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.

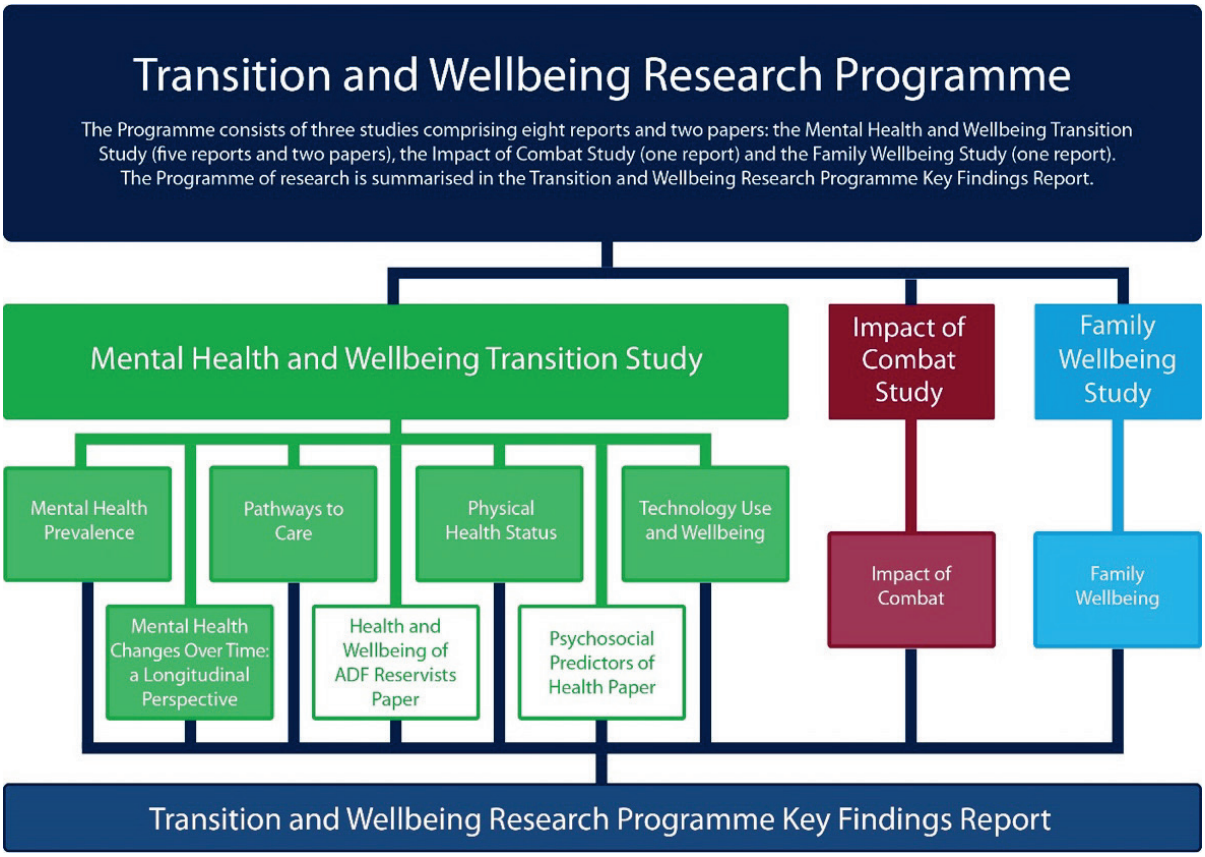
Transitioned ADF and Regular ADF were asked about the use of the internet to seek information or help for mental health, and then specifically asked about the use of the internet for their own mental health. Around one in four Transitioned ADF and one in six Regular ADF used the internet to seek information 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.

