4
Male | OFFR | unfit | Navy	81	54	66.7	1.5
Male | OFFR | unfit | Army	153	75	49.0	2.0
Male | OFFR | unfit | Air Force	117	58	49.6	2.0
Male | NCO | fit | Navy	1386	522	37.7	2.7
Male | NCO | fit | Army	2629	1037	39.4	2.6
Male | NCO | fit | Air Force	2153	789	36.6	2.7
Male | NCO | unfit | Navy	214	96	44.9	2.2
Male | NCO | unfit | Army	503	244	48.5	2.1
Male | NCO | unfit | Air Force	309	130	42.1	2.4
Male | Other Rank | fit | Navy	176	46	26.1	3.8
Male | Other Rank | fit | Army	433	57	13.2	7.6
Male | Other Rank | fit | Air Force	320	75	23.4	4.3
Male | Other Rank | unfit | Navy	39	11	28.2	3.5
Male | Other Rank | unfit | Army	105	25	23.8	4.2
Male | Other | unfit | Air Force	43	13	30.2	3.3

Table C.3 Strata description – non-MiLHOP Regular ADF

Strata Sex | Rank | Medical fitness | Service	2015 Regular ADF Population	Responder	%	No. of persons in population each responder represents
Non-MilHOP				
Female | OFFR | fit | Navy	305	114	37.4	2.7
Female | OFFR | fit | Army	374	112	29.9	3.3
Female | OFFR | fit | Air Force	406	139	34.2	2.9
Female | OFFR | unfit | Navy	66	23	34.8	2.9
Female | OFFR | unfit | Army	87	31	35.6	2.8
Female | OFFR | unfit | Air Force	70	28	40.0	2.5
Female | NCO | fit | Navy	120	50	41.7	2.4
Female | NCO | fit | Army	138	70	50.7	2.0
Female | NCO | fit | Air Force	157	79	50.3	2.0
Female | NCO | unfit | Navy	48	24	50.0	2.0
Female | NCO | unfit | Army	50	32	64.0	1.6
Female | NCO | unfit | Air Force	69	36	52.2	1.9
Female | Other Rank | fit | Navy	256	39	15.2	6.6
Female | Other Rank | fit | Army	271	33	12.2	8.2
Female | Other Rank | fit | Air Force	226	58	25.7	3.9
Female | Other Rank | unfit | Navy	59	14	23.7	4.2
Female | Other Rank | unfit | Army	58	14	24.1	4.1
Female | Other Rank | unfit | Air Force	55	20	36.4	2.8
Male | OFFR | fit | Navy	1450	188	13.0	7.7
Male | OFFR | fit | Army	2977	269	9.0	11.1
Male | OFFR | fit | Air Force	2098	213	10.2	9.8
Male | OFFR | unfit | Navy	95	11	11.6	8.6
Male | OFFR | unfit | Army	238	31	13.0	7.7
Male | OFFR | unfit | Air Force	157	26	16.6	6.0
Male | NCO | fit | Navy	2257	149	6.6	15.1
Male | NCO | fit | Army	3447	311	9.0	11.1
Male | NCO | fit | Air Force	1866	268	14.4	7.0
Male | NCO | unfit | Navy	334	23	6.9	14.5
Male | NCO | unfit | Army	575	59	10.3	9.7
Male | NCO | unfit | Air Force	257	28	10.9	9.2
Male | Other Rank | fit | Navy	4451	28	0.6	159.0
Male | Other Rank | fit | Army	10074	43	0.4	234.3
Male | Other Rank | fit | Air Force	2659	47	1.8	56.6
Male | Other Rank | unfit | Navy	491	4	0.8	122.8
Male | Other Rank | unfit | Army	1375	14	1.0	98.2
Male | Other | unfit | Air Force	268	12	4.5	22.3

