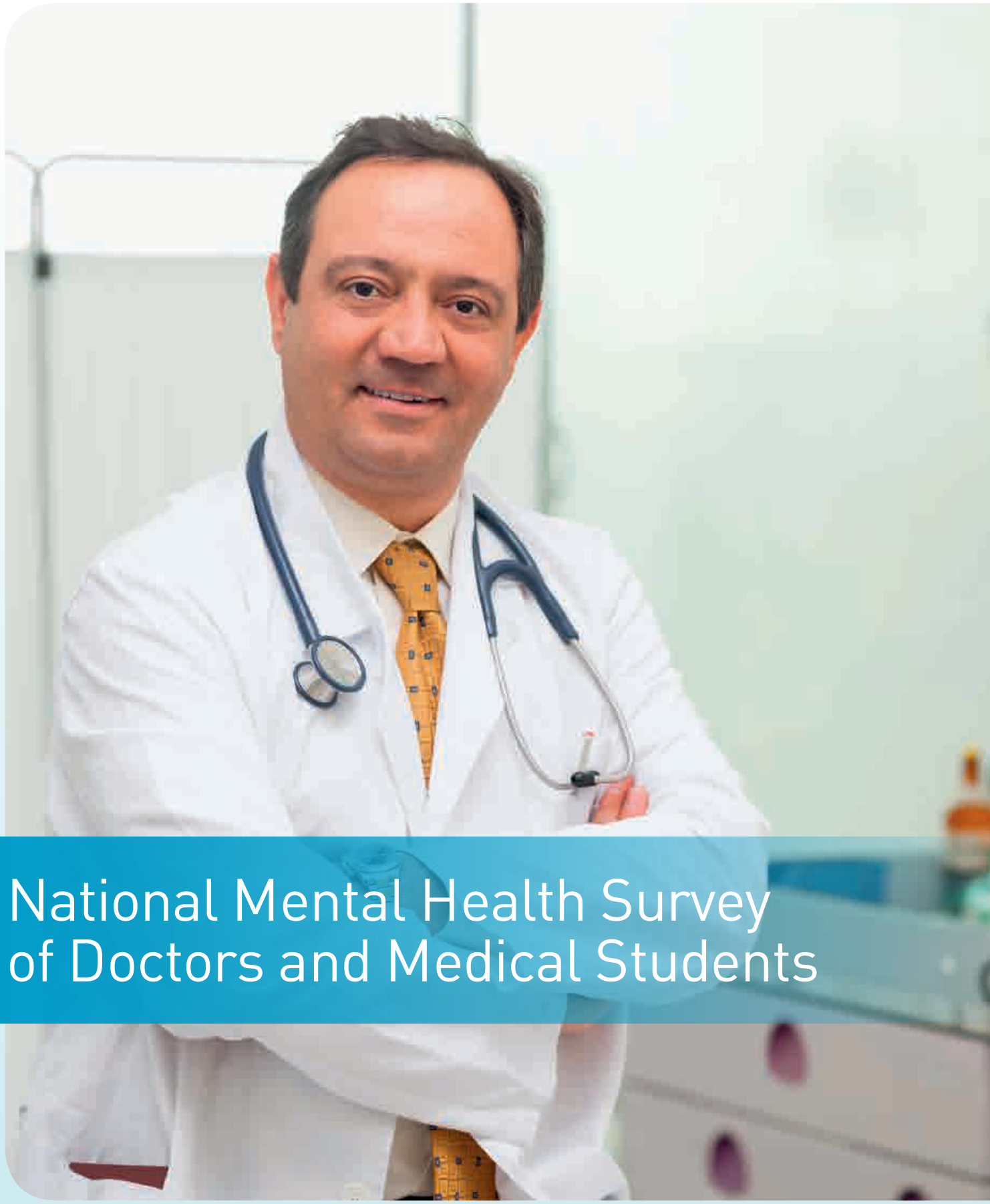
beyondblue
Depression. Anxiety.



National Mental Health Survey of Doctors and Medical Students

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The survey questionnaire and methodology were developed by *beyondblue* with input from a Project Advisory Group comprising leading experts in doctors' mental health (see Appendix 2 for membership details).

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Executive summary

1. Background

The National Mental Health Survey of Doctors and Medical Students was conducted with the aims of:

- understanding issues associated with the mental health of Australian medical students and doctors
- increasing awareness across the medical profession and broader community of issues associated with the mental health of medical students and doctors, and
- informing the development of mental health services and supports for the medical profession.

Topics covered by the anonymous, self-complete survey included specific and general mental health status, substance use and misuse, suicidal ideation and self-harm, workplace and life stressors, levels of burnout, impact of mental health symptoms, treatment and coping strategies employed to address mental health symptoms, barriers to seeking treatment and support, and attitudes regarding doctors with mental health conditions.

The sample comprised 42,942 doctors and 6,658 medical students. The final response rate was approximately 27% for both doctors and medical students, which resulted in 12,252 and 1,811 respondents respectively.

The broad demographic profile of those participating in the *beyondblue* survey and the general Australian doctors' population were similar, based on data obtained from the 2011 Australian Census. It was not possible to assess whether this sample is representative of the mental health status, experiences and attitudes of the Australian medical population. As no population norms exist for medical students, it was not possible to assess the representativeness of this sample.

Doctor data were weighted based on demographic information from the 2011 Census. As no population norms exist for medical students, these data were unweighted.

2. Key findings

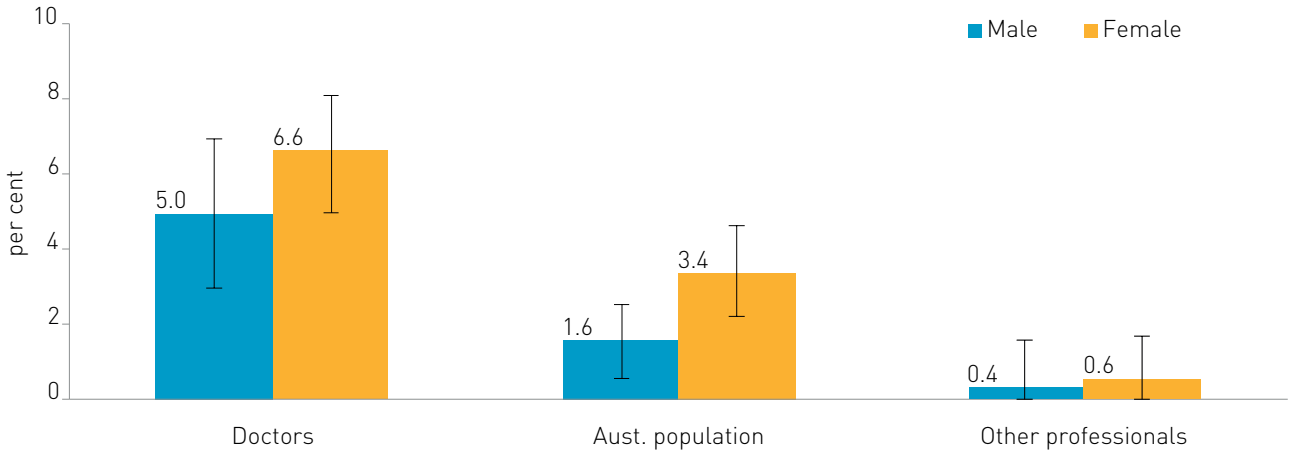
2.1 Doctors

Doctors reported substantially higher rates of psychological distress and suicidal thoughts compared to both the Australian population and other Australian professionals.

The level of psychological distress was assessed using the Kessler 10 (K10) scale. Doctors were asked if they had ever been, or were currently, diagnosed with anxiety or depression.

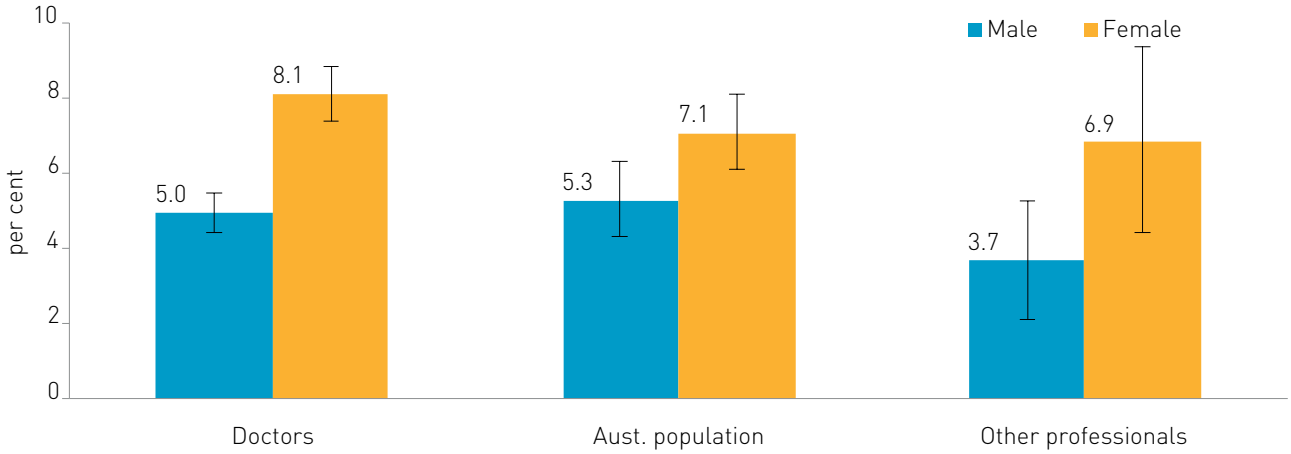
The level of both general distress and specific mental health diagnoses reported by medical professionals was high. In comparison to estimates obtained from the National Survey of Mental Health and Wellbeing 2007 (NSMHW, 2007), the level of very high psychological distress was significantly greater in doctors in comparison to the general population and other professionals (3.4% vs. 2.6% vs. 0.7%). In particular, the levels of very high psychological distress in doctors aged 30 years and below is significantly higher than individuals aged 30 years and under in the Australian population and other professionals (5.9% vs. 2.5% vs. 0.5%). (Figure 1).

Figure 1: Levels of very high psychological distress by gender in doctors, the Australian population and other Australian professionals aged 30 years and below



Approximately 21% of doctors reported having ever been diagnosed with, or treated for, depression and 6% had a current diagnosis. Current levels of depression were similar in doctors in comparison to the general population, but higher than other Australian professionals (6.2% vs. 6.2% vs. 5.3%). (Figure 2). Approximately 9% of doctors reported having ever been diagnosed with or treated for an anxiety disorder (Australian population 5.9%), and 3.7% reported having a current diagnosis (Australian population 2.7%).

Figure 2: Current levels of depression by gender in doctors, the Australian population and other professionals



Approximately a quarter of doctors reported having thoughts of suicide prior to the last 12 months (24.8%), and 10.4% reported having thoughts of suicide in the previous 12 months. The data also indicated that thoughts of suicide are significantly higher in doctors compared to the general population and other professionals (24.8% vs. 13.3% vs 12.8%). Approximately 2% of doctors reported that they had attempted suicide.

Young doctors and female doctors appeared to have higher levels of general and specific mental health problems and reported greater work stress.

General mental health problems were assessed with the use of the K10 and General Health Questionnaire (GHQ), which provides an indicator of the likelihood of minor psychiatric disorders. Specific distress was determined based on diagnoses of anxiety and depression.

Female doctors reported higher rates than male doctors of current psychological distress (4.1% vs 2.8%), high likelihood of minor psychiatric disorders (33.5% vs. 23.2%), and current diagnoses of specifc mental health disorders (8.1% vs. 5.0% for depression; 5.1% vs. 2.9% for anxiety). In addition, they were more likely to have thoughts of suicide in the previous 12 months (11.0% vs. 10.0%), prior to the previous 12 months (28.5% vs. 22.3%), and attempted suicide (3.3% vs. 1.6%). They also reported greater work stress (e.g. 37.4% vs. 19.8% for confict between career and family/personal responsibilities) and were more likely to report experiencing stressful life events in the past year compared to male doctors (e.g. 20.4% vs. 17.2% regarding caring for a family member).

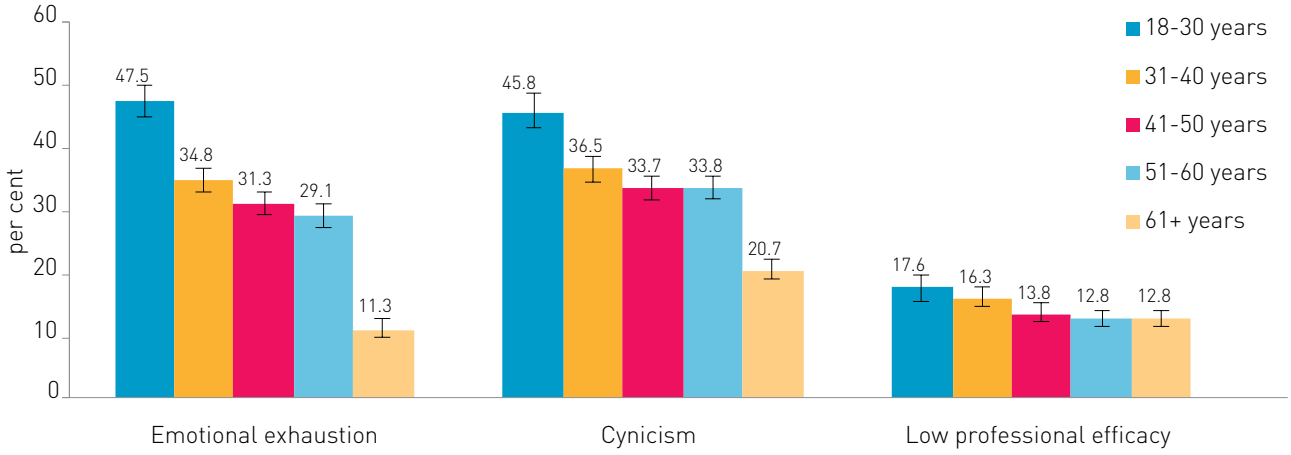
Young doctors appeared to be particularly vulnerable to poor mental health and high levels of stress. Compared to older doctors (51-60 years), younger doctors reported higher rates of burnout, as measured by the Maslach Burnout Inventory (MBI), across the three domains of emotional exhaustion (47.5% vs. 29.1%), low professional efficacy (17.6% vs. 12.8%) and high cynicism (45.8% vs. 33.8%).

The general work experience for Australian doctors is stressful and demanding.

The work experience of doctors was assessed with the use of the MBI. In addition, participants were asked about whether they experienced a number of work related stressors.

Reported levels of burnout were high across the three domains. Specifc subgroups of the population, including young doctors (Figure 3) and female doctors, reported higher rates of burnout in comparison to others. Of interest, levels of cynicism were substantially higher in young doctors in comparison to both pre-clinical and clinical medical students (45.8% vs. 23.6% vs. 26.6%). This suggests that the transition from study to working may be a particularly diffcult time for newly trained doctors and they may require additional support.

Figure 3: Burnout in the domains of emotional exhaustion, cynicism and professional efficacy, by age group



The most common source of work stress reported by doctors related to the need to balance work and personal responsibilities (26.8%). Other sources of work related stress include too much to do at work (25.0%), responsibility at work (20.8%), long work hours (19.5%) and fear of making mistakes (18.7%). There were some differences in work stressors within subgroups of the population. For example, overseas trained and Indigenous doctors were more likely to report being very stressed by racism and bullying. Females were more likely than male doctors to report being very stressed by life and work stressors.

Stigmatising attitudes regarding the performance of doctors with mental health conditions persist.

Stigmatising attitudes regarding the competence of doctors with mental health conditions, and their opportunities for career progression, persist in the medical community.

Approximately 40% of doctors felt that medical professionals with a history of mental health disorders were perceived as less competent than their peers, and 48% felt that these doctors were less likely to be appointed compared to doctors without a history of mental health problems. Approximately 59% of doctors felt that being a patient causes embarrassment for a doctor.

The prevalence of stigmatising attitudes differed by gender. For example, female doctors were more likely than male doctors to view doctors with a mental health history to be as reliable as the average doctor (69% and 55% respectively).

Doctors appear to have a greater degree of resilience to the negative impacts of poor mental health.

Impact was determined based on the reported impact of mental health symptoms in the areas of work and self, and the rates of treatment for specific mental health diagnoses. While rates of general and specific mental health problems were high, it appears that many doctors are able to limit the impact of these problems. However, barriers to seeking treatment and support for a mental health condition were identified, including a fear of a lack of confidentiality or privacy (52.5%), embarrassment (37.4%), impact on registration and right to practice (34.3%), preference to rely on self or not seek help (30.5%), lack of time (28.5%), and concerns about career development or progress (27.5%).

Few doctors reported being highly impacted by their mental health symptoms in the domain of work or self. Doctors reported high rates of treatment and medication use for both depression and anxiety in comparison to the general population. These findings suggest that despite having high levels of general and specific distress, doctors are more likely to seek treatment than the Australian population and are able to manage some of the negative effects of poor mental health. Jogging/exercise was the most commonly identified coping technique used by doctors (males 37.1%, females 35.9%).