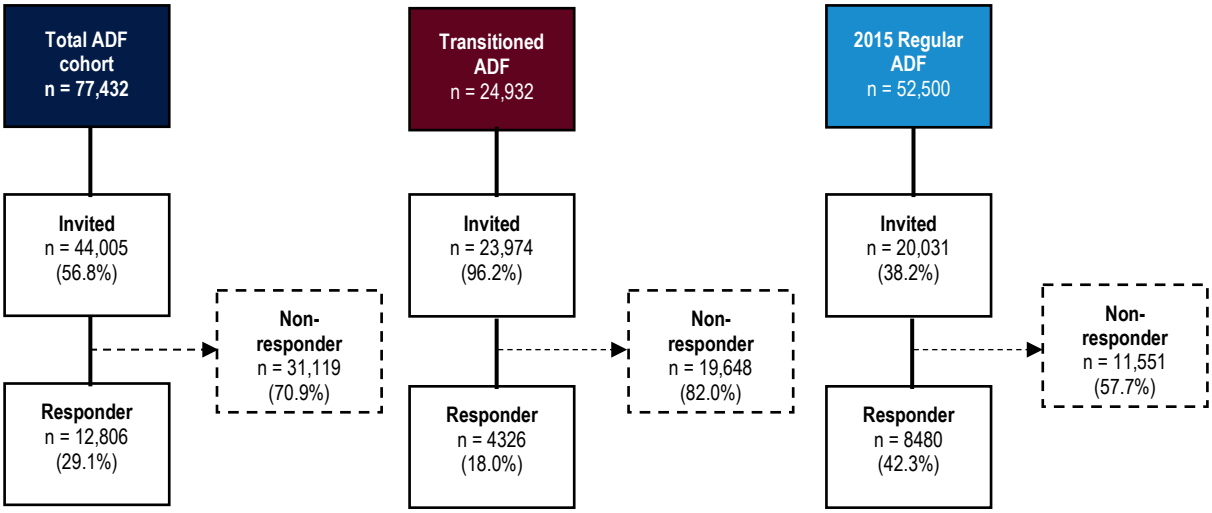
This report summarises findings on the Transitioned ADF and the 2015 Regular ADF, and provides self-report comparisons with the Australian community using Young and Well National Survey data, which was collected in 2012 (Burns et al., 2013). The limited comparison of technology use in the Transitioned 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

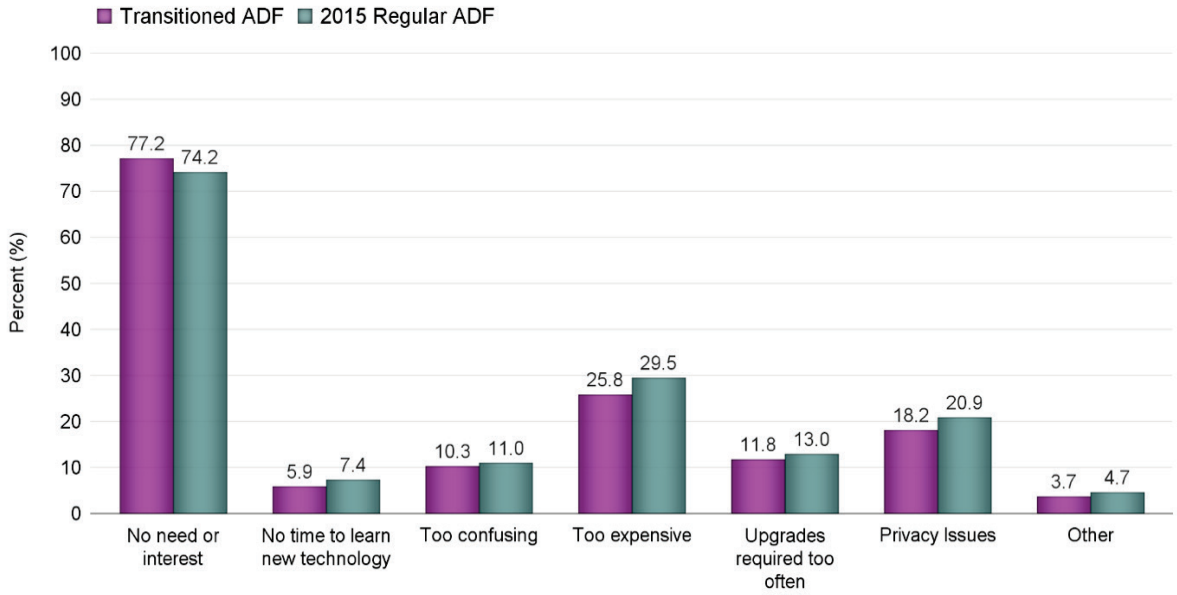
	Transitioned ADF n = 12,145			2015 Regular ADF n = 26,480		
Current types used	**n**	**Weighted n**	**% (95%CI)**	**n**	**Weighted n**	**% (95%CI)**
Smartwatch	133	837	6.9 (5.6, 8.4)	314	3092	11.7 (8.0, 16.8)
Software applications or 'apps'	1456	10081	83.0 (80.6, 85.2)	3337	22618	85.4 (81.7, 88.5)
Wearable 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.