Table C.4 Strata description – Transitioned ADF

Strata Sex | Rank | Medical fitness | Service	Transitioned ADF			
	Population	Responder	%	No. of persons in population each responder represents
Female | OFFR | fit | Navy	122	32	26.2	3.8
Female | OFFR | fit | Army	224	68	30.4	3.3
Female | OFFR | fit | Air Force	133	41	30.8	3.2
Female | OFFR | unfit | Navy	63	21	33.3	3.0
Female | OFFR | unfit | Army	90	31	34.4	2.9
Female | OFFR | unfit | Air Force	59	25	42.4	2.4
Female | NCO | fit | Navy	198	49	24.7	4.0
Female | NCO | fit | Army	263	80	30.4	3.3
Female | NCO | fit | Air Force	188	56	29.8	3.4
Female | NCO | unfit | Navy	101	26	25.7	3.9
Female | NCO | unfit | Army	139	48	34.5	2.9
Female | NCO | unfit | Air Force	92	30	32.6	3.1
Female | Other Rank | fit | Navy	411	25	6.1	16.4
Female | Other Rank | fit | Army	421	34	8.1	12.4
Female | Other Rank | fit | Air Force	156	21	13.5	7.4
Female | Other Rank | unfit | Navy	226	34	15.0	6.6
Female | Other Rank | unfit | Army	270	40	14.8	6.8
Female| Other Rank | unfit | Air Force	105	19	18.1	5.5
Male | OFFR | fit | Navy	583	173	29.7	3.4
Male | OFFR | fit | Army	1409	401	28.5	3.5
Male | OFFR | fit | Air Force	772	253	32.8	3.1
Male | OFFR | unfit | Navy	124	47	37.9	2.6
Male | OFFR | unfit | Army	350	114	32.6	3.1
Male | OFFR | unfit | Air Force	134	53	39.6	2.5
Male | NCO | fit | Navy	1285	225	17.5	5.7
Male | NCO | fit | Army	2735	752	27.5	3.6
Male | NCO | fit | Air Force	1148	291	25.3	3.9
Male | NCO | unfit | Navy	343	92	26.8	3.7
Male | NCO | unfit | Army	1055	337	31.9	3.1
Male | NCO | unfit | Air Force	319	111	34.8	2.9
Male | Other Rank | fit | Navy	1697	88	5.2	19.3
Male | Other Rank | fit | Army	5639	327	5.8	17.2
Male | Other Rank | fit | Air Force	889	65	7.3	13.7
Male | Other Rank | unfit | Navy	518	51	9.8	10.2
Male | Other Rank | unfit | Army	2443	231	9.5	10.6

Table C.5 Weighting table

	Transitioned ADF (n=24,932)								
	Raw Results			Stage 1 Weighted			Stage 2 Weighted		
ICD-10 12-month disorder	Raw n	Raw %	95% CI	Weighted n	%	95% CI	Weighted n	%	95% CI
Panic attack	155	16	13.7, 18.4	4031	16.1	13.9, 18.6	4244	17	13.8, 20.8
Panic disorder	53	5.5	4.1, 7.1	1368	5.5	4.2, 7.1	1344	5.4	3.6, 8.0
Agoraphobia	105	10.8	8.9, 12.9	2842	11.4	9.5, 13.6	2975	11.9	9.1, 15.5
Social phobia	83	8.6	6.9, 10.5	2167	8.7	7.0, 10.6	2738	11	8.4, 14.3
Specific phobia	97	10	8.2, 12.1	2499	10	8.3, 12.1	1936	7.8	5.8, 10.3
Generalised anxiety disorder	33	3.4	2.4, 4.7	855	3.4	2.4, 4.8	917	3.7	2.2, 6.0
Obsessive-compulsive disorder	37	3.8	2.7, 5.2	922	3.7	2.7, 5.1	1029	4.1	2.6, 6.6
Posttraumatic stress disorder	170	17.5	15.2, 20.1	4483	17.9	15.6, 20.5	4408	17.7	14.5, 21.3
Any anxiety disorder	354	36.5	34.3, 38.6	9175	36.7	33.7, 39.8	9232	37.0	32.6, 41.7
Depressive episodes	108	11.1	9.2, 13.3	2812	11.2	9.4, 13.4	2783	11.2	8.6, 14.3
Dysthymia	43	4.4	3.2, 5.9	1143	4.6	3.4, 6.1	1140	4.6	3.1, 6.7
Bipolar affective disorder	60	6.2	4.8, 7.9	1599	6.4	5.0, 8.2	2443	9.8	7.0, 13.5
Any affective disorder	180	18.5	16.1, 21.1	4739	19	16.6, 21.6	5755	23.1	19.2, 27.5
Alcohol harmful use	32	3.3	2.3, 4.6	894	3.6	2.6, 5.0	948	3.8	2.3, 6.3
Alcohol dependence	50	5.2	3.9, 6.7	1399	5.6	4.3, 7.3	2271	9.1	6.4, 12.8
Any alcohol disorder	82	8.4	6.8, 10.4	2293	9.2	7.5, 11.2	3219	12.9	9.8, 16.9

Acronyms

ABS	Australian Bureau of Statistics
ADF	Australian Defence Force
AIFS	Australian Institute of Family Studies
AIHW	Australian Institute of Health and Welfare
AUDIT	Alcohol Use Disorders Identification Test
BRS	Ohio State University Brief Resilience Scale
CI	Confidence interval
CRC	Cooperative Research Centre
CTSS	Centre for Traumatic Stress Studies
DAR-5	Dimensions of Anger Reactions Scale
DMAC	Data Management & Analysis Centre
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders – Fourth edition
DVA	Department of Veterans' Affairs
ESO	Ex-service organisation
GAD	Generalised anxiety disorder
GAD-7	Generalised Anxiety Disorder 7-item Scale
HILDA	Household, Income and Labour Dynamics in Australia
HREC	Human Research Ethics Committee
HRF	Hunter Research Foundation
ICD-10	International Statistical Classification of Diseases and Related Health Problems – 10th Revision
K10	Kessler Psychological Distress Scale
KCMHR	King's Centre for Military Health Research Academic Department of Military Mental Health
MEAO	Middle East Area of Operations