2.2 Medical students

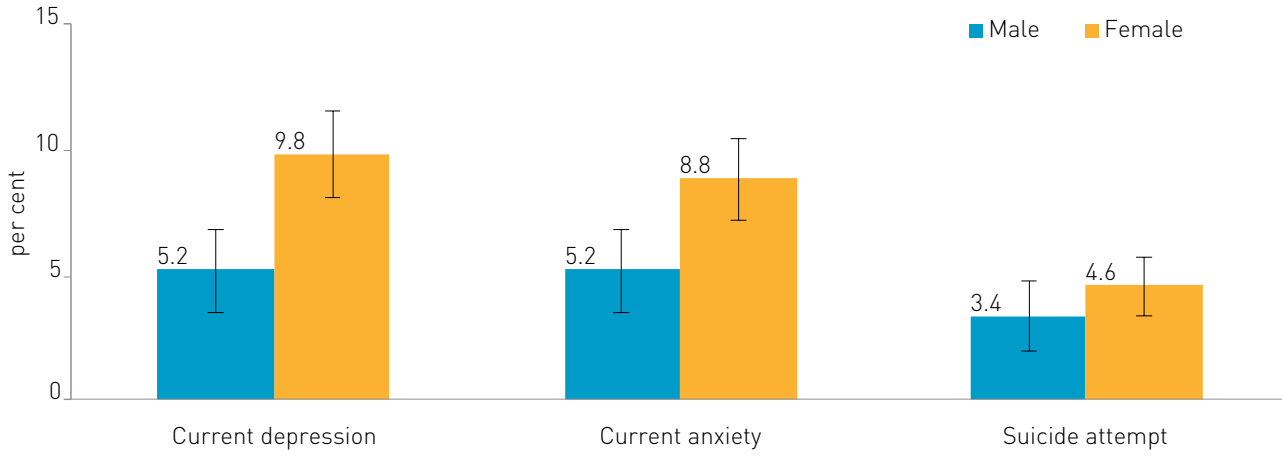
Medical students reported high rates of general and specific distress in comparison to the general population.

Medical students reported higher rates of general distress and specific mental health diagnoses in comparison to the Australian population. However, rates of depression and anxiety were similar to those reported for Australian university students. In addition, reported levels of harmful or hazardous alcohol use were substantially lower than those reported for Australian university students overall (Said, Kypri & Bowman, 2013).

Female students had higher levels of psychological distress and reported more specific mental health diagnoses than male students.

Female students were more likely than male students to be classified as having a high likelihood of a minor psychiatric disorder (47.2% vs. 35.9%), and have very high levels of psychological distress (10.4% vs. 7.1%). As seen in Figure 4, female students were more likely to have a current diagnosis of depression (9.8% vs. 5.2%), a current diagnosis of anxiety (8.8% vs. 5.2%), and have attempted suicide (4.6% vs. 3.4%). In addition, females were more likely to have had suicidal thoughts in the previous 12 months (20.5% vs. 17.1%) and prior to the previous 12 months (34.3% vs. 27.3%). Female students reported higher levels of burnout across the three domains of emotional exhaustion, cynicism and low professional efficacy. Further, in those students who experienced poor mental health, females reported higher impact in the domains of work and self (23.2% and 15.1% respectively), compared with males (17.3% and 8.3% respectively).

Figure 4: Current diagnosis of depression, current diagnosis of anxiety and attempted suicide, by gender



Medical students perceive that there are stigmatising attitudes regarding doctors with mental health conditions.

Students perceived that stigmatising attitudes regarding doctors with mental health conditions exist within the medical community. For example, 40% of students felt that doctors believe that a doctor with a mental health disorder is less competent, and 41.5% felt that doctors with a history of anxiety or depression are less likely to be appointed than other doctors.

There were some differences in stigmatising attitudes in those with a current diagnosis with a mental health condition compared to those who weren't currently diagnosed. More than half of students with a current diagnosis (52.4%) felt that doctors with a mental health history are less competent, whereas 38.2% of students who did not have a current diagnosis agreed with this. Further, 42% of students with a current diagnosis felt that doctors tend to advise colleagues not to divulge a history of depression or anxiety disorders, compared to 22.6% of students who were not currently diagnosed with depression or anxiety.

Indigenous students appear to be particularly vulnerable to poor general and specific mental health.

The student sample included 22 Indigenous students. While the interpretation of results is limited by the small sample size, this subgroup appeared to have poor mental health in comparison to their peers. In addition, of those students who identified as having been diagnosed with a mental health condition, a large proportion reported that their symptoms highly impacted them personally, at work and university.

3. Final considerations and recommendations

The work experience of doctors and medical students appears to be stressful and demanding. Doctors and medical students face long working hours, a need to balance competing work and personal demands, and a stressful work environment. This may contribute to the high general and specific levels of distress, and high levels of burnout reported by both doctors and students in the survey. Initiatives which address the stressful working environment (e.g. increasing resources and the size of the workforce, and limiting excessive work hours) may reduce the burden on overworked doctors. Social marketing programs that promote the importance of mental wellbeing and early treatment for mental health symptoms, could address both long and short term fatigue and improve the ability of doctors to cope with workplace stress.

A number of subgroups within the doctor population could potentially benefit from additional support and education to improve their ability to cope with stress, to maintain positive psychological wellbeing and to seek treatment and support when required. For example, the transition from study to work appears to be a particularly stressful period with higher rates of distress and burnout in younger doctors in comparison to more experienced and older doctors. Female doctors and students reported poor mental health in comparison to male doctors and students. Indigenous doctors and students in particular appear to be vulnerable to poor mental health. Additional support for these groups, through specific mental health services, strengthened mentor/mentee relationships and training to maintain good mental wellbeing and stress management, could be of benefit.

Although levels of mental health distress were high in doctors and students, a higher proportion of doctors with mental health problems seek and receive treatment for their problems. For most doctors with mental health problems, the impact on work and life was relatively modest. This highlights doctors' abilities to minimise the impact of high levels of distress on their functioning and suggests that many doctors appear to be resilient to the negative impacts of mental health distress, perhaps due to the higher level of specialist knowledge and access to treatment services that would be expected in this group.

Stigmatising attitudes regarding the job performance and career progression of doctors with mental illness were evident in a proportion of both the doctor and student populations. These attitudes may not only impact the way doctors deal with any mental health issue they may have, but may also impact a doctor's ability to provide the best possible health care to their patients. As doctors also play a pivotal role in educating the community about important health issues, doctors' attitudes towards mental health problems play an important role in reducing the stigma of mental illness in the community at large. Addressing stigmatising attitudes, particularly in medical students early in their career, could not only remove a potential barrier to doctors seeking appropriate treatment for their own mental health issues, but also improve their ability to provide high standard care for patients with mental illness, and to influence attitudes towards mental illness in their patients and within the community.

1. Introduction

1.1 Background

Doctors and medical students have been identified as a group at high risk of poor mental health. Research and media reports have highlighted consistently high rates of suicide, depression, anxiety disorders, substance use and self-prescribing in the profession. If doctors are not effectively dealing with mental health issues that they are experiencing, this may impact their ability to deliver the best possible medical care to their patients.

Previous research has identified a number of factors which may contribute to the risk of mental health problems in doctors. These include the challenging work environment, which often requires long working hours and high intensity work, effort-reward imbalance, home-work stress, and regular exposure to pain, suffering and death. At the same time, doctors and students, by virtue of their training and their positions, are expected to have good knowledge of mental health problems, their early symptoms, the most effective treatment options and how to effectively access treatment services when required.

While the mental health status of the entire medical community is of interest, a number of potentially at-risk groups have been identified. These include female doctors who may have to balance greater personal and family demands, particularly during child-bearing years, in comparison with their male colleagues. A second group identified as particularly vulnerable to poor mental health is young graduates. The transition from university to work is associated with long work hours, ongoing study requirements, and need for the rapid development of clinical skills in a stressful and challenging environment. Finally, minority groups such as overseas trained medical professionals, Indigenous doctors and students, and those working in rural and remote areas, where greater independence may be required with reduced access to support networks, have been identified as groups who may be particularly vulnerable to psychological distress.

While doctors and medical students are highly educated, have good knowledge of mental health conditions and access to services, it has previously been identified that there may be a number of barriers to seeking treatment for mental health problems. These barriers include perceptions of stigmatising attitudes regarding medical professionals with mental health conditions, lack of confidentiality and privacy, concerns about career progression and potential impacts on patients and colleagues, embarrassment and concerns regarding professional integrity. Further, it has previously been identified that many doctors have a negative attitude towards fellow practitioners with depression. This attitude may prevent doctors with mental health symptoms from seeking help and support from colleagues.

1.2 Purpose

While it has been recognised that medical professionals are at risk of psychological distress, little is known about the current mental health status, barriers to treatment seeking behaviour, use of services and the current workplace experience of Australian doctors and students.

The National Mental Health Survey of Doctors and Medical Students (NMHSDMS) was developed to examine the mental health and work experience of medical professionals. The survey collected information about general mental health status, diagnosis and experience of anxiety and depression. Information from respondents provided insight into substance use and misuse, suicidal ideation and self-harm, workplace and life stressors, levels of burnout, impact of mental health symptoms, treatment and coping strategies employed to address mental health symptoms, and attitudes in relation to doctors with mental health conditions.

This survey aimed to:

- develop an understanding of issues associated with the mental health of Australian doctors and medical students
- increase awareness across the medical profession and broader community of issues associated with the mental health of doctors and medical students, and
- inform the development of mental health services and supports to improve the mental health of doctors and medical students.

2. Methodology

Hard copy (paper-based) and online versions of the survey instruments were used to survey doctors and medical students randomly selected within a national geographical location. Printed questionnaires were sent to the sample by the Australian Health Practitioner Regulation Agency (AHPRA) on behalf of *beyondblue*. Invitation letters accompanying the hard copy survey instrument included a URL for participants to access an online version of the survey instrument. The online version of the survey instrument was offered via Computer Assisted Web Interviewing (CAWI). CAWI provides reliable and complete data input, using automatic filtering, and guarantees anonymity – a condition that was stipulated by *beyondblue*.
All responses were captured electronically and stored securely at Roy Morgan Research's head office in Melbourne.

2.1 Sampling frame

Doctors were sampled according to their geographical location based on the Australian Standard Geographical Classification developed by the Australian Bureau of Statistics. In total, the survey instrument was sent to 42,942 doctors (employed in medicine). Table 1 shows the proportion of doctors sampled by geographical area.

Table 1: Proportion of doctors sampled, by geographical area

Geographical area	Proportion of total to be sampled
Major cities	50%
Inner regional	75%
Outer regional	100%
Remote and very remote	100%

For medical students, 6,658 medical students were sampled randomly.

2.2 Questionnaire design

Two questionnaires, one version for doctors and another for medical students, were based on draft versions developed by the Project Advisory Group (See Appendix 2 for membership details), with input from experts in mental health epidemiology and estimation of burden of disease from the University of Western Australia's Centre for Child Health Research, and Roy Morgan Research.

The questionnaire contained questions about mental health problems, risk factors, coping strategies, and barriers to seeking support and treatment. A number of self-assessment tools were used, including:

- the General Health Questionnaire-28 (GHQ-28) to detect psychiatric distress related to general medical illness
- the Alcohol Use Disorders Identification Test (AUDIT) to detect harmful alcohol consumption
- the Maslach Burnout Inventory, a general survey to measure professional burnout (the student MBI was used for the student instrument), and
- the Kessler Psychological Distress Scale (K10), a general survey to measure the severity of symptoms for mental illness.

Copies of the questionnaires can be found in Appendix 1.

In order to maximise opportunities for comparison of results between doctors and medical students, questions were aligned with previous research. Where possible, demographic questions were included so that the data could be weighted to accurately represent the available population data on the characteristics of doctors and medical students.

2.2.1 Pilot testing

Prior to the launch of the main survey, a random sample of 2,000 doctors and 1,000 medical students were sent an invitation to participate in the pilot study. Following the pilot, minor refinements were made to the questionnaire to improve question sequencing and completion.

Pilot testing was conducted between 28 November and 12 December, 2012.

At survey close, 17% of doctors and 20% of medical students had completed the survey.

As far as possible, the pilot study was conducted according to the procedures and protocols of the survey proper, so as to provide an indication of the ease or difficulty in obtaining successfully completed questionnaires, enabling possible further refinements or improvement to procedures and instructions for the main study.

Response rates from the pilot study were at the lower end of the original expectations. The mitigating circumstances that may have reduced the potential for a stronger response rate included fieldwork being shorter than planned, medical students were not mailed the pre-notification/awareness letter, and the marketing and promotional activities planned for the main study were not implemented pre-pilot.

The aim of the pilot study was to test the formatting, programming, and structure of the questionnaire. More specifically, the aim was to resolve issues such as:

- survey introductions
- assessment of the workability of having individual diagnostic tools in one questionnaire
- logic flow of the questionnaire
- provision of black ball point pen in the mail-out packs
- enclosure with reminder letters, and when to send
- possible response and strike rates, and
- online survey length and completion times.

The main changes implemented for the main study were as follows.

- The layout and content of the online introduction screen was overly busy and missing details. The information was reformatted with the addition of headings which, when clicked on, would cascade with the appropriate text for that section. This allowed all information to appear on a single screen. An estimation of how long the survey might take to complete was also added.
- Before Q1, the addition of a note explaining the wording of the diagnostic tools.
- At Q30, from "When you **are** anxious..." to "When you **have felt** anxious..."
- At Q31, the inclusion of a 'never' column and the removal of the 'more than once a week' option so that the number of options in the scale remains the same.
- At Q66, the addition of a response code, "I am comfortable seeking help" for respondents who would have no hesitation seeking help.

The following amendments were made to the methodology of the main study:

- no insertion of pens with the questionnaire pack
- allowing at least two weeks, in field, before mailing the reminder letters, and
- sending out reminder letters unaccompanied.

2.3 Survey conduct

Doctors and medical students invited to participate in the survey were initially forwarded a letter advising them that they would receive a survey questionnaire in two weeks' time. The second mail-out was a questionnaire pack containing a hard copy questionnaire, an explanatory statement, and a reply paid envelope.

Fieldwork was carried out between 20 February and 4 April, 2013.

All mail outs were dispatched by Database Consultants Australia (DCA), who has a direct-mail agreement with the Australian Health Practitioner Regulation Agency (AHPRA) – the supplier of the sample database. *beyondblue* provided DCA with the relevant documentation which was mail merged by DCA. Contact details of doctors and medical students were not shared with *beyondblue* or Roy Morgan Research.

Participation in the survey was entirely voluntary and anonymous. Recipients were assured that their decision to participate in the survey would not impact on their registration with AHPRA, nor would the data collected be passed on to AHPRA or the Medical Board of Australia or, in the case of medical students, the university at which they are enrolled.

Recipients of the letter could choose to participate in the survey by either:

- completing the hard copy questionnaire, enclosing it in the reply paid envelope, and posting it to Roy Morgan Research, or
- visiting the secure URL and completing the questionnaire online.

2.3.1 Survey reminder

Since surveys were not tracked, in that no identifiable number or detail was recorded against the individual surveys, reminder letters were sent to all doctors and medical students, irrespective of whether they had already completed the questionnaire.

2.3.2 Fieldwork overview

Of the total number of questionnaires distributed (n=49,596), 87% of the mail-out went to doctors while 13% went to medical students.

The response rate was marginally lower for doctors than medical students.