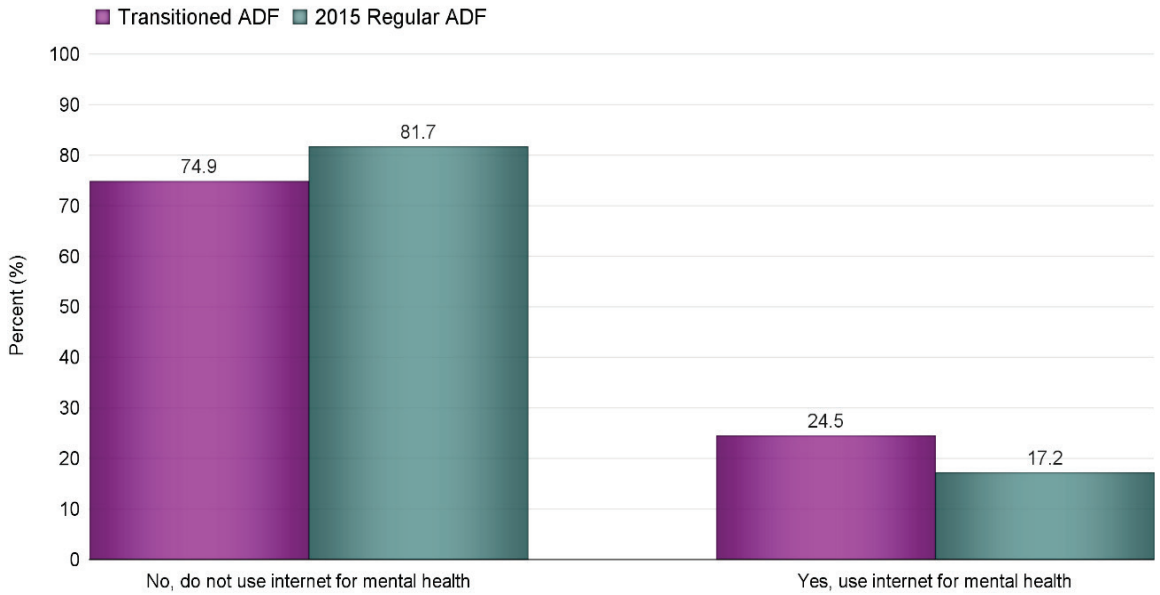
8 Use of the internet to seek mental health information or help (for self or other)

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

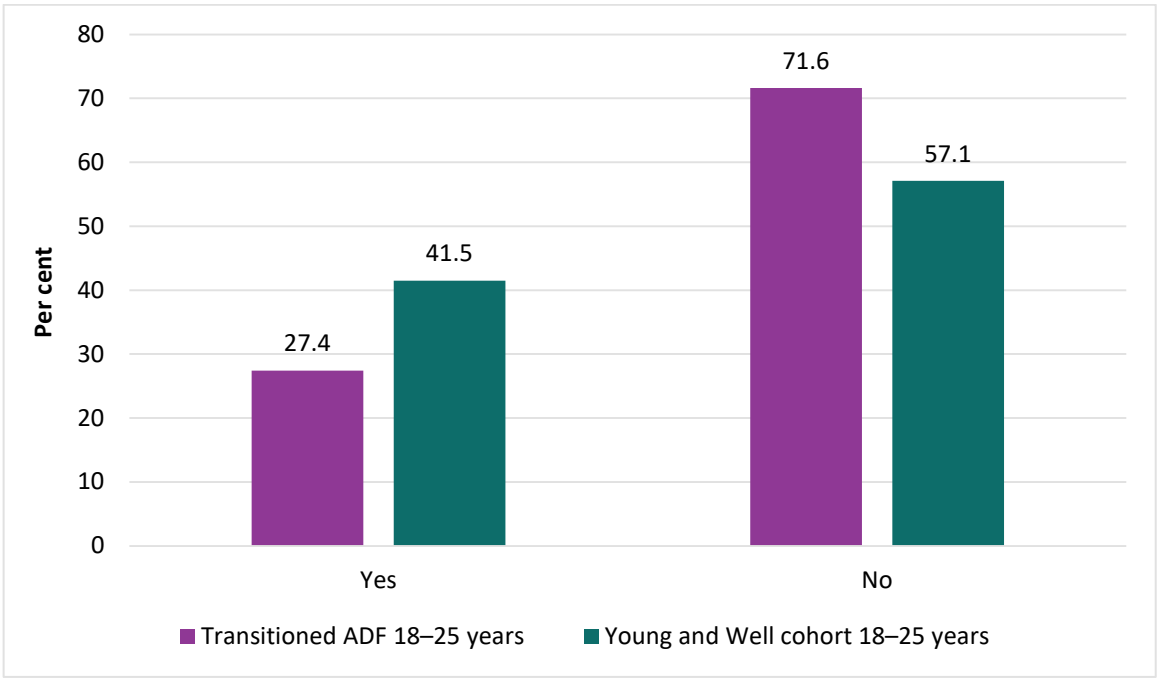
More than a quarter of the Transitioned ADF young adults (27.4%) and 41.5% of the Young and Well cohort reported using the internet to seek help for or manage mental health issues. However, in general, most of the Transitioned ADF young adults (71.6%) and Young and Well cohort (57.1%) did not use the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