MEC	Medical Employment Classification
MECRB	Medical Employment Classification Review Board
MHPWS	Mental Health Prevalence and Wellbeing Study
MilHOP	Military Health Outcomes Program
mTBI	Mild traumatic brain injury
NCO	Non-commissioned officer
NDI	National Death Index
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
OCD	Obsessive-compulsive disorder
OFFR	commissioned officer
OR	Odds ratio
OR	Other Ranks
OSU TBI-ID	Ohio State University Traumatic Brain Injury Identification Method
PBS	Pharmaceutical Benefits Scheme
PCL-C	Posttraumatic Stress Disorder Checklist – civilian version
PCS	Post-Concussion Syndrome Checklist
PGSI	Problem Gambling Severity Index
PHQ-9	Patient Health Questionnaire
PMKeyS	Personnel Management Key Solution
PTSD	Posttraumatic stress disorder
RPBS	Repatriation Pharmaceutical Benefits Scheme
SAC	Scientific Advisory Committee
SE	Standard error
TBI	Traumatic brain injury
UA	University of Adelaide

Glossary of terms

12-month prevalence. Meeting diagnostic criteria for a lifetime ICD-10 mental disorder and then having reported symptoms in the 12 months before the interview.

Affective disorders. Affective disorders is a class of mental health disorders. The Mental Health and Wellbeing Transition Study examined three types of affective disorder: depressive episodes, dysthymia and bipolar affective disorder. A key feature of these mental disorders is mood disturbance.

Agoraphobia. Marked fear or avoidance of situations such as crowds, public places, travelling alone, or travelling away from home, which is accompanied by palpitations, sweating, shaking or dry mouth, as well as other anxiety symptoms such as chest pain, choking sensations, dizziness, and sometimes feelings of unreality, fear of dying, losing control, or going mad.

Alcohol dependence. Characterised by an increased prioritisation of alcohol in a person's life. The defining feature of alcohol dependence is a strong, overwhelming desire to use alcohol despite experiencing a number of associated problems. A diagnosis was given if the person reported three or more of the following symptoms in the previous 12 months:

- a strong and irresistible urge to consume alcohol
- a tolerance to the effects of alcohol
- an inability to stop or reduce alcohol consumption
- withdrawal symptoms upon cessation or reduction of alcohol intake
- continuing to drink despite it causing emotional or physical problems
- reduction in important activities because of or in order to drink.

Alcohol harmful use. Diagnosis requires not only high levels of alcohol consumption but also that the alcohol use is damaging to the person's physical or mental health. Each participant was initially asked whether they consumed 12 or more standard alcoholic drinks in a 12-month period. If so, they were then asked a series of questions about their level of consumption. A diagnosis of Alcohol Harmful Use was applied if the alcohol interfered with either work or other responsibilities; caused arguments with their family or friends; was consumed in a situation where the person could get hurt;

resulted in being stopped or arrested by police; or if the participant continued to consume alcohol despite experiencing social or interpersonal problems as a consequence of their drinking during the previous 12 months. A person could not meet criteria for Alcohol harmful use if they met criteria for alcohol dependence.

Alcohol Use Disorders Identification Test (AUDIT). Alcohol consumption and problem drinking was examined using the Alcohol Use Disorders Identification Test (Saunders et al., 1993), a brief self-report screening instrument developed by the World Health Organization. This instrument consists of 10 questions to examine the quantity and frequency of alcohol consumption, possible symptoms of dependence, and reactions or problems related to alcohol. The AUDIT is widely used in epidemiological and clinical practice for defining at-risk patterns of drinking.

Anxiety disorders. A class of mental health disorder. This class of disorder involves the experience of intense and debilitating anxiety. The anxiety disorders covered in the survey were panic attacks, panic disorder, social phobia, specific phobia, agoraphobia, generalised anxiety disorder, posttraumatic stress disorder and obsessive-compulsive disorder.

Australian Bureau of Statistics (ABS). Australia's national statistical agency, providing trusted official statistics on a wide range of economic, social, population and environmental matters of importance to Australia. To enable comparison of estimates for the Transitioned ADF with an Australian community population, direct standardisation was applied to estimates in the 2014 – 2015 ABS National Health Survey (NHS) data. The NHS is the most recent in a series of Australia-wide ABS health surveys, assessing various aspects of the health of Australians, including long-term health conditions, health risk factors and health service use.

Australian Defence Force (ADF). The ADF is constituted under the *Defence Act 1903* (Cth) and, together with the Department of Defence, is collectively known as Defence. Defence's mission is to defend Australia and its national interests. In fulfilling this mission, Defence serves the government of the day and is accountable to the Australian Parliament, which represents the Australian people to efficiently and effectively carry out the government's defence policy. The current program of research aims to examine the mental, physical and social health of serving and ex-serving ADF members, and their families. It builds on previous research to inform effective and evidence-based health service provision for contemporary service members and veterans.