Figure 6: Completes by survey type: doctors v medical students

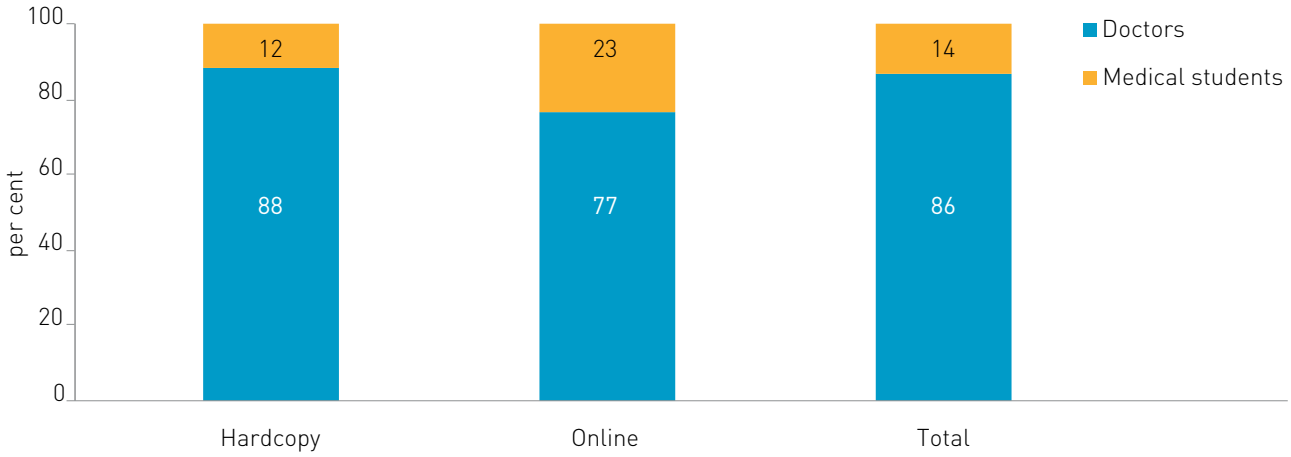


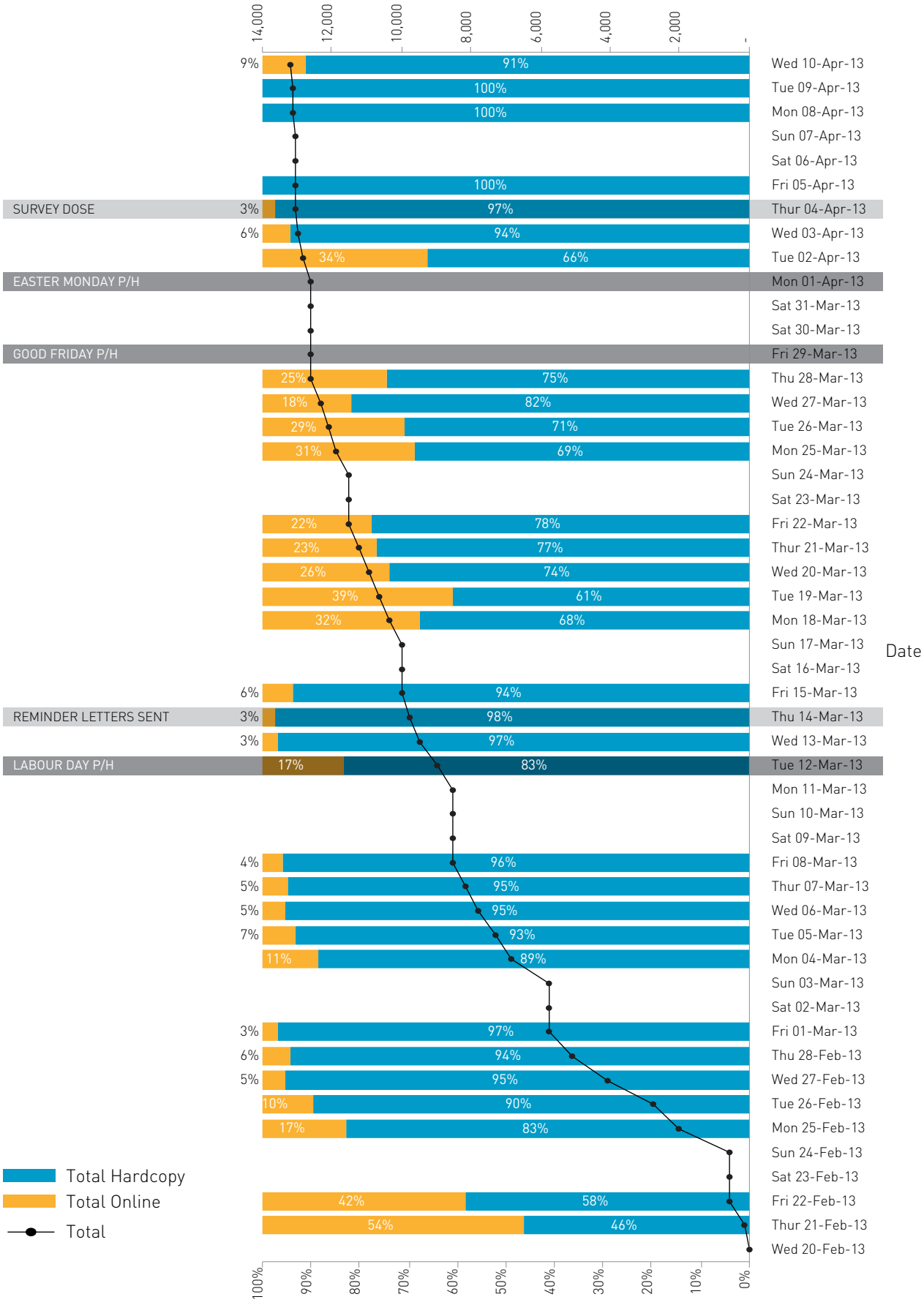
Figure 6 shows that doctors had a stronger preference for completing the questionnaire using the hardcopy version over the online survey. Doctors completed 88% of the hardcopy completes and 77% of the online completes.

Medical students completed 23% of the online completes and 12% of the hardcopy completes.

Within the first two weeks of survey launch, the proportion of doctors who had completed the survey (60%) was greater than the proportion of completes by medical students (53%). See Figure 7 for details.

Figure 7: Daily and cumulative tally of completes: hardcopy v online

People who completed the survey: Doctors n=11,378, Medical Students n=1,799 **Total n=13,177**



2.4 Data cleaning

Logical error checks were completed to ensure data consistency. A small number of errors were identified and corrected in the final file.

2.4.1 Editing

The CAWI survey was programmed with filters and routing, and accept only response where applicable. As such, respondents were guided through the survey accordingly, and consequently there was little need to edit the data for any inconsistencies.

The hard copy survey, however, did require edits to three of the single-response questions:

- Q72. What is your current marital status?
- Q79. In which area would you classify your primary place of work to be located?
- Q80. Which State/Territory do you work in?

Upon reviewing the data, it was found that approximately 0.5% of all respondents had selected more than one response.

Q72 required recoding so that it follows the conventional marital status sequence. For example respondents who had selected both codes 2 (in a committed relationship) and 6 (widowed) were recoded as Code 2, because it would not make sense for someone to be a widow if they were in a committed relationship. Similarly, for respondents who selected codes 4 (separated) and 5 (divorced), they were recoded as Code 5. Refer to Appendix 3 for the full list of recoded code combinations.

Q79 and Q80 were changed from single to multiple responses to ensure that doctors that work (equally) in different geographical locations were captured.

2.4.2 Coding

Where possible, matching codeframes were developed and used in the doctor and medical student versions of the survey.

The following questions (using the doctor survey as the reference point for the question numbers) shared the same codeframes for the partially open-ended response for the 'other' specify:

Codeframe 1

- Q37. Where did you seek personal support or professional treatment from? [for support or treatment of depression]
- Q44. Where did you seek personal support or professional treatment from? [for support or treatment of anxiety disorder]
- Q64. Whether or not you have been depressed, anxious or had substance use problems, where would you be comfortable seeking help from for these mental health problems? I would seek help from:
- Q65. Whether or not you have been depressed, anxious or had substance use problems, where would you be comfortable seeking help from for these mental health problems? I would NOT seek help from:

Codeframe 2

- Q38. What type of treatment did you receive? [for treatment of depression]
- Q45. What type of treatment did you receive? [for treatment of anxiety disorder]

Additionally, there were two fully open-ended questions that required coding.

- Q76. Please specify what kind of disability you have.
- Q83. What is your specialty? (Doctor survey only)

2.4.3 Missing data

Cases with no valid data were deleted. While most doctors and students completed the entire questionnaire, respondents often inadvertently, or otherwise, missed one or two questions in the survey. As a result, there was a small amount of individual missing data for most of the variables in the survey – typically less than 1%. Because of this modest level of missing data, item level imputation was used with minimal impact on overall results. As the small level of missing data was not expected to impact on the analysis, single imputation rather than multiple imputation was employed. Random donor imputation was used, subject to constraints that ensured that imputed values for any missing items conformed with sequencing rules for the questionnaire. Due to the large amount of missing information for the variables relating to doctors specialty and stage of training, these variables were not imputed.

Doctors who were missing data for the key demographic variables of age, gender and work state were not included on the final analysis file, as these cases were unable to be weighted.

2.5 Response bias

The demographic profile of doctors participating in the *beyondblue* survey was compared with characteristics of doctors as reported in the 2011 Australian Census. The profiles were similar in terms of distribution by age, gender and geographic location. However, it is important to note that given the achieved response rate, which has resulted in a modest proportion of the total Australian doctors' population participating in the survey, it is possible that respondents and non-respondents may differ significantly with regards to other variables of interest. For instance, it is unknown whether doctors' mental health status or attitudes towards mental illness affected their decision to participate in the survey.

No population norms exist to allow for the comparison of demographic characteristics of medical students who did and did not participate in the *beyondblue* survey.

2.6 Weighting

Data from the doctor's survey were weighted to represent the full population of doctors in Australia. Weights were derived with the use of calibration on marginal totals. Weights were calculated based on information relating to the distribution of doctors by age groups, sex and state obtained from the 2011 census data.

Again, as no population norms are available for medical students, we were unable to weight the student data.

2.7 Analysis

2.7.1 Kessler 10

The Kessler 10 (K10) provides a measure of non-specific psychological distress. Scores range between 10 and 50. Scores below 20 indicate mental wellbeing, 20–24 mild mental health disorder, 25–29 moderate mental health disorder, and scores greater than 29 serious mental health disorder. The K10 is a widely used screening tool for mental illness, and has been specifically designed to have discrimination for cases of serious mental illness. Detailed re-interview studies, where people who have completed the K10 scale are independently assessed by psychiatrists, have demonstrated that there is a very high correlation between K10 scores and mental illness diagnostic status.

2.7.2 General Health Questionnaire (GHQ)

The GHQ provided an indicator of the presence of minor psychiatric disorder (Goldberg, 1978). The binary scoring method, with the two least severe answers scoring 0 and the two most symptomatic answers scoring 1, was used. A score of greater than 4 was considered to indicate a high likelihood of a minor psychiatric disorder.

2.7.3 Alcohol Use Disorders Identification

The AUDIT, a standardised instrument for assessing alcohol dependence (Babor et al., 1992) and harmful use of alcohol, was administered to all respondents in the survey. Scores of greater or equal than 8 were used to indicated medium risk alcohol use, and scores greater than 15 were classified as high risk alcohol consumption.

2.7.4 Maslach Burnout Inventory

Burnout was assessed within the three domains of emotional exhaustion, cynicism, and professional efficacy with the use of the MBI – general survey. Participants were asked how frequently they experienced certain feelings, such as 'I feel drained from my work' and 'I doubt the significance of my work', in relation to their job.

Average scores within each domain were calculated and compared to norms provided by the test authors to categories participants into low, moderate and high levels of burnout (Maslach, 1986).

2.7.5 Impact

The survey included a series of questions to assess the impact of anxiety or depression on individual functioning within two domains: work and self. Doctors and medical students were asked to rate the frequency of which they had experienced each impact item. These responses were summarised to categorise the impact of anxiety or depression into low, moderate and high levels within the domains of work and self.

If participants indicated that any of the included experiences occurred daily, a value of 2 was assigned. If any of the experiences occurred monthly or weekly a value of 1 was assigned, and if the experience occurred less than monthly a value of 0 was given. Scores were then summed within the domains of work and self, resulting in a possible score range from 0 to 12.

To establish cut points for the categorisation of impact, scores in both domains were compared with levels of psychological distress as measured on the K10 scale. A very high level of psychological distress is very highly correlated with serious mental illness requiring specialised treatment. The items within the self domain occur more commonly and may represent lower levels of impact than the items within the work domain. Within the work domain, summed scores of 2 or above were associated with a 50% or greater likelihood of having a high level of psychological distress, while within the self domain, summed scores of 6 or above were associated with a 50% or greater likelihood of having a high level of psychological distress.

Within the work domain, summed scores of 2 or above, which represent daily occurrence of one experience or weekly/monthly occurrence of two of the listed experiences, were considered to equate to high impact. Scores equal to 1 were considered to be moderate impact.

Within the self domain, summed scores of 6 and 4 were used as cut points for high and moderate impact respectively.

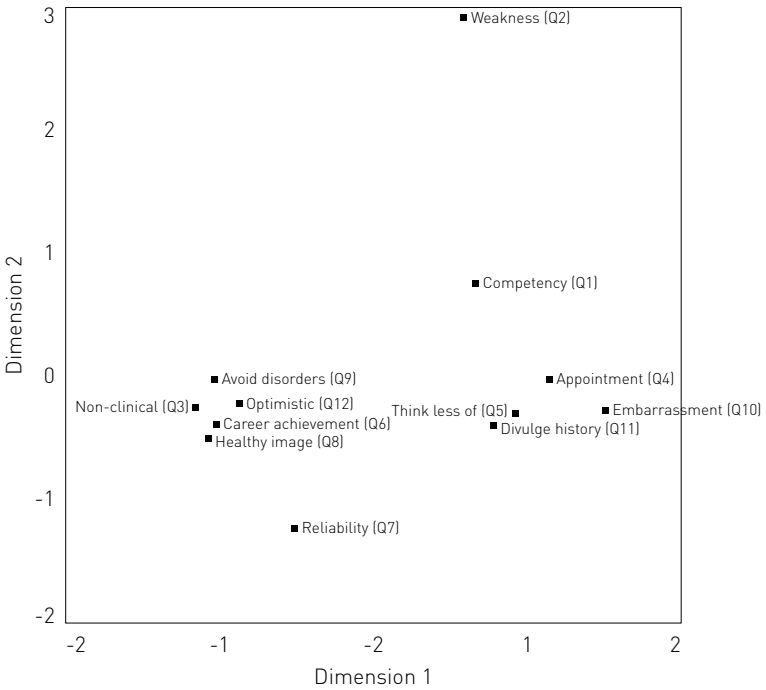
Questions included in each of the domains are included in Appendix 6.

2.7.6 Attitudes

The existence of stigmatising attitudes towards mental health issues, and the capability to provide adequate patient care by doctors with a mental health problem was assessed using a scale that was developed for this survey. Respondents were asked to rate their level of agreement or disagreement with 12 statements about stigmatising attitudes towards doctors with mental illness. In order to develop an overall measure of doctor's attitudes towards mental illness, the responses to these items were analysed to develop a method for combining the responses for each item into an overall score. This was done using both factor analysis and Euclidean distance analysis (results displayed in Figure 8). The purpose of these analyses was to identify whether the series of questions was measuring one or more consistent underlying concepts. Two such factors were identified. The first factor related to attitudes regarding the job performance of doctors with mental health conditions and the second factor related to stigmatising attitudes to mental illness in general. Higher scores equate to more negative attitudes towards job performance and greater levels of stigma.

Questions included within each factor, and the distributions of factor scores are included in Appendix 7.

Figure 8: Euclidean distance analysis of questions relating to attitudes



2.8 Statistical analysis methods

2.8.1 Weighted estimates

Using the data from the doctor's survey, survey weights were used to calculate representative estimates of the proportions of all Australian doctors with particular problems or characteristics. As these estimates are produced from a sample survey, rather than a full census of all doctors, they are subject to sampling error. This sampling error has been estimated from the survey data, and is indicated by the inclusion of 95% confidence intervals (CI). The 95%CI indicates the sample estimate may differ by random chance from the value that would have been obtained if all doctors had been surveyed. For instance, the survey has estimated that the average working hours for doctors aged 18–30 are 49.8 hours per week with a 95% CI of 49.0–50.5. In statistical terms this indicates that if the survey were run many times then by chance variation alone, 95% of the time the survey result would lie in the range 49.0–50.5.

Because population demographics for all Australian medical students are not known, unweighted estimates have been produced from the medical students survey.

2.8.2 Modelling

Binary logistic regression was used to assess the factors associated with high or very high psychological distress in doctors. In addition, factors associated with suicidal thoughts in the past 12 months, and the use of predominately negative coping techniques to deal with mental health symptoms, were modelled.

Demographic, workplace and mental health related factors were evaluated in the model. Variables were eliminated from the final models if non-significant (α=0.05) and the most parsimonious model reported.

3. Results

3.1 Response

Fieldwork was carried out for six weeks between 20 February and 4 April, 2013. In total, 13,178 surveys were completed, giving a response rate of 26.6% (see Table 2). While this response resulted in a large sample, it represents a relatively small proportion of the total Australian doctors and medical student population.

Table 2: Number of completed interviews, by survey type

Survey	Sample size	Target (20–40%)	Completes	Response rate
Doctors	42,942	8,587–17,174	11,379	26.5%
Medical students	6,658	1,332–2,664	1,799	27.0%
Total	49,600	9,919–19,838	13,178	26.6%

The final analysis files included 11,252 doctors and 1,811 medical students.

3.2 Doctors

3.2.1 Demographic characteristics

Key demographic characteristics for doctors participating in the *beyondblue* survey, and from the Australian doctor's population (2011 census data), are provided in Table 3. These data suggest that there are some differences in the age distribution between these two groups. In addition, there is an obvious overrepresentation of doctors from regional, rural and remote areas (Tables 4 and 5). All further analysis uses weighted estimates (weighted totals provided in Table 6).