Australian Institute of Family Studies (AIFS). The Australian Government's key research body in the area of family wellbeing. AIFS conducts original research to increase understanding of Australian families and the issues that affect them. The current research was conducted by a consortium of Australia's leading research

institutions led by the Centre for Traumatic Stress Studies at the University of Adelaide, and AIFS.

Australian Institute of Health and Welfare (AIHW). Australia's national agency for health and welfare statistics and information. It was used in this Programme to develop a Study Roll by integrating contact information from various sources and databases.

Bipolar affective disorder. A class of mental disorder associated with fluctuations of mood that are significantly disturbed. These fluctuations of mood are markedly elevated on some occasions (hypomania or mania) and can be markedly lowered on other occasions (depressive episodes). A diagnosis of bipolar affective disorder was applied in this study if the individuals met criteria for mania or hypomania in the previous 12-months

Centre for Traumatic Stress Studies (CTSS). This centre at the University of Adelaide seeks to improve evidence-based practice by informing and applying scientific knowledge in the field of trauma, mental disorder and wellbeing in at-risk populations. The Programme was conducted by a consortium of Australia's leading research institutions, led by the CTSS and the Australian Institute of Family Studies.

Chain of command. A line of authority and responsibility along which orders are passed within a military unit and between different units.

Class of mental disorder. Mental disorders are grouped into classes of disorder that share common features. Three classes of mental disorders were included in the survey. These were affective disorders, anxiety disorders and alcohol disorders.

Comorbidity. The occurrence of more than one disorder at the same time**.** Comorbidity was defined by grouping any alcohol disorders, any affective disorders, any anxiety disorders (excluding PTSD), and PTSD according to their co-occurrence. In addition to a breakdown of the individual patterns of co-occurrence, five categories were defined representing those with no mental health disorder and those with 1, 2, 3 or 4 disorder categories.

Composite International Diagnostic Interview (CIDI). The World Mental Health Survey Initiative version of the World Health Organization's Composite International Diagnostic Interview, version 3 (WMH-CIDI 3.0) (Kessler & Ustun, 2004) provides an assessment of mental disorders based on the definitions and criteria of two classification systems: the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth edition (DSM-IV) and the *World Health Organization International Classification of Diseases*, 10th revision (ICD-10) (World Health Organization, 1994). This instrument was utilised in phase 2 of the current research Programme.

Confidence interval (CI). This measurement gives an estimated range of values that is likely to include an unknown population parameter: the estimated range being calculated from a given set of sample data.

Department of Veterans' Affairs (DVA). The Department delivers government programs for war veterans, and members of the ADF and the Australian Federal Police and their dependants. In 2014, DVA, in collaboration with the Department of Defence, commissioned the Transition and Wellbeing Research Programme, one of the largest and most comprehensive military research projects undertaken in Australia.

Deployment status. The Mental Health and Wellbeing Transition Study defined deployment status, based on survey responses, as:

- **Never deployed:** Individuals who did not endorse any deployments listed in the self-report survey (Your Military Career: Deployments) and did not endorse any deployment exposures (Your Military Career: Deployment Exposure)
- **Deployed:** Individuals who endorsed one or more of the listed deployments (Your Military Career: Deployments) or endorsed one or more of the deployment exposures (Your Military Career: Deployment Exposure).

Depressive episodes. Characteristic of a major depressive disorder, an episode requires that an individual has suffered from depressed mood lasting a minimum of two weeks, with associated symptoms or feelings of worthlessness, lack of appetite, difficulty with memory, reduction in energy, low self-esteem, concentration problems and suicidal thoughts. Depressive episodes can be mild, moderate or severe. All three are included under the same heading. Hierarchy rules were applied to depressive episodes, such that a person could not have met criteria for either a hypomanic or manic episode.

Diagnostic criteria. The survey was designed to estimate the prevalence of common mental health disorders defined according to clinical diagnostic criteria, as directed by the International Classification of Diseases 10th Revision (ICD-10). Diagnostic criteria for a disorder usually involve specification of:

- the nature, number and combination of symptoms
- the time period over which the symptoms have been continuously experienced
- the level of distress or impairment experienced
- the circumstances for exclusion of a diagnosis, such as it being due to a general medical condition or the symptoms being associated with another mental disorder.

Dimensions of Anger Reactions Scale (DAR-5). A concise measure of anger consisting of five items that address anger frequency, intensity, duration, aggression and interference with social functioning. Items are scored on a five-point Likert scale, generating a severity score ranging from 5 to 25, with higher scores indicating worse symptomatology. This scale has been used previously to assess Australian Vietnam veterans, as well as US Afghanistan and Iraq veterans, and shows strong unidimensionality, and high levels of internal consistency and criterion validity.

DVA client. A term used when referring to DVA clients for the purpose of analyses.

In constructing the DVA dataset for the Military and Veteran Research Study Roll, DVA created an indicator for assessing confidence in the accuracy of veterans' address details, based on the level of DVA's interaction with each veteran. Each of the following groups were considered a DVA client:

- High – where a veteran is in receipt of a fortnightly payment (such as income support or compensation pension) from DVA it was a sign of regular ongoing contact with the client and therefore DVA would have a high level of confidence that their address would be up to date and correct.

- Medium – where a veteran only holds a treatment card (i.e., does not also have an ongoing payment) there is a lower level of ongoing contact with the Department and therefore the level of confidence that DVA can assign to the accuracy of the client's address is lower.

- Low – not all veterans who have their illness/injury liability claim accepted as service-related by DVA automatically receive a treatment card or pension payment; however they would still be considered DVA clients.

For the purposes of this report, any individual in the study population who met the criteria above was flagged as a 'DVA Client'. Those with this flag were compared against those without this flag.

Dysthymia. Characterised as a chronic or pervasive disturbance of mood lasting several years that is not sufficiently severe or in which the depressive episodes are not sufficiently prolonged to warrant a diagnosis of a recurrent depressive disorder. Hierarchy rules were applied to dysthymia such that in order to have this disorder a person could not have met criteria for either a hypomanic or manic episode and could not have reported episodes of severe or moderate depression within the first two years of dysthymia.

Ex-service organisation (ESO). Organisations that provide assistance to current and former ADF members. Services can include but are not necessarily limited to welfare support, help with DVA claims, and employment programs and social support.

Generalised anxiety disorder (GAD) – A generalised and persistent worry, anxiety or apprehension about everyday events and activities lasting a minimum of six months that is accompanied by anxiety symptoms as described in 'agoraphobia'. Other symptoms may include symptoms of tension, such as inability to relax and muscle tension, and other non-specific symptoms, such as irritability and difficulty in concentrating.

Generalised Anxiety Disorder 7-item Scale (GAD-7). A brief seven-item screening measure based on the *Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition* (DSM-IV) criteria for generalised anxiety disorder. Originally validated for use in primary care, the GAD-7 performs well in detecting probable cases of the disorder, with a sensitivity of 89% and a specificity of 82%.

Gold Card. A DVA health card for all conditions. Gold Card holders are entitled to DVA funding for services for all clinically necessary healthcare needs and all health conditions, whether or not they are related to war service. The card holder may be a veteran or the widow/widower or dependant of a veteran. Only the person named on the card is covered.

Help-seeking latency. The delay in time between first becoming concerned about a health problem and first seeking help for that problem. To assess help-seeking latency in the study, participants were asked to indicate when they first sought help for their own mental health. Options included 'within three months of becoming concerned' or 'within one year of becoming concerned'. Alternatively, participants were able to specify the number of years since becoming concerned. This item was developed by researchers for use in the study.

Hypomanic episodes. Episodes that last at least four consecutive days and are considered abnormal to the individual. These episodes are characterised by increased activity, talkativeness, elevated mood, disrupted concentration, decreased need for sleep and disrupted judgment, manifesting as risk-taking (for example, mild spending sprees). In a subgroup of people, these disorders are particularly characterised by irritability. To meet criteria for the 'with hierarchy' version, the person cannot have met criteria for an episode of mania.

Kessler Psychological Distress Scale (K10). A short 10-item screening questionnaire that yields a global measure of psychological distress based on symptoms of anxiety and depression experienced in the most recent four-week period. Items are scored from 1 to 5 and are summed to give a total score between 10 and 50. Various methods

have been used to stratify the scores of the K10. The categories of low (10–15), moderate (16–21), high (22–29) and very high (30–50) that are used in this report are derived from the cut-offs of the K10 that were used in the 2007 Australian Bureau of Statistics National Survey of Mental Health and Wellbeing (Slade et al., 2009).

Lifetime prevalence. A prevalence that meets diagnostic criteria for a mental disorder at any point in the respondent's lifetime.

Lifetime trauma. Exposure questions used in this study were drawn from the posttraumatic stress disorder module of the CIDI (Haro et al., 2006). Participants were asked to indicate whether or not they had experienced the following traumatic events: combat (military or organised non-military group); being a peacekeeper in a war zone or a place of ongoing terror; being an unarmed civilian in a place of war, revolution, military coup or invasion; living as a civilian in a place of ongoing terror for political, ethnic, religious or other reasons; being a refugee; being kidnapped or held captive; being exposed to a toxic chemical that could cause serious harm; being in a life-threatening automobile accident; being in any other life-threatening accident; being in a major natural disaster; being in a man-made disaster; having a life-threatening illness; being beaten by a spouse or romantic partner; being badly beaten by anyone else; being mugged, held up or threatened with a weapon; being raped; being sexually assaulted; being stalked; having someone close to you die; having a child with a life-threatening illness or injury; witnessing serious physical fights at home as a child; having someone close experience a traumatic event; witnessing someone badly injured or killed or unexpectedly seeing a dead body; accidentally injuring or killing someone; purposefully injuring, torturing or killing someone; seeing atrocities or carnage such as mutilated bodies or mass killings; experiencing any other traumatic event.