Table 3: Demographic characteristics of doctors participating in *beyondblue* survey and all Australian doctors (census 2011)

	beyondblue survey		Census	
	n	Per cent	n	Per cent
Age group				
22–25 years old	370	3.3	2,295	3.3
26–30 years old	1,071	9.5	8,151	11.6
31–40 years old	2,486	22.1	19,106	27.2
41–50 years old	2,441	21.7	17,581	25.0
51–60 years old	2,604	23.1	13,857	19.7
61+ years old	2,280	20.3	9,226	13.1
Gender				
Male	6,064	53.9	42,457	60.5
Female	5,188	46.1	27,769	39.5

	beyondblue survey		Census	
	n	Per cent	n	Per cent
State/territory				
ACT	187	1.7	1,280	1.8
NSW	3,198	28.4	22,501	32.0
NT	244	2.2	719	1.0
QLD	2,249	20.0	14,099	20.1
SA	936	8.3	5,786	8.2
TAS	497	4.40	1,574	2.2
VIC	2,829	25.1	17,619	25.1
WA	1,112	9.9	6,649	9.5
Indigenous status				
Non-Indigenous	11,229	99.8	69,792	99.4
Indigenous	23	0.2	177	0.3
Not stated	-	0.0	262	0.4

Table 4: Distribution of Australian doctors, by work area (census 2011)

	n	Per cent
Major cities	58,299	83.0
Inner regional	7,833	11.2
Outer regional	3,367	4.8
Remote	511	0.7
Very remote	132	0.2
No usual	89	0.1

Table 5: Distribution of doctors participating in the *beyondblue* survey, by work area

	n	Per cent
Inner metropolitan	4,836	43.0
Outer metropolitan	2,153	19.1
Regional	2,465	21.9
Rural	1,565	13.9
Remote	233	2.1

Table 6: Weighted totals for demographic characteristics of doctors participating in the *beyondblue* survey

	Total (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	10,447	14.9	14.2	15.6
31–40 years old	19,109	27.2	26.3	28.1
41–50 years old	17,584	25.0	24.2	25.9
51–60 years old	13,859	19.7	19.0	20.5
61+ years old	9,227	13.1	12.6	13.7
Gender				
Male	42,457	60.5	59.5	61.4
Female	27,769	39.5	38.6	40.5
State/territory				
ACT	1,280	1.8	1.6	2.1
NSW	22,500	32.0	31.1	33.0
NT	719	1.0	0.9	1.2
QLD	14,099	20.1	19.3	20.9
SA	5,786	8.2	7.7	8.8
TAS	1,574	2.2	2.0	2.5
VIC	17,619	25.1	24.2	25.9
WA	6,649	9.5	8.9	10.0
Indigenous status				
Non-Indigenous	70,085	99.8	99.7	99.9
Indigenous	141	0.2	0.1	0.3
Region				
Inner metropolitan	30,900	44.0	43.0	45.0
Outer metropolitan	13,772	19.6	18.8	20.4
Regional	15,198	21.6	20.8	22.5
Rural	9,291	13.2	12.6	13.9
Remote	1,065	1.5	1.3	1.7

The mean number of hours worked by doctors participating in the *beyondblue* survey is displayed in Table 7. Doctors between 18 and 30 years of age reported working significantly more hours than older doctors. In addition, there was significant difference between hours worked by doctors in different specialities.

Table 7: Mean hours worked, by key demographic and workplace variables

	Mean	95%CI	
		Lower	Upper
Age group			
18–30 years old	49.8	49.0	50.5
31–40 years old	43.4	42.8	44.0
41–50 years old	43.5	42.8	44.1
51–60 years old	46.1	45.5	46.8
61+ years old	33.7	32.8	34.6
Gender			
Male	46.3	45.9	46.7
Female	39.5	39.1	40.0
Work area			
Inner metropolitan	43.8	43.3	44.3
Outer metropolitan	42.7	42.0	43.3
Regional	43.4	42.7	44.0
Rural	44.1	43.1	45.1
Remote	49.8	46.2	53.5
Specialty			
General practitioner	39.3	38.8	39.9
Anaesthetics	43.8	42.8	44.8
Mental health	41.3	39.9	42.7
Emergency medicine	42.9	41.7	44.2
Paediatrics	45.3	43.9	46.7
Surgery	50.8	49.1	52.5
Rural/remote/Aboriginal health	50.9	48.5	53.4
Non-patient	41.0	38.6	43.4
Oncology	47.6	45.4	49.7
Obstetrics and gynaecology	48.3	46.2	50.4
Imaging and pathology	42.9	41.4	44.4
Other	45.4	44.5	46.2
Training stage			
Intern	51.1	49.6	52.6
Trainee	47.3	46.7	47.8
Consultant	43.3	42.9	43.7
Retired	11.2	9.5	12.9
Missing	39.1	37.7	40.6

	Mean	95%CI	
		Lower	Upper
Overseas degree			
Yes	44.4	43.8	45.1
No	43.3	42.9	43.7
Work setting			
Hospital	47.4	46.9	47.8
University	45.1	42.3	47.8
Solo or group practice	41.3	40.8	41.7
Other patient care	37.4	35.2	39.6
Aboriginal Health Centre	39.4	36.8	42.0
Non-patient care	36.3	34.1	38.5
Not working	7.6	5.1	10.1
Missing	37.8	31.7	43.8
Total	43.6	43.3	43.9

3.2.2 General mental health

Minor psychiatric disorders (GHQ)

Table 8 provides estimates of the number of doctors classified as having high likelihood of minor psychiatric disorder by demographic and workplace characteristics. These results suggest that younger doctors and, in particular, female doctors have significantly higher rates of minor psychiatric disorders. Further, high likelihood of a minor psychiatric disorder was more commonly identified in doctors who did not have children compared to those with children (34.9%, 95%CI=33.2–36.6 and 23.8%, 95%CI=22.8–24.8 respectively) and those who were single (38.0%, 95%CI=35.1–40.9), separated or divorced (37.0%, 95%CI=32.7–41.4) compared to those who were in a committed relationship (25.4%, 95%CI=24.4–26.3). In addition, those working in oncology and paediatrics, and doctors who did not provide speciality information, were more likely to be classified as having a high likelihood of a minor psychiatric disorder compared to others. However, differences between specialities were small.

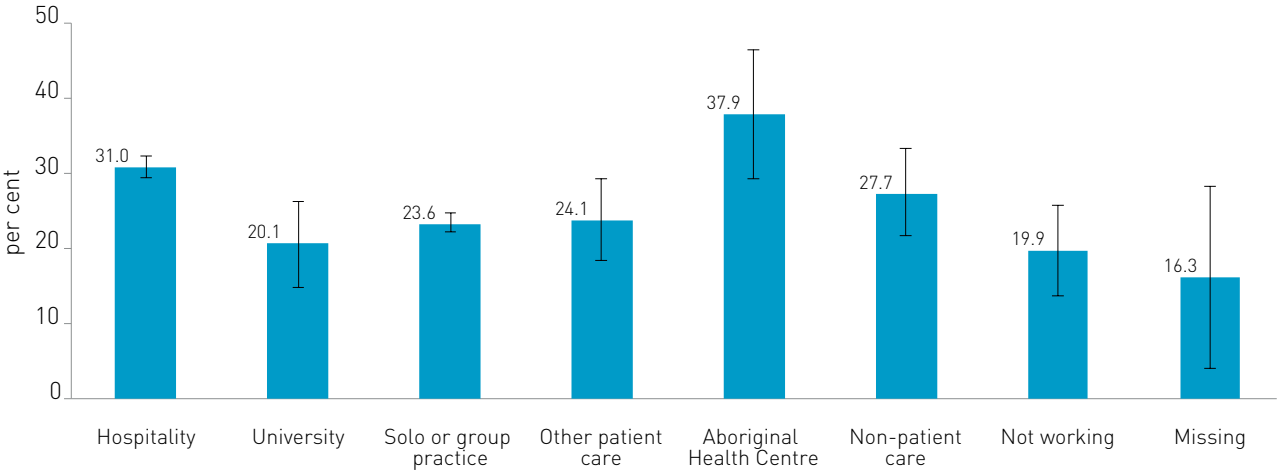
As shown in Figure 9 there were some differences in the proportion of doctors classified as having a high likelihood of a minor psychiatric disorder in different work settings. Those working in Aboriginal Health Centres were most likely to be classified as having high likelihood of a minor disorder (38%). Rates were lowest in doctors who were not currently working (20%).

Table 8: High likelihood of minor psychiatric disorder, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	3,838	36.7	34.2	39.3
31–40 years old	6,162	32.2	30.4	34.1
41–50 years old	4,826	27.5	25.6	29.3
51–60 years old	3,119	22.5	20.8	24.2
61+ years old	1,180	12.8	11.4	14.2
Gender				
Male	9,837	23.2	22.0	24.3
Female	9,289	33.5	32.1	34.8
Work area				
Inner metropolitan	8,667	28.1	26.7	29.4
Outer metropolitan	3,835	27.9	25.8	29.9
Regional	3,993	26.3	24.4	28.1
Rural	2,300	24.8	22.5	27.1
Remote	330	31.0	24.2	37.8
Specialty				
General practitioner	5,738	24.9	23.4	26.3
Anaesthetics	1,433	29.5	26.0	33.0
Mental health	805	24.3	20.4	28.2
Emergency medicine	866	27.5	23.2	31.8
Paediatrics	934	31.8	27.3	36.2
Surgery	737	20.5	16.8	24.2
Rural/remote/Aboriginal health	276	26.0	19.2	32.9
Non-patient	332	30.9	24.0	37.7
Oncology	394	33.9	26.4	41.4
Obstetrics and gynaecology	493	24.7	19.8	29.5
Imaging and pathology	705	28.4	23.6	33.1
Other	2,629	26.7	24.3	29.1
Missing	3,783	32.5	30.2	34.8
Training stage				
Intern	1,084	38.4	33.5	43.4
Trainee	6,891	35.5	33.6	37.3
Consultant	10,191	24.1	23.1	25.2
Retired	270	14.5	11.0	17.9

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	691	17.8	14.9	20.7
Overseas degree				
Yes	4,683	25.4	23.7	27.1
No	14,443	27.9	26.9	28.9
Work setting				
Hospital	10,424	31.0	29.6	32.3
University	253	20.8	14.9	26.6
Solo or group practice	7,210	23.6	22.3	24.8
Other patient care	365	24.1	18.5	29.6
Aboriginal Health Centre	284	37.9	29.3	46.6
Non-patient care	371	27.7	21.6	33.7
Not working	177	19.9	13.8	26.0
Children				
No children	7,618	34.9	33.2	36.6
Children	11,507	23.8	22.8	24.8
Marital status				
Single	3,000	38.0	35.1	40.9
Committed relationship/married	14,940	25.4	24.4	26.3
Separated/divorced	1,123	37.0	32.7	41.4
Widowed	64	14.4	7.1	21.7
Total	19,126	27.2	26.4	28.1

Figure 9: High likelihood of minor psychiatric disorder, by work setting



Psychological distress (K10)

Table 9 provides estimates of the prevalence of very high psychological distress in the doctors' population using the K10 scale. These results suggest higher levels of distress were present in younger doctors and females doctors. Of interest, trainee doctors (pre-vocational and vocational) had significantly higher levels of distress compared to doctors in later stages of their careers. Fewer doctors with children reported very high psychological distress compared to doctors without children (2.3%, 95%CI=2.0–2.7, and 5.6%, 95%CI=4.8–6.5, respectively). Further, rates of very high distress were significantly greater in single (7.8%, 95%CI=6.2–9.5) and separated doctors (9.0%, 95%CI=6.4–11.6) compared to those who were in committed relationships (2.5%, 95%CI=2.1–2.8) or widowed (1.45%, 95%CI=0.0–4.3). A significantly greater proportion of doctors who worked on average more than 50 hours a week (5.7%) reported being very highly distressed in comparison to those who worked less than 50 hours (2.6%) (Table 10). Further, there were higher levels of distress in doctors working in remote areas compared to other regions. However, the interpretation of this finding is limited by the relatively small number of doctors in this subgroup. There was little difference in levels of distress between those working in different specialities. However, doctors who did not provide speciality information had significantly higher levels of distress than other doctors.

The 2007 Australian NSMHW used the K10 scale to measure psychological distress in Australian adults and collected information on occupation. Due to the sample size, estimates for specific professions are not available. However, estimates for the occupational category "professionals" have been derived. In comparison to estimates obtained from the NSMHW, doctors reported significantly higher levels of psychological distress compared to both the general population and, of particular interest, other professionals (Appendix 4, Table A1).

Table 9: Very high psychological distress (K10), by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	618	5.9	4.7	7.2
31–40 years old	707	3.7	2.9	4.5
41–50 years old	574	3.3	2.5	4.0
51–60 years old	365	2.6	2.0	3.3
61+ years old	86	0.9	0.5	1.4
Gender				
Male	1,203	2.8	2.4	3.3
Female	1,147	4.1	3.6	4.7
Work area				
Outer metropolitan	446	3.2	2.4	4.1
Regional	433	2.9	2.2	3.5
Rural	227	2.4	1.6	3.3
Remote	51	4.8	1.4	8.1
Specialty				
General practitioner	658	2.9	2.3	3.4
Anaesthetics	185	3.8	2.3	5.3
Mental health	76	2.3	0.9	3.7
Emergency medicine	92	2.9	1.3	4.6
Paediatrics	95	3.3	1.6	4.9
Surgery	90	2.5	1.0	4.0
Rural/remote/Aboriginal health	17	1.7	0.0	3.5

	n (est.)	Per cent	95%CI	
			Lower	Upper
Non-patient	35	3.3	0.5	6.0
Oncology	64	5.5	1.9	9.0
Obstetrics and gynaecology	68	3.4	1.3	5.5
Imaging and pathology	89	3.6	1.6	5.6
Other	301	3.1	2.1	4.0
Missing	579	5.0	3.9	6.1
Training stage				
Intern	124	4.4	2.4	6.4
Trainee	1,079	5.6	4.7	6.5
Consultant	997	2.4	2.0	2.8
Retired	29	1.6	0.4	2.7
Missing	121	3.1	1.8	4.4
Overseas degree				
Yes	554	3.0	2.3	3.7
No	1,795	3.5	3.0	3.9
Total	2,350	3.4	3.0	3.7

Table 10: Percentage of doctors classified as highly distressed, by hours worked per week

Hours per week	n (est.)	Per cent	95%CI	
			Lower	Upper
Less than 37.5 hours	461	2.4	1.9	2.9
37.5 to 50 hours	927	2.7	2.2	3.2
Greater than 50 hours	962	5.7	4.8	6.7
Total	2,350	3.4	3.0	3.7

3.2.3 Specific mental health disorders

Depression

Approximately 20% of doctors reported having ever been diagnosed with depression. As evident in Table 11, females were significantly more likely to have received a diagnosis of depression than male doctors (27.1% and 16.6% respectively). There was no significant difference between those doctors with and those without children. However, those who reported being single or divorced (23.7%, 95%CI=21.2–26.2 and 39.7%, 95%CI=35.3–44.0 respectively) were more likely to have received a depression diagnosis compared to those who were in committed relationships or widowed (19.4%, 95%CI=18.5–20.2 and 22.9%, 95%CI=14.2–31.7 respectively). In addition, while interpretation is again limited by the small sample size, doctors working in remote areas had a slightly higher rate of having ever received a depression diagnosis compared to those living in less remote areas.

Table 11: Doctors ever diagnosed with depression, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	1,849	17.7	15.7	19.7
31–40 years old	3,795	19.9	18.3	21.4
41–50 years old	3,977	22.6	20.9	24.3
51–60 years old	3,366	24.3	22.6	26.0
61+ years old	1,590	17.2	15.6	18.9
Gender				
Male	7,058	16.6	15.7	17.6
Female	7,518	27.1	25.8	28.3
Work area				
Inner metropolitan	6,347	20.5	19.4	21.7
Outer metropolitan	2,782	20.2	18.4	22.0
Regional	3,158	20.8	19.1	22.4
Rural	2,040	22.0	19.8	24.1
Remote	250	23.5	17.5	29.4
Specialty				
General practitioner	5,211	22.6	21.2	23.9
Anaesthetics	986	20.3	17.3	23.3
Mental health	890	26.8	22.9	30.8
Emergency medicine	649	20.6	16.8	24.4
Paediatrics	552	18.8	15.1	22.4
Surgery	495	13.8	10.8	16.8
Rural/remote/Aboriginal health	240	22.6	16.3	29.0
Non-patient	327	30.4	23.5	37.3
Oncology	221	19.0	13.1	25.0
Obstetrics and gynaecology	410	20.5	16.0	24.9
Imaging and pathology	440	17.7	13.8	21.6
Other	1,922	19.5	17.5	21.6

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	2,235	19.2	17.3	21.1
Training stage				
Intern	514	18.2	14.4	22.1
Trainee	3,844	19.8	18.3	21.3
Consultant	9,052	21.4	20.4	22.4
Retired	365	19.5	15.6	23.5
Missing	801	20.7	17.7	23.6
Overseas degree				
Yes	2,714	14.7	13.4	16.1
No	11,862	22.9	22.0	23.8
Work setting				
Hospital	6,543	19.4	18.3	20.6
University	228	18.8	13.3	24.2
Solo or group practice	6,596	21.6	20.4	22.7
Other patient care	427	28.2	22.6	33.8
Aboriginal Health Centre	181	24.2	16.8	31.6
Non-patient care	371	27.7	21.8	33.6
Not working	182	20.5	14.4	26.6
Missing	47	18.5	5.0	32.0
Total	14,576	20.8	20.0	21.5

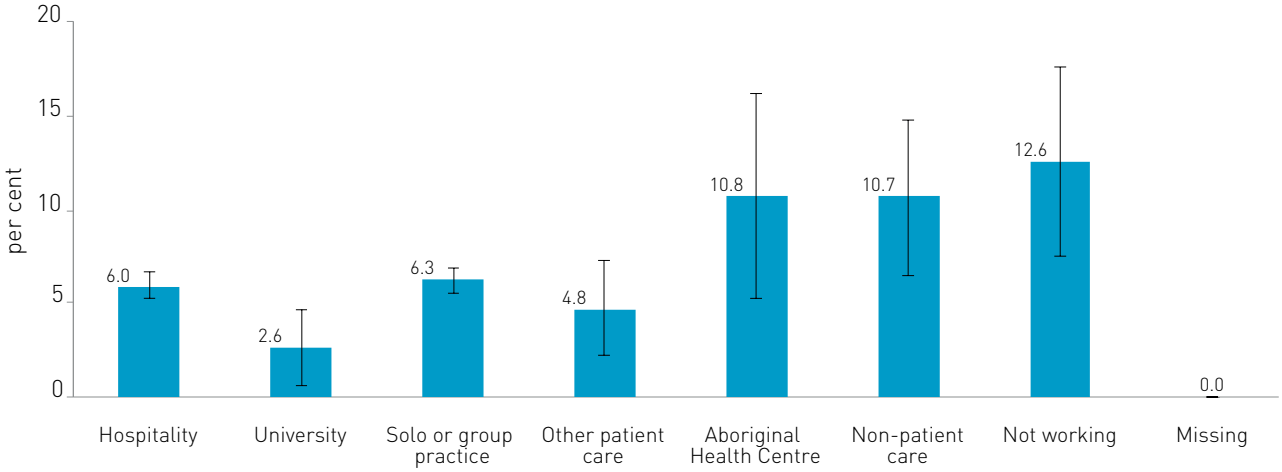
Approximately 6% of doctors had a current diagnosis of depression. As seen in Table 12, a greater number of female doctors reported current depression compared with males. There was no significant difference between doctors with and without children. However, single (9.1%, 95%CI=7.5–10.8) and separated doctors (14.0%, 95%CI=10.8–17.1) were more likely to report current depression compared to those in committed relationships (5.4%, 95%CI=5.0–5.9) or widowed (7.8%, 95%CI=2.2–13.4). As seen in Figure 10, there were some differences by work setting. Those working in Aboriginal Health Centres or non-patient care, or who were not working, reported the highest levels of current depression. In addition, higher rates of current depression were reported by doctors working in remote areas compared to other regions. Again, assessment of the significance of these findings is limited by the small size of this subgroup.