Mania. Similar to hypomania but more severe in nature. Lasting slightly longer (a minimum of a week), these episodes often lead to severe interference with personal functioning. In addition to the symptoms outlined under 'hypomania', mania is often associated with feelings of grandiosity, marked sexual indiscretions and racing thoughts.

Medical Employment Classification (MEC). An administrative process designed to monitor physical fitness and medical standards in the ADF. MEC was divided into four levels (either current or on discharge from Regular ADF service):

- **MEC 1:** Members who are medically fit for employment in a deployed or seagoing environment without restriction.
- **MEC 2:** Members with medical conditions that require access to various levels of medical support or employment restrictions. However, they remain medically fit for duty in their occupation in a deployed or seagoing environment. In allocating

sub-classifications of MEC 2, access to the level of medical support will always take precedence over specified employment restrictions.

- **MEC 3:** Members who are medically unfit for duty in their occupation in a deployed or seagoing environment. The member so classified should be medically managed towards recovery and should be receiving active medical management with the intention of regaining MEC 1 or 2 within 12 months of allocation of MEC 3. After a maximum of 12 months their MEC is to be reviewed. If still medically unfit for military duties in any operational environment, they are to be downgraded to MEC 4 or, if appropriate, referred to a Medical Employment Classification Review Board (MECRB) for consideration of an extension to remain MEC 3.

- **MEC 4:** Members who are medically unfit for deployment or seagoing service in the long term. Members who are classified as MEC 4 for their military occupation will be subject to review and confirmation of their classification by an MECRB.

Medical fitness. A status defined as:

- **Fit:** Those who are categorised as fully employable and deployable, or deployable with restrictions. Participants are classified as 'fit' if they fall into MEC 1 or 2 as described above, or are assigned a perturbed MEC value of 'fit'.

- **Unfit:** Those not fit for deployment, their original occupation and/or further service. This can include those undergoing rehabilitation or transitioning to alternative return-to-work arrangements or in the process of medically separating from the ADF. Participants were classified as 'unfit' if they fell into MEC 3 or 4 as described above OR were assigned a perturbed MEC value of Unfitu.

Medical discharge. The involuntary termination of the client's employment by the ADF on the grounds of permanent or at least long-term unfitness to serve, or unfitness for deployment to operational (war-like) service.

Mental disorders. Defined according to the detailed diagnostic criteria within the World Health Organization International Classification of Diseases. This publication reports data for ICD-10 criteria.

Mental Health Prevalence and Wellbeing Study (MHPWS). The 2010 study is part of the Military Health Outcomes Program (MilHOP), the first comprehensive investigation of the mental health of serving ADF members.

Middle East Area of Operations (MEAO). Australia's military involvement in Afghanistan and Iraq is often referred to as the Middle East Area of Operations. Thousands of members have been deployed to the MEAO since 2001, with many

completing multiple tours of duty. The Transition and Wellbeing Research Programme will build upon the Military Health Outcomes Program, which sought to determine the impact of operational deployment on the health and wellbeing of service men and women.

Military Health Outcomes Program (MilHOP). MilHOP detailed the prevalence of mental disorders among serving ADF members in 2010 as well as deployment-related health issues for those deployed to the Middle East Area of Operations. The Transition and Wellbeing Research Programme will address a number of gaps identified following MilHOP, including the mental health of Reservists, ex-serving members and ADF members in high-risk roles, as well as the trajectory of disorder and pathways to care for individuals previously identified with a mental disorder in 2010.

National Death Index (NDI). A Commonwealth database that contains records of deaths registered in Australia since 1980. Data comes from the Registry of Births, Deaths and Marriages in each jurisdiction, the National Coronial Information System and the Australian Bureau of Statistics. Before contacting participants, the Study Roll was cross-checked against the NDI to ensure we did not attempt to approach deceased members.

National Health and Medical Research Council (NHMRC). Australia's peak funding body for medical research. The NHMRC has funded previous investigations undertaken by the Centre for Traumatic Stress Studies.

National Health Survey (NHS). The 2014–15 National Health Survey is the most recent in a series of Australia-wide ABS health surveys, assessing various aspects of the health of Australians, including long-term health conditions, health risk factors, and health service use.

Obsessive-compulsive disorder (OCD). A disorder characterised by obsessional thoughts (ideas, images, impulses) or compulsive acts (ritualised behaviour). These thoughts and acts are often distressing and typically cannot be avoided, despite the sufferer recognising their ineffectiveness.