Table 12: Doctors currently diagnosed with depression, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	616	5.9	4.7	7.1
31–40 years old	1,112	5.8	4.9	6.7
41–50 years old	1,174	6.7	5.7	7.7
51–60 years old	1,039	7.5	6.5	8.5
61+ years old	428	4.6	3.7	5.6
Gender				
Male	2,110	5.0	4.4	5.5
Female	2,258	8.1	7.4	8.9
Work area				
Inner metropolitan	1,835	5.9	5.3	6.6
Outer metropolitan	903	6.6	5.5	7.7
Regional	946	6.2	5.2	7.2
Rural	591	6.4	5.1	7.6
Remote	93	8.8	4.7	12.8
Specialty				
General practitioner	1,515	6.6	5.8	7.4
Anaesthetics	343	7.1	5.2	9.0
Mental health	238	7.2	4.9	9.5
Emergency medicine	176	5.6	3.4	7.8
Paediatrics	155	5.3	3.3	7.3
Surgery	128	3.6	2.0	5.1
Rural/remote/Aboriginal health	64	6.1	2.5	9.6
Non-patient	101	9.4	4.8	13.9
Oncology	70	6.1	2.6	9.5
Obstetrics and gynaecology	102	5.1	2.8	7.5
Imaging and pathology	148	6.0	3.5	8.4
Other	514	5.2	4.1	6.4
Missing	813	7.0	5.7	8.2
Training stage				
Intern	215	7.6	4.9	10.3
Trainee	1,190	6.1	5.2	7.0
Consultant	2,612	6.2	5.6	6.8
Retired	151	8.1	5.3	10.8

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	201	5.2	3.5	6.8
Overseas degree				
Yes	740	4.0	3.3	4.8
No	3,629	7.0	6.4	7.6
Total	4,368	6.2	5.8	6.7

Figure 10: Current depression, by work setting



Anxiety

Approximately 9% of doctors reported having ever being diagnosed or treated with an anxiety disorder. A significantly higher number of female doctors (11.3%) reported having ever received a diagnosis compared with male doctors (6.9%) (Table 13). While there were no significant differences in lifetime diagnosis of anxiety by doctors in different work settings, those doctors with children had significantly lower rates of anxiety compared to those with no children (7.9%, 95%CI=7.3–8.5 and 10.3%, 95%CI=9.2–11.4 respectively). In addition, those who were single (11.4%, 95%CI=9.5–13.2) or separated (15.3%, 95%CI=12.0–18.5) had higher rates of anxiety diagnosis compared to those who were in committed relationships (8.0%, 95%CI=7.4–8.5) or widowed (6.2%, 95%CI=0.8–11.5).

Table 13: Doctors ever diagnosed with anxiety, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	1,084	10.4	8.8	12.0
31–40 years old	1,603	8.4	7.3	9.5
41–50 years old	1,679	9.6	8.4	10.7
51–60 years old	1,182	8.5	7.4	9.6
61+ years old	520	5.6	4.6	6.6
Gender				
Male	2,942	6.9	6.3	7.6
Female	3,126	11.3	10.4	12.2

	n (est.)	Per cent	95%CI	
			Lower	Upper
Work area				
Inner metropolitan	2,851	9.2	8.4	10.1
Outer metropolitan	1,239	9.0	7.7	10.3
Regional	1,166	7.7	6.6	8.8
Rural	745	8.0	6.6	9.4
Remote	67	6.3	2.8	9.8
Specialty				
General practitioner	2,130	9.2	8.3	10.2
Anaesthetics	349	7.2	5.2	9.1
Mental health	411	12.4	9.4	15.4
Emergency medicine	206	6.5	4.2	8.9
Paediatrics	242	8.2	5.6	10.8
Surgery	168	4.7	2.9	6.5
Rural/remote/Aboriginal health	74	7.0	3.0	11.0
Non-patient	121	11.3	6.6	15.9
Oncology	92	8.0	3.8	12.1
Obstetrics and gynaecology	122	6.1	3.5	8.7
Imaging and pathology	231	9.3	6.3	12.3
Other	847	8.6	7.1	10.1
Missing	1,075	9.2	7.8	10.6
Training stage				
Intern	283	10.1	7.0	13.1
Trainee	1,722	8.9	7.8	9.9
Consultant	3,701	8.8	8.1	9.5
Retired	151	8.1	5.3	10.9
Missing	210	5.4	3.8	7.1
Overseas degree				
Yes	893	4.9	4.0	5.7
No	5,175	10.0	9.3	10.7
Total	6,068	8.6	8.1	9.2

Approximately 4% of doctors reported being currently diagnosed with, or treated for, an anxiety disorder. As can be seen in Table 14, current anxiety diagnosis are relatively stable across all age–groups. Females reported higher levels of anxiety than males (5.1% and 2.9% respectively). There were no significant differences between levels of current anxiety in doctors working in different settings. In addition, while single and separated doctors (6.2%, 95%CI=4.8–7.6 and 6.0%, 95%CI=3.8–8.2 respectively) had higher rates of current depression compared to those in committed relationships (3.3%, 95%CI=2.9–3.7), there was no difference between those with and without children.

Table 14: Doctors currently diagnosed with anxiety, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	507	4.9	3.8	6.0
31–40 years old	693	3.6	2.9	4.4
41–50 years old	727	4.1	3.3	4.9
51–60 years old	518	3.7	3.0	4.5
61+ years old	184	2.0	1.4	2.6
Gender				
Male	1,212	2.9	2.4	3.3
Female	1,416	5.1	4.5	5.7
Work area				
Inner metropolitan	1,241	4.0	3.4	4.6
Outer metropolitan	571	4.2	3.2	5.1
Regional	470	3.1	2.4	3.8
Rural	302	3.3	2.4	4.1
Remote	44	4.1	1.1	7.2
Specialty				
General practitioner	995	4.3	3.6	5.0
Anaesthetics	116	2.4	1.3	3.5
Mental health	166	5.0	3.0	7.0
Emergency medicine	133	4.2	2.3	6.1
Paediatrics	86	2.9	1.3	4.6
Surgery	77	2.1	0.8	3.5
Rural/remote/Aboriginal health	31	2.9	0.4	5.5
Non-patient	47	4.4	1.5	7.2
Oncology	33	2.9	0.3	5.4
Obstetrics and gynaecology	33	1.7	0.3	3.0
Imaging and pathology	107	4.3	2.2	6.4
Other	323	3.3	2.4	4.2
Missing	481	4.1	3.2	5.1
Training stage				
Intern	138	4.9	2.7	7.1
Trainee	801	4.1	3.4	4.9
Consultant	1,562	3.7	3.2	4.2
Retired	66	3.5	1.7	5.4

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	62	1.6	0.7	2.5
Overseas degree				
Yes	295	1.6	1.1	2.1
No	2,333	4.5	4.0	5.0
Work setting				
Hospital	1,248	3.7	3.1	4.2
University	45	3.7	1.0	6.4
Solo or group practice	1,130	3.7	3.2	4.2
Other patient care	45	2.9	1.0	4.9
Aboriginal Health Centre	43	5.7	1.7	9.7
Non-patient care	63	4.7	1.7	7.7
Not working	54	6.1	2.5	9.7
Missing	0	0.0	0.0	0.0
Total	2,628	3.7	3.4	4.1

Suicide

Approximately one-quarter of doctors reported having thoughts of taking their own life prior to the last 12 months (Table 15), and 10.4% reported having these thoughts within the last 12 months (Table 16). Approximately 2% of doctors reported having ever attempted suicide. Doctors without children reported higher rates of suicide attempts compared to doctors with children (3.2%, 95%CI=2.6 – 3.8 and 1.86%, 95%CI=1.6–2.2 respectively). Doctors who were separated or divorced (6.4%, 95%CI=4.3–8.5) had a higher rate of attempted suicide in comparison to both single doctors (3.6%, 95%CI=2.5–4.6) and those in committed relationships (1.9%, 95%CI=1.6–2.2). There were no significant differences in the proportion of doctors who had attempted suicide in different work settings (Table 17).

Rates of both suicidal ideation and attempted suicide are substantially higher than those reported by the general population and other professionals in the NSMHW (Appendix 4, Tables A4 and A5).

Table 15: Thoughts of suicide prior to the previous 12 months, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	2,888	27.6	25.3	30.0
31–40 years old	4,816	25.2	23.5	26.9
41–50 years old	4,719	26.8	25.0	28.7
51–60 years old	3,638	26.3	24.5	28.0
61+ years old	1,343	14.6	13.1	16.1
Gender				
Male	9,486	22.3	21.2	23.5
Female	7,917	28.5	27.2	29.8
Work area				
Inner metropolitan	7,608	24.6	23.3	25.9
Outer metropolitan	3,287	23.9	22.0	25.8
Regional	3,804	25.0	23.2	26.8
Rural	2,373	25.5	23.2	27.9
Remote	332	31.1	24.5	37.8
Specialty				
General practitioner	5,261	22.8	21.4	24.2
Anaesthetics	1,355	27.9	24.5	31.3
Mental health	1,069	32.2	27.9	36.5
Emergency medicine	867	27.5	23.2	31.8
Paediatrics	690	23.5	19.4	27.5
Surgery	757	21.1	17.4	24.7
Rural/remote/Aboriginal health	253	23.9	17.3	30.5
Non-patient	350	32.6	25.5	39.6
Oncology	249	21.5	15.2	27.8
Obstetrics and gynaecology	517	25.9	20.9	30.8
Imaging and pathology	659	26.5	21.9	31.1
Other	2,120	21.5	19.4	23.7
Missing	3,255	28.0	25.7	30.2
Training stage				
Intern	728	25.8	21.4	30.3
Trainee	5,301	27.3	25.5	29.0
Consultant	10,262	24.3	23.2	25.4
Retired	351	18.8	14.9	22.7

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	762	19.6	16.7	22.6
Overseas degree				
Yes	3,322	18.0	16.5	19.5
No	14,081	27.2	26.2	28.2
Work setting				
Hospital	9,044	26.7	25.4	27.9
University	264	21.8	15.8	27.7
Solo or group practice	6,816	22.3	21.1	23.5
Other patient care	483	31.9	25.9	37.8
Aboriginal Health Centre	261	34.8	26.4	43.1
Non-patient care	376	28.0	22.0	34.1
Not working	160	17.9	11.9	24.0
Missing	31	12.0	1.7	22.3
Total	17,403	24.8	23.9	25.6

Table 16: Thoughts of suicide in the previous 12 months, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	1,327	12.7	10.9	14.5
31–40 years old	2,013	10.5	9.3	11.8
41–50 years old	1,927	11.0	9.7	12.3
51–60 years old	1,504	10.9	9.6	12.1
61+ years old	552	6.0	5.0	7.0
Gender				
Male	4,264	10.0	9.2	10.9
Female	3,058	11.0	10.1	11.9
Work area				
Inner metropolitan	3,139	10.2	9.3	11.1
Outer metropolitan	1,480	10.7	9.3	12.2
Regional	1,619	10.7	9.4	11.9
Rural	934	10.1	8.5	11.7
Remote	151	14.2	9.2	19.2
Specialty				
General practitioner	2,036	8.8	7.9	9.8

	n (est.)	Per cent	95%CI	
			Lower	Upper
Anaesthetics	639	13.2	10.6	15.7
Mental health	399	12.0	9.0	15.1
Emergency medicine	416	13.2	9.9	16.5
Paediatrics	246	8.4	5.7	11.0
Surgery	357	9.9	7.2	12.7
Rural/remote/Aboriginal health	105	9.9	5.2	14.5
Non-patient	149	13.9	8.5	19.2
Oncology	113	9.7	5.2	14.3
Obstetrics and gynaecology	177	8.8	5.6	12.1
Imaging and pathology	198	8.0	5.2	10.8
Other	953	9.7	8.1	11.2
Missing	1,535	13.2	11.5	14.9
Training stage				
Intern	347	12.3	9.0	15.7
Trainee	2,416	12.4	11.1	13.7
Consultant	4,067	9.6	8.9	10.4
Retired	174	9.3	6.4	12.2
Missing	318	8.2	6.1	10.3
Overseas degree				
Yes	1,518	8.2	7.2	9.3
No	5,805	11.2	10.5	11.9
Work setting				
Hospital	3,979	11.8	10.9	12.8
University	64	5.2	2.3	8.2
Solo or group practice	2,686	8.8	8.0	9.6
Other patient care	188	12.4	8.1	16.7
Aboriginal Health Centre	147	19.6	12.5	26.7
Non-patient care	138	10.3	6.1	14.5
Not working	92	10.3	5.5	15.2
Missing	29	11.1	0.3	22.0
Total	7,322	10.4	9.8	11.0

Table 17: Ever attempted suicide, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	283	2.7	1.9	3.6
31–40 years old	412	2.2	1.6	2.7
41–50 years old	422	2.4	1.8	3.0
51–60 years old	355	2.6	1.9	3.2
61+ years old	131	1.4	0.9	1.9
Gender				
Male	692	1.6	1.3	2.0
Female	911	3.3	2.8	3.8
Work area				
Inner metropolitan	648	2.1	1.7	2.5
Outer metropolitan	242	1.8	1.2	2.3
Regional	416	2.7	2.1	3.4
Rural	259	2.8	1.9	3.6
Remote	39	3.6	1.1	6.2
Specialty				
General practitioner	443	1.9	1.5	2.4
Anaesthetics	93	1.9	0.9	2.9
Mental health	147	4.4	2.6	6.3
Emergency medicine	95	3.0	1.4	4.7
Paediatrics	39	1.3	0.3	2.4
Surgery	45	1.3	0.3	2.2
Rural/remote/Aboriginal health	37	3.5	0.8	6.2
Non-patient	47	4.4	1.1	7.6
Oncology	28	2.4	0.1	4.6
Obstetrics and gynaecology	35	1.8	0.2	3.3
Imaging and pathology	37	1.5	0.4	2.6
Other	181	1.8	1.2	2.5
Missing	377	3.2	2.4	4.1
Training stage				
Intern	64	2.3	0.8	3.8
Trainee	557	2.9	2.2	3.5
Consultant	856	2.0	1.7	2.4
Retired	38	2.1	0.6	3.5

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	88	2.3	1.1	3.4
Overseas degree				
Yes	333	1.8	1.3	2.3
No	1,271	2.5	2.1	2.8
Work setting				
Hospital	761	2.2	1.8	2.7
University	15	1.3	0.0	2.6
Solo or group practice	668	2.2	1.8	2.6
Other patient care	60	3.9	1.5	6.4
Aboriginal Health Centre	19	2.5	0.4	4.7
Non-patient care	62	4.6	2.0	7.2
Not working	18	2.1	0.0	4.4
Missing	0	0.0	0.0	0.0
Total	1,603	2.3	2.0	2.6

3.2.4 Substance use

Alcohol (AUDIT)

The AUDIT provides a measure of low, moderate and high risk patterns of alcohol intake. Moderate risk equates to a hazardous level of intake while a high risk classification is associated with harmful drinking patterns. The proportion of doctors classified as having moderate and high risk drinking behaviour is shown in Tables 18 and 19 respectively. Younger doctors had the highest levels of moderate or high risk alcohol use. While levels of moderate risk intake declined across age-group, patterns of high risk alcohol use remained relatively stable (range 1.7%–3.2%). Males had significantly higher levels of moderate or high risk use compared to females (18.1%, 95%CI=17.1–19.1 and 10.9%, 95%CI=10.0–11.8 respectively). Slightly higher levels of high risk alcohol use were reported by doctors in rural and remote areas compared to those in regional and metropolitan areas (3.6%, 95%CI=2.7–4.6 and 2.3%, 95%CI=1.9–2.6). Harmful alcohol use was higher in divorced doctors (6.01%, 95%CI=3.8–8.2) compared to those in a committed relationship (2.1%, 95%CI=1.8–2.5). There was no significant difference between single (3.5%, 95%CI=2.4–4.7) doctors and other groups, doctors with and without children, or those working in different settings. In addition, there was little difference between doctors working in different speciality areas.