Optimal epidemiological cut-off. The value that brings the number of false positives (mistaken identifications of a disorder) and false negatives (missed identifications of a disorder) closest together, thereby counterbalancing these sources of error most accurately. Therefore, this cut-off would give the closest estimate to the true prevalence of a 30-day ICD-10 disorder as measured by the CIDI and should be used to monitor disorder trends.

Optimal screening cut-off. The value that maximises the sum of the sensitivity and specificity (the proportion of those with and without a disease who are correctly classified). This cut-off can be used to identify individuals who might need further care.

Panic attack. Sudden onset of extreme fear or anxiety, often accompanied by palpitations, chest pain, choking sensations, dizziness, and sometimes feelings of unreality, fear of dying, losing control or going mad.

Panic disorder. Recurrent panic attacks that are unpredictable in nature.

Patient Health Questionnaire-9 (PHQ-9). Self-reported depression was examined using the Patient Health Questionnaire-9 (PHQ-9). The nine items of the PHQ-9 are scored from 0 to 3 and summed to give a total score between 0 and 27. The PHQ-9 provides various levels of diagnostic severity, with higher scores indicating higher levels of depression symptoms.

Pharmaceutical Benefits Scheme (PBS). The PBS began as a limited scheme in 1948, offering free medicines for pensioners and a list of 139 'life-saving and disease-preventing' medicines free to other members of the community. Today, the PBS provides timely, reliable and affordable access to necessary medicines for all Australians. The PBS is part of the Australian Government's broader National Medicines Policy. Health Care Utilisation, Cost and Pharmaceutical Benefit Scheme data/Repatriation Pharmaceutical Benefits Scheme data were obtained for consenting serving and ex-serving ADF members as part of the current Programme of research.

Posttraumatic stress disorder (PTSD). A stress reaction to an exceptionally threatening or traumatic event that would cause pervasive distress in almost anyone. Symptoms are categorised into three groups: re-experiencing memories or flashbacks, avoidance symptoms and either hyperarousal symptoms (increased arousal and sensitivity to cues) or inability to recall important parts of the experience.

The Posttraumatic Stress Disorder Checklist – civilian version (PCL-C). A 17-item self-report measure designed to assess the symptomatic criteria of PTSD according to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV). The 17 questions of the PCL-C are scored from 1 to 5 and are summed to give a total symptom severity score of between 17 and 85. An additional four items from the newly released PCL-5 were also included, giving researchers flexibility to also measure PTSD symptoms according to the most recent definitional criteria.

Personnel Management Key System (PMKeyS). An integrated human resource management system that provides the ADF with a single source of personnel management information. PMKeyS manages information about the entire Defence workforce – Navy, Army, Air Force.

Prevalence of mental disorders. The proportion of people in a given population who meet diagnostic criteria for any mental disorder in a given time frame. (See also '12-month prevalence' and 'lifetime prevalence'.)

Probable mental disorder. Where probable rates of mental health disorder are presented, these are based on self-report epidemiological cut-offs.

Psychopathology. The scientific study of mental disorders.

Rank status – Three levels of rank were used in the Mental Health and Wellbeing Transition Study:

- **Commissioned Officer (OFFR):** Senior Commissioned Officers (Commander (CMDR), Lieutenant Colonel (LTCOL), Wing Commander (WGCDR) and above) and Commissioned Officers (Lieutenant Commander (LCDR), Major (MAJ), Squadron Leader (SQNLDR) and more junior ranks)

- **Non-Commissioned Officer (NCO):** Senior Non-Commissioned Officers (Petty Officer (PO), Sergeant (SGT) and more senior ranks), and Junior Non-Commissioned Officers (Leading Seaman (LS), Corporal (CPL) and more junior ranks)

- **Other Ranks:** Able Seaman (AB), Seaman (SMN), Private (PTE), Leading Aircraftman (LAC), Aircraftman (AC) or equivalent.

Reason for discharge. The reason for transitioning out of the ADF. In the Programme, the reason for discharge was derived from responses on the self-report survey, and classified accordingly:

- **Medical discharge:** Involuntary termination of the client's employment by the ADF on the grounds of permanent or at least long-term unfitness to serve, or unfitness for deployment to operational (war-like) service

- **Other:** All other types of discharge including compulsory age retirement, resignation at own request, assessed as unsuitable for further training, end of fixed-period engagement, end of initial enlistment period or return of service obligation, end of limited-tenure appointment, not offered re-engagement, accepted voluntary redundancy, compassionate grounds, and non-voluntary administrative discharge.

Repatriation Pharmaceutical Benefits Scheme (RPBS). The benefits listed in the RPBS can be prescribed only for Department of Veterans' Affairs beneficiaries who hold a Gold, White or Orange card. Health Care Utilisation, Cost and Pharmaceutical Benefit Scheme data/Repatriation Pharmaceutical Benefits Scheme data were obtained for

consenting serving and ex-serving ADF members as part of the current Programme of research.