Hazardous or high risk alcohol use was significantly higher in those with high (6.9%) and very high (8.9%) levels of psychological distress, as measured by the K10, in comparison to those with moderate (2.7%) or low (1.3%) levels of distress (Table 20).

It is important to note that the scoring of the AUDIT is the same for both males and females. As males may be more likely to drink more alcohol, and alcohol related national guidelines and recommendations allow for higher intakes in males than females, the failure to distinguish between genders in the scoring of the overall AUDIT scale may in part contribute to the slightly higher levels of at risk drinking patterns in males compared to females.

Table 18: Moderate risk drinking, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	1,834	17.6	15.5	19.6
31–40 years old	2,116	11.1	9.8	12.4
41–50 years old	2,079	11.8	10.5	13.2
51–60 years old	1,818	13.1	11.7	14.5
61+ years old	1,135	12.3	10.9	13.7
Gender				
Male	6,360	15.0	14.0	15.9
Female	2,622	9.4	8.6	10.3
Work area				
Inner metropolitan	3,983	12.9	11.9	13.9
Outer metropolitan	1,558	11.3	9.9	12.8
Regional	2,229	14.7	13.2	16.2
Rural	1,047	11.3	9.6	12.9
Remote	165	15.5	10.3	20.7
Specialty				
General practitioner	2,695	11.7	10.6	12.7
Anaesthetics	746	15.4	12.5	18.2
Mental health	361	10.9	8.0	13.8
Emergency medicine	541	17.2	13.5	20.9
Paediatrics	345	11.7	8.6	14.9
Surgery	555	15.5	12.3	18.6
Rural/remote/Aboriginal health	133	12.5	7.4	17.7
Non-patient	119	11.0	6.3	15.8
Oncology	105	9.1	4.5	13.6
Obstetrics and gynaecology	235	11.7	8.1	15.4
Imaging and pathology	255	10.3	7.2	13.3
Other	1,164	11.8	10.1	13.6
Missing	1,727	14.8	13.0	16.6
Training stage				
Intern	479	17.0	13.1	20.9
Trainee	2,706	13.9	12.5	15.3
Consultant	5,103	12.1	11.3	12.9
Retired	220	11.8	8.6	15.0

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	474	12.2	9.7	14.7
Overseas degree				
Yes	1,848	10.0	8.8	11.2
No	7,134	13.8	13.0	14.6
Work setting				
Hospital	4,773	14.1	13.0	15.1
University	132	10.8	6.2	15.5
Solo or group practice	3,510	11.5	10.6	12.4
Other patient care	232	15.3	10.4	20.3
Aboriginal Health Centre	106	14.2	7.6	20.7
Non-patient care	142	10.6	6.4	14.9
Not working	86	9.6	5.3	13.9
Missing	0	0.0	0.0	0.0
Total	8,981	12.8	12.1	13.5

Table 19: High risk or harmful drinking, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	259	2.5	1.6	3.4
31–40 years old	333	1.7	1.2	2.3
41–50 years old	445	2.5	1.9	3.2
51–60 years old	442	3.2	2.5	3.9
61+ years old	247	2.7	2.0	3.4
Gender				
Male	1,318	3.1	2.7	3.6
Female	407	1.5	1.1	1.8
Work area				
Inner metropolitan	729	2.4	1.9	2.8
Outer metropolitan	259	1.9	1.3	2.5
Regional	362	2.4	1.7	3.0
Rural	309	3.3	2.4	4.3
Remote	66	6.2	2.4	10.0
Specialty				
General practitioner	530	2.3	1.8	2.8

	n (est.)	Per cent	95%CI	
			Lower	Upper
Anaesthetics	167	3.4	2.0	4.9
Mental health	82	2.5	1.1	3.8
Emergency medicine	90	2.9	1.3	4.5
Paediatrics	30	1.0	0.0	2.1
Surgery	83	2.3	1.0	3.7
Rural/remote/Aboriginal health	38	3.6	0.6	6.6
Non-patient	20	1.9	0.1	3.7
Oncology	30	2.6	0.0	5.1
Obstetrics and gynaecology	16	0.8	0.0	1.9
Imaging and pathology	39	1.6	0.4	2.7
Other	248	2.5	1.7	3.3
Missing	352	3.0	2.2	3.9
Training stage				
Intern	93	3.3	1.4	5.2
Trainee	331	1.7	1.2	2.2
Consultant	1,123	2.7	2.3	3.1
Retired	102	5.5	3.2	7.7
Missing	76	2.0	0.9	3.1
Overseas degree				
Yes	232	1.3	0.8	1.7
No	1,493	2.9	2.5	3.3
Work setting				
Hospital	830	2.5	2.0	2.9
University	18	1.5	0.0	3.0
Solo or group practice	697	2.3	1.8	2.7
Other patient care	46	3.1	0.8	5.3
Aboriginal Health Centre	48	6.5	2.0	10.9
Non-patient care	43	3.2	0.8	5.6
Not working	42	4.7	1.6	7.7
Missing	0	0.0	0.0	0.0
Total	1,725	2.5	2.2	2.8

Table 20: High risk drinking, by level of psychological distress (K10)

	n (est.)	Per cent	95%CI	
			Lower	Upper
Low	616	1.3	1.0	1.6
Moderate	550	3.5	2.7	4.3
High	350	6.9	5.0	8.8
Very high	209	8.9	5.7	12.1
Total	1,725	2.5	2.2	2.8

Other substance use

Approximately 8% of doctors reported using prescription medication every day, while 2% reported that they smoked on a daily basis. Approximately 5% reported using illicit substances. However, only 0.6% reported using illicit substances weekly and none reported daily use.

3.2.5 Burnout

Burnout is a response to chronic emotional interpersonal stressors experienced at work, and is thought to primarily affect those who deal with people in a professional capacity (Maslach, 2001). Burnout has been associated with decreased job performance, reduced commitment, psychological distress and low career satisfaction. The MBI provides a measure of burnout in the three domains of emotional exhaustion, cynicism and reduced professional efficacy (Tables 21–23).

Reported levels of burnout were high for all groups of doctors. Emotional exhaustion was highest in younger doctors and declined across age groups. Female doctors had significantly higher levels of emotional exhaustion compared to males. No significant differences were evident between doctors in different work regions. However, as seen in Figure 11, there were some differences between levels of emotional exhaustions by work setting. Those who were not working, or working in non-patient care, reported the lowest levels of emotional exhaustion. In contrast, levels were higher in those working in hospitals, solo or group practice, and Aboriginal Health Centres.

Single, divorced, or separated doctors reported significantly higher levels of emotional exhaustion (47.9%, 95%CI=44.9–50.9 and 39.3%, 95%CI=34.9–43.7 respectively) compared to those in committed relationships (29.2%, 95%CI=28.2–30.2). Those doctors who were widowed reported the lowest levels of emotional exhaustion (10.8%, 95%CI=4.2–17.4). In addition, practitioners with children had significantly lower levels of emotional exhaustion compared to practitioners without children (26.3% CI=25.1–27.2 and 43.6%, 95%CI=41.9–45.4 respectively).

Cynicism, or depersonalisation, was highest in younger doctors. There did not appear to be differences in the level of cynicism reported by gender, and little difference between those working in different regions or work settings. However, cynicism was higher in doctors with no children (43.9%, 95%CI=42.1–45.7), compared to doctors with children (30.4%, 95%CI=29.3–31.4). In addition, single doctors (48.5%, 95%CI=45.5–51.5) had higher levels of cynicism compared to doctors in committed relationships (32.5%, 95%CI=31.5–33.5), or who were separated or divorced (41.2%, 95%CI=36.8 – 45.7), or who were widowed (19.0%, 95%CI=11.1–27.0).

Reported low professional efficacy was higher in younger doctors and in female doctors compared to males. Further, those working in non-patient care (24.2%, 95%CI=18.6–29.8) or not working (26.5%, 95%CI=19.9–33.2) had lower levels of efficacy compared to doctors working in other settings. Those with children (13.0%, 95%CI=12.3–13.8) had lower rates of burnout in the domain of professional efficacy compared to those with no children (18.4%, 95%CI=17.0–19.8). Single doctors and separated or divorced doctors had lower levels of efficacy (20.7%, 95%CI=18.2–23.1) compared to those in committed relationships (13.8%, 95%CI=13.1–14.5).

Table 21: High emotional exhaustion, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	4,965	47.5	44.9	50.2
31–40 years old	6,644	34.8	32.9	36.7
41–50 years old	5,500	31.3	29.4	33.2
51–60 years old	4,037	29.1	27.3	31.0
61+ years old	1,038	11.3	9.9	12.6
Gender				
Male	11,630	27.4	26.2	28.6
Female	10,554	38.0	36.6	39.4
Work area				
Inner metropolitan	9,544	30.9	29.5	32.3
Outer metropolitan	4,806	34.9	32.7	37.0
Regional	4,644	30.6	28.6	32.5
Rural	2,880	31.0	28.5	33.5
Remote	310	29.1	22.6	35.7
Specialty				
General practitioner	7,418	32.1	30.6	33.7
Anaesthetics	1,193	24.6	21.2	27.9
Mental health	959	28.9	24.7	33.1
Emergency medicine	958	30.4	26.0	34.9
Paediatrics	956	32.5	28.0	37.0
Surgery	845	23.5	19.6	27.4
Rural/remote/Aboriginal health	412	38.9	31.3	46.4
Non-patient	214	19.9	14.0	25.9
Oncology	388	33.4	26.0	40.8
Obstetrics and gynaecology	619	30.9	25.7	36.2
Imaging and pathology	805	32.4	27.4	37.3
Other	2,771	28.1	25.7	30.6
Missing	4,645	39.9	37.5	42.3
Training stage				
Intern	1,289	45.7	40.6	50.8
Trainee	7,908	40.7	38.8	42.6
Consultant	11,856	28.1	27.0	29.2
Retired	170	9.1	6.2	12.0

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	961	24.8	21.5	28.0
Overseas degree				
Yes	4,474	24.3	22.6	26.0
No	17,710	34.2	33.1	35.3
Work setting				
Hospital	11,461	34.0	32.6	35.4
University	241	19.8	14.0	25.6
Solo or group practice	9,388	30.7	29.4	32.1
Other patient care	335	22.1	16.7	27.4
Aboriginal Health Centre	271	36.1	27.5	44.7
Non-patient care	291	21.7	16.0	27.3
Not working	151	17.0	10.9	23.0
Missing	79	31.6	18.4	44.8
Total	22,184	31.6	30.7	32.5

Table 22: High cynicism, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	4,788	45.8	43.2	48.5
31–40 years old	6,971	36.5	34.5	38.4
41–50 years old	5,918	33.7	31.7	35.6
51–60 years old	4,685	33.8	31.9	35.7
61+ years old	1,905	20.7	18.9	22.4
Gender				
Male	14,551	34.3	33.0	35.5
Female	9,717	35.0	33.6	36.4
Work area				
Inner metropolitan	10,390	33.6	32.2	35.0
Outer metropolitan	5,130	37.3	35.1	39.4
Regional	5,251	34.6	32.6	36.6
Rural	3,118	33.6	31.0	36.1
Remote	379	35.6	28.7	42.5
Specialty				
General practitioner	7,640	33.1	31.5	34.7

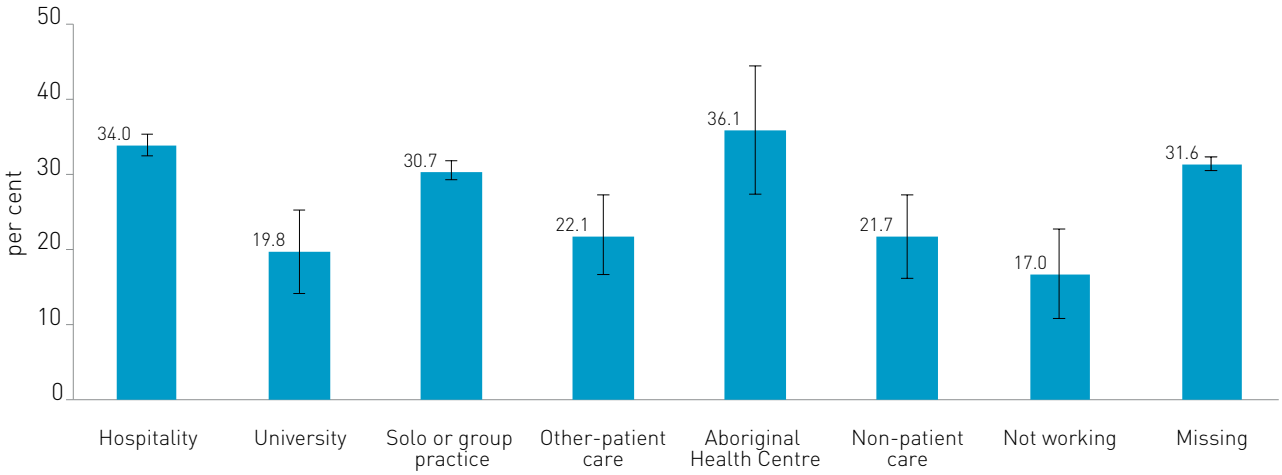
	n (est.)	Per cent	95%CI	
			Lower	Upper
Anaesthetics	1,568	32.3	28.7	35.9
Mental health	1,180	35.6	31.2	40.0
Emergency medicine	1,189	37.8	33.1	42.4
Paediatrics	863	29.3	25.0	33.7
Surgery	994	27.7	23.6	31.7
Rural/remote/Aboriginal health	407	38.4	30.8	46.0
Non-patient	302	28.1	21.3	34.8
Oncology	436	37.6	30.0	45.1
Obstetrics and gynaecology	558	27.9	22.9	33.0
Imaging and pathology	989	39.8	34.6	44.9
Other	3,098	31.5	29.0	34.0
Missing	5,044	43.3	40.9	45.8
Training stage				
Intern	1,191	42.2	37.2	47.3
Trainee	7,994	41.1	39.2	43.1
Consultant	13,615	32.2	31.1	33.4
Retired	398	21.3	17.2	25.5
Missing	1,069	27.6	24.2	30.9
Overseas degree				
Yes	5,356	29.1	27.3	30.8
No	18,912	36.5	35.4	37.6
Work setting				
Hospital	12,794	38.0	36.6	39.4
University	286	23.5	17.4	29.7
Solo or group practice	9,619	31.5	30.1	32.8
Other patient care	551	36.3	30.2	42.5
Aboriginal Health Centre	280	37.4	28.8	45.9
Non-patient care	422	31.5	25.2	37.7
Not working	246	27.6	20.8	34.4
Missing	70	27.4	12.5	42.3
Total	24,268	34.6	33.6	35.5

Table 23: Low professional efficacy, by key demographic and workplace variables

	n (est.)	Per cent	95%CI	
			Lower	Upper
Age group				
18–30 years old	1,838	17.6	15.6	19.6
31–40 years old	3,108	16.3	14.8	17.7
41–50 years old	2,424	13.8	12.4	15.2
51–60 years old	1,773	12.8	11.5	14.1
61+ years old	1,176	12.8	11.3	14.2
Gender				
Male	5,538	13.0	12.2	13.9
Female	4,781	17.2	16.1	18.3
Work area				
Inner metropolitan	4,723	15.3	14.2	16.4
Outer metropolitan	2,333	16.9	15.3	18.6
Regional	2,086	13.7	12.3	15.2
Rural	1,061	11.4	9.7	13.1
Remote	116	10.9	6.1	15.7
Specialty				
General practitioner	2,763	12.0	10.9	13.0
Anaesthetics	689	14.2	11.5	16.8
Mental health	560	16.9	13.4	20.3
Emergency medicine	504	16.0	12.6	19.4
Paediatrics	457	15.5	12.0	19.0
Surgery	475	13.2	10.2	16.2
Rural/remote/Aboriginal health	90	8.5	4.1	12.9
Non-patient	238	22.1	16.0	28.2
Oncology	208	17.9	11.9	23.9
Obstetrics and gynaecology	252	12.6	8.9	16.3
Imaging and pathology	497	20.0	15.8	24.2
Other	1,432	14.5	12.7	16.4
Missing	2,156	18.5	16.6	20.4
Training stage				
Intern	548	19.4	15.4	23.5
Trainee	3,333	17.2	15.7	18.6
Consultant	5,458	12.9	12.1	13.8
Retired	413	22.1	18.0	26.3

	n (est.)	Per cent	95%CI	
			Lower	Upper
Missing	567	14.6	12.0	17.3
Overseas degree				
Yes	2,732	14.8	13.5	16.2
No	7,587	14.7	13.9	15.5
Work setting				
Hospital	5,591	16.6	15.5	17.7
University	193	15.9	10.8	21.0
Solo or group practice	3,530	11.5	10.6	12.5
Other patient care	316	20.8	15.7	26.0
Aboriginal Health Centre	92	12.2	6.5	18.0
Non-patient care	325	24.2	18.6	29.8
Not working	236	26.5	19.9	33.2
Missing	37	14.6	3.3	26.0
Total	10,319	14.7	14.0	15.4

Figure 11: Emotional exhaustion, by work setting



3.2.6 Impact of mental health problems

The impact of mental health conditions in the areas of work and personal functioning are displayed in Tables 24 and 25 respectively. The method used to determine impact scores is described in the methodology section.

Almost three-quarters of doctors (72.4%, n=8,174) reported that they had ever felt anxious or depressed. Approximately 12% of these doctors were highly impacted at work due to their mental health symptoms. Further, 18% reported moderate or high personal impact.

The specific areas of impact which were reported to occur regularly (daily or weekly) are included in Table 26. There were some differences in the proportion of male and female doctors who reported being moderately or highly impacted by their symptoms in the domain of personal functioning (16.5% and 19.8% respectively). In addition, there were some differences in the areas of impact by gender. For example, female doctors were more likely than male doctors to report that mental health symptoms caused physical health complaints on a daily or weekly basis (5.7%, 95%CI=5.0–6.4 and 3.5%, 95%CI= 2.9–4.1 respectively). In addition, a greater proportion of females reported that they felt their mental health symptoms regularly caused stress (15.6%, 95%CI=14.5–16.7) in comparison to their male colleagues (12.9%, 95%CI=11.8–13.9).

Thirty-eight per cent of doctors who had ever received a diagnosis of depression, and 37% of those who had ever been diagnosed with anxiety, took time off work because of their mental health condition.

Table 24: Impact of mental health symptoms on work, by gender

		n (est.)	Per cent	95%CI	
				Lower	Upper
Male	No/low	21,247	75.6	74.2	77.0
	Moderate	3,359	12.0	10.9	13.0
	High	3,498	12.4	11.3	13.6
Female	No/low	17,256	75.8	74.5	77.2
	Moderate	2,702	11.9	10.8	12.9
	High	2,800	12.3	11.3	13.4
Total	No/low	38,503	75.7	74.7	76.7
	Moderate	6,060	11.9	11.2	12.7
	High	6,298	12.4	11.6	13.2

Table 25: Impact of mental health symptoms on self, by gender

		n (est.)	Per cent	95%CI	
				Lower	Upper
Male	No/low	23,477	83.5	82.3	84.8
	Moderate	2,933	10.4	9.4	11.5
	High	1,694	6.0	5.2	6.8
Female	No/low	18,254	80.2	78.9	81.5
	Moderate	2,690	11.8	10.8	12.9
	High	1,814	8.0	7.1	8.8
Total	No/low	41,731	82.0	81.2	82.9
	Moderate	5,623	11.1	10.3	11.8
	High	3,507	6.9	6.3	7.5

Table 26: Areas of impact experienced daily or weekly due to mental health symptoms

	n (est.)	Per cent	95%CI	
			Lower	Upper
Work				
Ostracised at work	1,197	2.4	2	2.7
Time off work	236	0.5	0.3	0.6
Overlooked for career development opportunities	307	0.6	0.4	0.8
Negatively impacted on work performance	3,434	6.8	6.2	7.3
Discriminated against at work	1,053	2.1	1.7	2.4
Bullied at work	1,077	2.1	1.8	2.5
Personal				
Physical health complaints	2,304	4.5	4.1	5
Embarrassed or shamed	2,435	4.8	4.3	5.3
Increased stress	7,575	14.9	14.1	15.7
Negatively impacted on personal relationships	7,028	13.8	13	14.6
Less able to contribute to household responsibilities	4,783	9.4	8.7	10.1
Socially isolated due to the fear of stigma or prejudice	3,621	7.1	6.5	7.7

3.2.7 Treatment and support

Coping techniques

Table 27 provides the coping mechanisms often used by doctors who felt anxious or depressed, by gender (n=8,147). The most commonly used coping techniques were positive behaviours such as trying to look on the bright side, talking to others, or exercising when feeling anxious or depressed. However, some negative coping strategies, such as substance use, were used by doctors.

Of note, there were some significant differences in the coping techniques reported by male and female doctors. For example, a greater proportion of female doctors reported that they often talked to others to cope with mental health symptoms compared to males (45.4% and 24.9% respectively). In addition, a significantly greater proportion of females reported coping strategies such as taking themselves to bed, eating more than usual, trying to look on the bright side, praying or seeking spiritual advice, doing something enjoyable, and practising mindfulness. In contrast, males were more likely to drink more alcohol, smoke more than usual, and take non-prescription medication in order to cope with symptoms of mental health problems, in comparison to female doctors.

Table 27: Coping techniques often used by doctors who have ever felt anxious or depressed, by gender

	Gender	n (est.)	Per cent	95%CI	
				Lower	Upper
Talk to others	Male	6,989	24.9	23.4	26.3
	Female	10,332	45.4	43.8	47.0
Avoid being with people	Male	4,344	15.5	14.2	16.7
	Female	3,678	16.3	15.0	17.3
Take yourself to bed	Male	1,801	6.4	5.6	7.2
	Female	2,798	12.3	11.2	13.4
Eat more than usual	Male	2,626	9.3	8.4	10.3
	Female	4,275	18.8	17.5	20.0
Smoke more cigarettes than usual	Male	455	1.6	1.2	2.1
	Female	262	1.2	0.8	1.5
Drink more alcohol than usual	Male	2,263	8.1	7.2	9.0
	Female	1,522	6.7	5.9	7.5
Take non-prescribed medication	Male	325	1.2	0.8	1.5
	Female	218	1.0	0.7	1.3
Try to look on the bright side of things	Male	10,915	38.8	37.3	40.4
	Female	9,993	43.9	42.3	45.5
Jog or do other exercise	Male	10,411	37.1	35.5	38.6
	Female	8,180	35.9	34.4	37.5
Pray	Male	3,631	12.9	11.8	14.0
	Female	3,491	15.3	14.2	16.5
Do something enjoyable	Male	7,386	26.3	24.9	27.7
	Female	7,475	32.8	31.4	34.3
Practice mindfulness or another relaxation technique	Male	3,268	11.6	10.6	12.7
	Female	3,784	16.6	15.5	17.8
Seek spiritual help	Male	1,591	5.7	4.9	6.4
	Female	1,644	7.2	6.4	8.1

Types of treatment

Sixty-four per cent of doctors who had ever felt seriously depressed or had been diagnosed with depression sought treatment (n=2,945). A significantly greater proportion of female doctors sought treatment for depression compared to males (70.4% 95%CI=68.5–72.3 and 57.9%, 95%CI=55.7–60.2). The most common treatment for depression was a combination of medication and counselling (46.6%). As seen in Table 28, there is a higher rate of medication only treatment in older doctors compared to younger doctors. Further, males had significantly higher rates of medication only treatment compared to female doctors (26.9% and 18.7% respectively). There appears to be some differences in treatment type by region, which may reflect differences in access to services. Commonly identified sources of treatment and support for depression are displayed in Table 29.

Rates of treatment for depression were significantly higher in doctors compared to both the general population and other professionals. Of interest, there was a substantially higher use of medication by doctors compared to the general population (Appendix 4, Table A2).

Table 28: Treatment for depression, by key demographic and workplace variables

		n (est.)	Per cent	95%CI	
				Lower	Upper
Age group					
18–30 years old	No treatment	500	19.5	15.4	23.7
	Counselling and medication	960	37.5	32.5	42.5
	Counselling	629	24.6	20.1	29
	Medication	434	16.9	13.0	20.9
	Other	37	1.5	0.2	2.7
31–40 years old	No treatment	360	7.7	5.6	9.8
	Counselling and medication	2,376	50.5	46.6	54.5
	Counselling	1,044	22.2	18.9	25.5
	Medication	873	18.6	15.5	21.7
	Other	48	1.0	0.2	1.8
41–50 years old	No treatment	336	7.2	5.1	9.2
	Counselling and medication	2,423	51.8	47.9	55.6
	Counselling	826	17.7	14.7	20.6
	Medication	997	21.3	18.1	24.5
	Other	98	2.1	1.0	3.2
51–60 years old	No treatment	276	7.2	5.2	9.1
	Counselling and medication	1,777	46.1	42.4	49.9
	Counselling	714	18.6	15.7	21.4
	Medication	1,026	26.6	23.3	29.9
	Other	58	1.5	0.6	2.4
61+ years old	No treatment	104	6.0	3.7	8.3
	Counselling and medication	631	36.5	31.7	41.2
	Counselling	309	17.8	14.0	21.7
	Medication	630	36.4	31.6	41.2
	Other	56	3.2	1.6	4.9
Gender					
Male	No treatment	742	8.9	7.2	10.6
	Counselling and medication	3,613	43.2	40.3	46.1
	Counselling	1,583	18.9	16.6	21.2
	Medication	2,251	26.9	24.3	29.5
	Other	178	2.1	1.3	3.0
Female	No treatment	835	9.1	7.7	10.6
	Counselling and medication	4,554	49.8	47.3	52.2

		n (est.)	Per cent	95%CI	
				Lower	Upper
	Counselling	1,939	21.2	19.1	23.2
	Medication	1,708	18.7	16.7	20.6
	Other	119	1.3	0.8	1.8
Work area					
Inner metropolitan	No treatment	690	9.0	7.3	10.7
	Counselling and medication	3,574	46.6	43.7	49.5
	Counselling	1,668	21.8	19.3	24.2
	Medication	1,596	20.8	18.4	23.2
	Other	143	1.9	1.1	2.6
Outer metropolitan	No treatment	348	10.3	7.6	13.1
	Counselling and medication	1,561	46.3	41.9	50.8
	Counselling	700	20.8	17.2	24.4
	Medication	695	20.6	17.1	24.2
	Other	65	1.9	0.7	3.2
Regional	No treatment	331	8.8	6.4	11.2
	Counselling and medication	1,841	48.7	44.6	52.8
	Counselling	598	15.8	12.8	18.8
	Medication	968	25.6	22.1	29.1
	Other	43	1.1	0.4	1.9
Rural	No treatment	181	7.6	4.9	10.2
	Counselling and medication	1,051	43.8	38.8	48.8
	Counselling	495	20.6	16.5	24.7
	Medication	629	26.2	21.8	30.6
	Other	43	1.8	0.4	3.3
Remote	No treatment	26	8.8	1.3	16.3
	Counselling and medication	140	46.4	33.2	59.6
	Counselling	61	20.2	9.4	30.9
	Medication	72	23.8	12.8	34.8
	Other	3	0.9	0.0	2.6
Training stage					
Intern	No treatment	85	12.0	5.4	18.6
	Counselling and medication	321	45.4	35.4	55.4
	Counselling	193	27.3	18.4	36.3
	Medication	98	13.9	7.2	20.6
	Other	9	1.3	0.0	3.8

		n (est.)	Per cent	95%CI	
				Lower	Upper
Trainee	No treatment	680	14.1	11.4	16.7
	Counselling and medication	2,107	43.6	39.8	47.4
	Counselling	1,024	21.2	18.1	24.3
	Medication	968	20.0	16.9	23.2
	Other	53	1.1	0.3	1.9
Consultant	No treatment	723	6.8	5.5	8.0
	Counselling and medication	5,143	48.1	45.7	50.6
	Counselling	2,116	19.8	17.9	21.7
	Medication	2,495	23.4	21.3	25.4
	Other	209	2.0	1.3	2.6
Retired	No treatment	21	5.4	1.1	9.7
	Counselling and medication	153	40.3	29.4	51.2
	Counselling	34	8.9	2.6	15.3
	Medication	161	42.6	31.7	53.6
	Other	10	2.7	0.0	6.0
Missing	No treatment	68	7.4	3.2	11.6
	Counselling and medication	444	48.3	40.7	55.9
	Counselling	156	16.9	11.4	22.5
	Medication	237	25.8	19.2	32.3
	Other	15	1.7	0.0	3.6
Overseas degree					
Yes	No treatment	261	8.3	5.8	10.8
	Counselling and medication	1,295	41.3	36.8	45.8
	Counselling	652	20.8	17.0	24.6
	Medication	905	28.9	24.7	33.0
	Other	21	0.7	0.0	1.4
No	No treatment	1,316	9.2	7.9	10.4
	Counselling and medication	6,872	47.8	45.7	49.9
	Counselling	2,870	19.9	18.3	21.6
	Medication	3,055	21.2	19.5	22.9
	Other	276	1.9	1.3	2.5
Work setting					
Hospital	No treatment	830	10.4	8.6	12.2
	Counselling and medication	3,630	45.5	42.6	48.4
	Counselling	1,688	21.2	18.8	23.5

		n (est.)	Per cent	95%CI	
				Lower	Upper
	Medication	1,729	21.7	19.3	24.1
	Other	105	1.3	0.7	2.0
University	No treatment	43	15.3	4.5	26.0
	Counselling and medication	102	36.2	22.3	50.2
	Counselling	64	22.7	10.3	35.1
	Medication	73	25.8	13.1	38.5
	Other	0	0.0	0.0	0.0
Solo or group practice	No treatment	606	7.7	6.2	9.3
	Counselling and medication	3,692	47.2	44.4	50.0
	Counselling	1,498	19.1	16.9	21.4
	Medication	1,857	23.7	21.4	26.1
	Other	174	2.2	1.4	3.0
Other patient care	No treatment	28	6.1	0.6	11.6
	Counselling and medication	259	56.3	45.4	67.3
	Counselling	77	16.7	8.8	24.7
	Medication	96	20.8	11.9	29.8
	Other	0	0.0	0.0	0.0
Aboriginal Health Centre	No treatment	31	11.9	2.4	21.4
	Counselling and medication	119	45.6	31.0	60.1
	Counselling	71	27.2	14.0	40.4
	Medication	35	13.3	4.6	22.1
	Other	5	2.1	0.0	6.1
Non-patient care	No treatment	11	2.7	0.0	6.2
	Counselling and medication	249	59.7	48.2	71.2
	Counselling	74	17.8	8.8	26.8
	Medication	74	17.8	9.0	26.5
	Other	8	2.0	0.0	6.0
Not working	No treatment	24	10.7	1.2	20.2
	Counselling and medication	80	35.0	20.3	49.7
	Counselling	31	13.6	3.3	23.9
	Medication	89	38.8	24.1	53.5
	Other	4	1.9	0.0	5.7
Missing	No treatment	3	4.6	0.0	13.8
	Counselling and medication	35	55.6	22.0	89.1
	Counselling	18	28.9	0.0	58.4

		n (est.)	Per cent	95%CI	
				Lower	Upper
	Medication	7	11.0	0.0	31.4
	Other	0	0.0	0.0	0.0
Totals					
	No treatment	1,577	9.0	7.9	10.1
	Counselling and medication	8,167	46.6	44.7	48.5
	Counselling	3,522	20.1	18.6	21.6
	Medication	3,959	22.6	21.0	24.2
	Other	297	1.7	1.2	2.2

Table 29: Common sources of treatment and support for doctors with depression

	n (est.)	Per cent	95%CI	
			Lower	Upper
General practitioner	10,885	62.1	60.3	64.0
Friend	9,594	54.8	52.9	56.7
Spouse/partner	9,107	52.0	50.1	53.9
Psychologist/counsellor	8,872	50.6	48.7	52.6
Psychiatrist	8,032	45.8	43.9	47.8
Family member	7,781	44.4	42.5	46.3
Work colleague	3,963	22.6	21.0	24.2
Internet	2,078	11.9	10.6	13.1
Doctors' Health Advisory Service	997	5.7	4.8	6.6
University services	993	5.7	4.8	6.6
Peer support program	766	4.4	3.6	5.2
Employee Assistance Provider	482	2.8	2.1	3.4
Library	419	2.4	1.8	3.0
Telephone helpline (e.g. Lifeline)	347	2.0	1.4	2.5
Workplace support	286	1.6	1.1	2.1
Indigenous support worker	-	0.0	0.0	0.0

Approximately 36% of doctors who had ever felt seriously anxious or had been diagnosed with an anxiety disorder sought treatment for anxiety (n=1,444). Again, the proportion of female doctors who sought treatment for anxiety was significantly higher than the proportion of males (40.7%, 95%CI=38.5–42.9 and 32.3%, 95%CI=30.0–34.6 respectively). The most common treatment for anxiety was medication and counselling (50.7%). Approximately 22% of doctors received counselling only and 16% were treated with medication alone. As in doctors with depression, rates of treatment for anxiety disorders were significantly higher than those reported by both the general population and other professionals in the NSMHW (Appendix 4, Table A3).

Of interest, 43% of doctors who were classified as having a high likelihood of a minor psychiatric disorder, as measured by the GHQ, had previously sought treatment for anxiety or depression.

While not displayed in Table 30, there were some differences in the most common anxiety treatment types for across specialty. For example, the most commonly used treatment for depression in general practitioners, anaesthesiologists, those working in mental health and emergency medicine, was a combination of medication and counselling. However, the most commonly used treatment for oncologists, paediatricians, those working in rural, remote or Aboriginal health, obstetrics and gynaecology was counselling alone.

It is important to note that the lower incidence of treatment rates reported in the NSMHW is, in part, due to the use of diagnostic criteria to determine depression and anxiety in the NSMHW compared to the use of self-reported previous diagnoses in the *beyondblue* survey. These differences are likely to result in a greater number of people being identified as anxious or depressed in the national survey, including those who may not have been given a formal diagnosis of anxiety or depression. This may contribute to the lower treatment rates reported for the Australian population in comparison to doctors.