Service status. The ADF comprises:

- **Royal Australian Navy:** A maritime force that contributes to regional security, supports global interests, shapes the strategic environment and protects national interests
- **Australian Army:** The military land force, a potent, versatile and modern army that contributes to the security of Australia, protecting its interests and people
- **Royal Australian Air Force:** An air force that provides immediate and responsive military options across the spectrum of operations as part of a whole-of-government joint or coalition response, either from Australia or deployment overseas. It does this through its key air power roles – control of the air; precision strikes; intelligence, surveillance and responses; and air mobility – enabled by combat and operational support.

Social phobia. The marked fear or avoidance of being the centre of attention or in situations where it is possible to behave in a humiliating or embarrassing way, accompanied by anxiety symptoms, as well as either blushing, fear of vomiting, or fear of defecation or micturition.

Specific phobia. The marked fear or avoidance of a specific object or situation such as animals, birds, insects, heights, thunder, flying, small enclosed spaces, sight of blood or injury, injections, dentists or hospitals, and accompanied by anxiety symptoms as described in 'agoraphobia'.

Stratification. Grouping outcomes by variables of interest. In Report 1, 12-month diagnosable mental disorder and self-reported suicidality were stratified by age, sex, rank, service, years of service in the Regular ADF, deployment status, transition status, years since transition, reason for transition and DVA client status.

Study Roll. Participants' contact details and demographic information were obtained through the creation of a study roll by the Australian Institute of Health and Welfare. This process involved integrating contact information from the following sources:

- Defence Personnel Management Key Solution database
- DVA client databases
- National Death Index

- ComSuper member database
- Military Health Outcomes Program (MilHOP) dataset.

Suicidal ideation. Serious thoughts about taking one's own life.

Suicidality. Suicidal ideation (serious thoughts about taking one's own life) and suicide plans.

Subsyndromal disorder. Characterised by or exhibiting symptoms that are not severe enough for diagnosis as a clinically recognised syndrome.

Transitioned ADF/ADF members. ADF members who have left military service. For the purpose of the current study, this included all ADF members who transitioned from the Regular ADF between 2010 and 2014, including those who transitioned into the Active Reserve and Inactive Reserve.

Transitioned status. Transitioned ADF members were categorised into one of three groups that broadly represented their level of continued association and contact with Defence and their potential access to support services provided by Defence:

- **Ex-serving:** A person who was a Regular ADF member before 2010, has since transitioned out of the ADF and is no longer engaged with Defence in a Reservist role. The individual is classified as discharged from Defence
- **Inactive Reservist:** A person who was a Regular ADF member before 2010, but has since transitioned into an Inactive Reservist role
- **Active Reservist:** A person who was a Regular ADF member before 2010, but has since transitioned into an Active Reservist role.

Two-phase design. A well-accepted epidemiological approach to investigating the prevalence of mental disorders. In the first phase, participants completed a screening questionnaire, which was generally economical in terms of time and resources. Based on the results of this screening and the demographic information provided, certain participants were selected for a more accurate but costly formal diagnostic interview.

Veterans' health cards. DVA, on behalf of the Australian Government, uses the health cards as a convenient method for veterans, war widows and their eligible dependants to access health and other care services. Arrangements are based on providing access to clinically appropriate treatment that is evidence-based. There are Gold, White and Orange health cards.

Weighting. Allowing for the inference of results for the entire population. Weighting involved allocating a representative value or 'weight' to the data for each responder, based on key variables. The weight indicated how many individuals in the entire population were represented by each responder. Weighting was applied to:

- correct for differential non-response
- adjust for any systematic biases in the responders (for example, oversampling of high scorers for the CIDI).

White Card. A DVA health card for specific conditions. A White Card entitles the holder to care and treatment for:

- injuries or conditions that are accepted as being caused by war or service-related
- malignant cancer, pulmonary tuberculosis, posttraumatic stress disorder, anxiety and/or depression, whether or not it was caused by war
- symptoms of unidentifiable conditions that arise within 15 years of service (other than peacetime service).

Services covered by a White Card are the same as those for a Gold Card, but must be for treatment of conditions that are accepted as being caused by war or service-related.

World Mental Health Survey Initiative Version of the World Health Organization Composite International Diagnostic Interview – version 3 (CIDI). The CIDI (Kessler & Ustun, 2004) provides an assessment of mental disorders based on the definitions and criteria of two classification systems: the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV) and the International Statistical Classification of Diseases and Related Health Problems – 10th Revision (ICD-10) (World Health Organization, 1994). This instrument was used in phase 2 of the Programme.

Years since transition. To ascertain the number of years since transition from regular service, participants were asked to indicate what year they transitioned to Active Reserves, Inactive Reserves or were discharged out of the service (ex-serving). Options included: zero, one, two, three, four or five years.

Years of regular service. The following categories were used in the Mental Health and Wellbeing Transition Study to define the number of years of regular service: 3 months – 3.9 years, 4–7.9 years, 8–11.9 years, 12–15.9 years, 16–19.9 years and 20+ years.

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