Table 30: Treatment for anxiety, by key demographic and workplace variables

		n (est.)	Per cent	95%CI	
				Lower	Upper
Age group					
18–30 years old	No treatment	276	17.3	12.2	22.3
	Counselling and medication	614	38.4	32.0	44.8
	Counselling	564	35.3	29.0	41.6
	Medication	125	7.8	4.1	11.5
	Other	21	1.3	0.0	2.8
31–40 years old	No treatment	241	9.5	6.3	12.6
	Counselling and medication	945	37.1	31.9	42.2
	Counselling	1,004	39.4	34.1	44.7
	Medication	303	11.9	8.4	15.4
	Other	54	2.1	0.5	3.7
41–50 years old	No treatment	234	9.7	6.5	12.9
	Counselling and medication	917	38.0	32.8	43.3
	Counselling	752	31.2	26.2	36.2
	Medication	376	15.6	11.6	19.5
	Other	132	5.5	3.1	7.9
51–60 years old	No treatment	138	8.3	5.0	11.6
	Counselling and medication	638	38.4	32.8	43.9
	Counselling	548	33.0	27.6	38.4
	Medication	282	17.0	12.7	21.2
	Other	56	3.4	1.3	5.5
61+ years old	No treatment	53	7.6	3.5	11.7
	Counselling and medication	207	29.9	22.7	37
	Counselling	170	24.4	17.8	31.1
	Medication	216	31.1	23.8	38.4
	Other	48	7.0	3.0	11.0
Gender					
Male	No treatment	410	10.1	7.4	12.7

		n (est.)	Per cent	95%CI	
				Lower	Upper
	Counselling and medication	1,481	36.4	32.2	40.5
	Counselling	1,279	31.4	27.4	35.4
	Medication	737	18.1	14.9	21.3
	Other	167	4.1	2.5	5.7
Female	No treatment	533	11.0	8.8	13.2
	Counselling and medication	1,840	38.0	34.7	41.4
	Counselling	1,759	36.3	33	39.7
	Medication	565	11.7	9.5	13.9
	Other	145	3.0	1.8	4.2
Work area					
Inner metropolitan	No treatment	468	10.9	8.4	13.4
	Counselling and medication	1,515	35.4	31.6	39.1
	Counselling	1,536	35.9	32.1	39.7
	Medication	615	14.4	11.6	17.1
	Other	148	3.5	2.1	4.9
Outer metropolitan	No treatment	166	9.7	6.0	13.5
	Counselling and medication	660	38.8	32.6	44.9
	Counselling	590	34.6	28.6	40.6
	Medication	231	13.6	9.3	17.8
	Other	56	3.3	1.1	5.5
Regional	No treatment	176	10.3	6.5	14.2
	Counselling and medication	723	42.4	36.2	48.5
	Counselling	527	30.9	25.2	36.6
	Medication	250	14.7	10.4	19.0
	Other	30	1.8	0.4	3.2
Rural	No treatment	114	10.6	5.9	15.3
	Counselling and medication	383	35.6	28.3	42.8
	Counselling	330	30.6	23.6	37.7
	Medication	185	17.2	11.4	22.9
	Other	65	6.1	2.2	9.9
Remote	No treatment	18	12.5	0.0	25.5
	Counselling and medication	40	27.7	8.7	46.8
	Counselling	55	37.7	17.7	57.7
	Medication	20	13.9	0.9	26.9
	Other	12	8.2	0.0	20.8

		n (est.)	Per cent	95%CI	
				Lower	Upper
Training stage					
Intern	No treatment	85	16.8	7.8	25.8
	Counselling and medication	213	42.0	30.1	53.8
	Counselling	187	36.9	25.4	48.4
	Medication	15	3.1	0.0	7.3
	Other	7	1.3	0.0	3.8
Trainee	No treatment	325	13.0	9.4	16.5
	Counselling and medication	966	38.4	33.3	43.6
	Counselling	854	34	29	39.0
	Medication	304	12.1	8.6	15.5
	Other	64	2.5	0.9	4.2
Consultant	No treatment	488	9.1	7.1	11.2
	Counselling and medication	1,954	36.5	33.2	39.9
	Counselling	1,837	34.4	31.0	37.7
	Medication	870	16.3	13.7	18.8
	Other	198	3.7	2.4	5.0
Retired	No treatment	15	7.6	0.0	15.6
	Counselling and medication	75	38.6	22.9	54.3
	Counselling	32	16.6	5.4	27.8
	Medication	58	29.9	15.7	44.1
	Other	14	7.4	0.0	15.4
Missing	No treatment	28	8.0	0.5	15.6
	Counselling and medication	114	32.2	20.6	43.8
	Counselling	127	36.0	24.2	47.8
	Medication	54	15.4	6.2	24.6
	Other	30	8.4	2.2	14.7
Overseas degree					
Yes	No treatment	183	13.2	8.4	17.9
	Counselling and medication	502	36.0	29.3	42.7
	Counselling	440	31.6	25.0	38.2
	Medication	196	14.1	9.2	18.9
	Other	71	5.1	2.1	8.2
No	No treatment	759	10.1	8.3	11.9
	Counselling and medication	2,819	37.5	34.6	40.3
	Counselling	2,598	34.5	31.7	37.3

		n (est.)	Per cent	95%CI	
				Lower	Upper
	Medication	1,106	14.7	12.6	16.8
	Other	240	3.2	2.2	4.2
Work setting					
Hospital	No treatment	466	11.1	8.5	13.7
	Counselling and medication	1,622	39.2	34.9	42.9
	Counselling	1,427	34.1	30.2	37.9
	Medication	548	13.1	10.3	15.8
	Other	108	2.6	1.3	3.8
University	No treatment	18	15.8	0.0	33.8
	Counselling and medication	41	35.7	13.7	57.7
	Counselling	39	33.8	12.5	55.1
	Medication	17	14.7	0.0	29.6
	Other	0	0.0	0.0	0.0
Solo or group practice	No treatment	405	10.4	7.9	12.9
	Counselling and medication	1,397	35.8	32.0	39.7
	Counselling	1,313	33.7	29.8	37.5
	Medication	644	16.5	13.5	19.4
	Other	143	3.7	2.2	5.1
Other patient care	No treatment	11	4.8	0.0	11.5
	Counselling and medication	81	34.5	19.9	49.2
	Counselling	91	38.6	22.4	54.8
	Medication	37	15.6	4.3	26.8
	Other	15	6.5	0.0	15.3
Aboriginal Health Centre	No treatment	17	10.9	0.0	23.2
	Counselling and medication	34	21.6	4.7	38.5
	Counselling	72	46.2	25.8	66.6
	Medication	3	2.2	0.0	6.5
	Other	30	19.1	3.0	35.1
Non-patient care	No treatment	19	8.0	0.0	16.9
	Counselling and medication	93	40.2	24.3	56.0
	Counselling	92	39.7	23.7	55.8
	Medication	20	8.4	0.0	16.9
	Other	8	3.6	0.0	10.6
Not working	No treatment	7	8.1	0.0	20.6
	Counselling and medication	33	39.1	15.5	62.7

		n (est.)	Per cent	95%CI	
				Lower	Upper
	Counselling	4	4.3	0.0	10.7
	Medication	34	39.7	16.4	63.1
	Other	7	8.7	0.0	24.9
Missing	No treatment	0	0.0	0.0	0.0
	Counselling and medication	20	0.0	0.0	0.0
	Counselling	0	0.0	0.0	0.0
	Medication	0	0.0	0.0	0.0
	Other	0	0.0	0.0	0.0
Totals					
	No treatment	942	10.6	8.9	12.3
	Counselling and medication	3,321	37.3	34.6	39.9
	Counselling	3,038	34.1	31.5	36.7
	Medication	1,302	14.6	12.7	16.5
	Other	312	3.5	2.5	4.5

Table 31: Common sources of treatment and support for doctors with anxiety

	n (est.)	Per cent	95%CI	
			Lower	Upper
Psychologist/counsellor	5,110	57.3	54.6	60.0
Spouse/partner	5,074	56.9	54.2	59.6
General practitioner	4,928	55.3	52.6	58.0
Friend	4,541	50.9	48.2	53.7
Family member	3,900	43.8	41.1	46.5
Psychiatrist	3,451	38.7	36.1	41.4
Work colleague	1,908	21.4	19.2	23.6
Internet	1,244	14.0	12.0	15.9
University services	438	4.9	3.7	6.1
Doctors' Health Advisory Service	400	4.5	3.4	5.6
Library	283	3.2	2.2	4.2
Peer support program	281	3.2	2.2	4.1
Employee Assistance Provider	238	2.7	1.8	3.6
Workplace support	137	1.5	0.9	2.2
Telephone helpline (e.g. Lifeline)	62	0.7	0.3	1.1
Indigenous support worker	0	0.0	0.0	0.0

Self-prescription

Of those doctors with anxiety or depression, 5.2% reported self-prescribing drugs in the past 12 months, and 6% reported daily use of self-prescribed drugs for the treatment of symptoms of depression or anxiety.

Sources of support

As shown in Table 32, more than 70% of doctors indicated that they were comfortable seeking help or support for mental health problems from their partner or doctor. In contrast, more than 50% of doctors were not comfortable seeking support from an Indigenous support worker.

Overall, doctors were uncomfortable seeking support for mental health conditions from employees or workplace related services, and reported being more comfortable seeking help from family, friends and specific mental health services. While the number of doctors seeking help and support for mental health symptoms from doctors' advisory services was low, there were some differences between states. As seen in Table 34, the number of doctors seeking support from advisory services in Victoria was far higher than in other states for both depression (12.8% and 3.2% respectively) and anxiety (10.8% and 2.1% respectively).

Differences existed between preferred sources of support for doctors who had ever and never been diagnosed with a mental health condition (Table 35 and 36). Doctors who had received a previous diagnosis of anxiety or depression were less likely to seek support from their spouse or partner, workplace or peers. In contrast, these doctors were more comfortable seeking support from general practitioners, psychologists and psychiatrists.

Of note, a number of respondents indicated that they were both comfortable and not comfortable seeking help from the same source. This suggests that comfort with a particular source of support may depend on the mental health symptom or condition.

Table 32: Sources of support doctors felt comfortable seeking help from

	n (est.)	Per cent	95%CI	
			Lower	Upper
Spouse/partner	52,389	74.6	73.8	75.5
Doctor	51,831	73.8	72.9	74.7
Friend	45,514	64.8	63.9	65.7
Family member	37,795	53.8	52.8	54.8
Psychologist/counsellor	36,068	51.4	50.4	52.3
Psychiatrist	29,668	42.3	41.3	43.2
Work colleague	24,213	34.5	33.6	35.4
Internet	19,668	28.0	27.1	28.9
Doctors' Health Advisory Service	18,036	25.7	24.8	26.6
Peer support program	14,620	20.8	20.0	21.6
Workplace support	5,660	8.1	7.5	8.6
Telephone helpline (e.g. Lifeline)	5,037	7.2	6.7	7.7
Library	3,857	5.5	5.0	5.9
Employee Assistance Provider	3,778	5.4	4.9	5.8
University services	1,671	2.4	2.1	2.7
Indigenous support worker	113	0.2	0.1	0.2

Table 33: Sources of support doctors did not feel comfortable seeking help from

	n (est.)	Per cent	95%CI	
			Lower	Upper
Indigenous support worker	36,136	51.5	50.5	52.4
Employee Assistance Provider	33,694	48.0	47.0	49.0
University services	32,848	46.8	45.8	47.8
Workplace support	32,115	45.7	44.8	46.7
Library	31,423	44.8	43.8	45.7
Telephone helpline (e.g. Lifeline)	29,369	41.8	40.9	42.8
Work colleague	29,292	41.7	40.7	42.7
Internet	21,486	30.6	29.7	31.5
Peer support program	16,669	23.7	22.9	24.6
Doctors' Health Advisory Service	15,202	21.7	20.9	22.4
Family member	11,313	16.1	15.4	16.8
Psychiatrist	9,581	13.6	13.0	14.3
Friend	8,661	12.3	11.7	13.0
Psychologist/counsellor	7,677	10.9	10.3	11.5
Doctor	6,399	9.1	8.6	9.7
Spouse/partner	4,726	6.7	6.3	7.2

Table 34: Proportion of doctors with depression and anxiety who made use of doctors' advisory services, by work state

	Depression				Anxiety			
	n (est.)	Per cent	95%CI		n (est.)	Per cent	95%CI	
			Lower	Upper			Lower	Upper
ACT	0	0	0	0	0	0.0	0.0	0.0
NSW	195	3.6	2.3	5	74	2.7	1.1	4.4
NT	5	2.2	0	5.4	3	3.5	0.0	10.4
QLD	98	2.8	1.4	4.1	22	1.3	0.1	2.6
SA	28	2.01	0	4	17	2.4	0.0	5.2
TAS	10	2.2	0	4.6	0	0.0	0.0	0.0
VIC	580	12.8	10.2	15.3	267	10.8	7.5	14.1
WA	82	4.8	2.3	7.4	18	2.0	0.0	4.2
Total	997	5.7	4.8	6.6	400	4.5	3.3	5.6

Table 35: Sources of support doctors felt comfortable seeking help from, by mental health diagnosis

Support	Ever diagnosed	n (est.)	Per cent	95%CI	
				Lower	Upper
Friend	No	35,217	65.6	64.5	66.7
	Yes	10,297	62.3	60.4	64.2
Family	No	29,414	54.8	53.7	55.9
	Yes	8,382	50.7	48.7	52.7
Spouse/partner	No	40,802	76.0	75.0	77.0
	Yes	11,586	70.1	68.3	71.9
Work college	No	19,545	36.4	35.3	37.5
	Yes	4,668	28.2	26.5	30.0
Library	No	2,766	5.2	4.7	5.7
	Yes	1,091	6.6	5.6	7.6
University services	No	1,289	2.4	2.0	2.8
	Yes	382	2.3	1.7	2.9
Internet	No	14,740	27.5	26.4	28.5
	Yes	4,928	29.8	28.0	31.6
Peer support	No	12,168	22.7	21.7	23.6
	Yes	2,451	14.8	13.4	16.2
Doctor	No	38,635	72.0	70.9	73.0
	Yes	13,196	79.8	78.3	81.4
Psychiatrist	No	19,801	36.9	35.8	38.0
	Yes	9,868	59.7	57.8	61.6
Psychologist/counsellor	No	25,447	47.4	46.3	48.5
	Yes	10,622	64.3	62.4	66.1
Indigenous support worker	No	80	0.2	0.1	0.2
	Yes	33	0.2	0.0	0.4
Telephone helpline	No	3,897	7.3	6.7	7.9
	Yes	1,140	6.9	5.9	7.9
Doctors' Health Advisory Service	No	14,278	26.6	25.6	27.6
	Yes	3,758	22.7	21.1	24.4
Employee Assistance Provider	No	2,806	5.2	4.7	5.7
	Yes	973	5.9	4.9	6.8
Workplace support	No	4,598	8.6	7.9	9.2
	Yes	1,062	6.4	5.4	7.4

Table 36: Sources of support doctor did not feel comfortable seeking help from, by mental health diagnosis

Support	Ever diagnosed	n (est.)	Per cent	95%CI	
				Lower	Upper
Friend	No	6,277	11.7	11.0	12.4
	Yes	2,384	14.4	13.0	15.8
Family	No	7,810	14.5	13.8	15.3
	Yes	3,503	21.2	19.6	22.8
Spouse/partner	No	3,290	6.1	5.6	6.7
	Yes	1,436	8.7	7.6	9.8
Work college	No	20,872	38.9	37.8	40.0
	Yes	8,421	50.9	49.0	52.9
Library	No	24,609	45.8	44.7	47.0
	Yes	6,814	41.2	39.3	43.2
University services	No	25,147	46.8	45.7	48.0
	Yes	7,701	46.6	44.6	48.6
Internet	No	17,228	32.1	31.0	33.1
	Yes	4,257	25.8	24.1	27.5
Peer support program	No	11,103	20.7	19.8	21.6
	Yes	5,567	33.7	31.8	35.5
Doctor	No	5,293	9.9	9.2	10.5
	Yes	1,106	6.7	5.7	7.7
Psychiatrist	No	7,901	14.7	13.9	15.5
	Yes	1,679	10.2	9.0	11.4
Psychologist/counsellor	No	6,317	11.8	11.0	12.5
	Yes	1,360	8.2	7.2	9.3
Indigenous support worker	No	27,723	51.6	50.5	52.8
	Yes	8,413	50.9	48.9	52.9
Telephone helpline	No	21,548	40.1	39.0	41.2
	Yes	7,822	47.3	45.4	49.3
Doctors' Health Advisory Service	No	10,152	18.9	18.0	19.8
	Yes	5,050	30.6	28.7	32.4
Employee Assistance Provider	No	24,602	45.8	44.7	46.9
	Yes	9,092	55.0	53.0	57.0
Workplace support	No	22,745	42.4	41.3	43.5
	Yes	9,370	56.7	54.7	58.6

3.2.8 Attitudes

Stigmatising attitudes were identified regarding the competence and career progression of doctors with mental health conditions (Table 37). For example, 12.7% of respondents felt that doctors with a history of depression or an anxiety disorder were not as reliable as the average doctor, and 10.5% felt that they were unable to achieve as much in their career as those without a mental health condition. Almost 4% felt that doctors with a mental health condition should change to a non-clinical career. In addition, the majority of doctors felt that being a patient themselves causes embarrassment (58.6%). Almost all doctors (87%) felt that doctors need to present a healthy image, and 7.2% felt that doctors should be able to avoid depression and anxiety disorders.

In order to provide an overall measure of doctor's perceptions of attitudes towards medical professionals with a mental health history, the responses to these items were grouped into two domains and scores were calculated in each domain. These domains related to attitudes relating to the job performance of doctors with mental illness, and general stigmatising attitudes regarding mental illness. Questions that make up each domain are included in Appendix 7. Mean scores on each domain were calculated to allow comparisons between groups of interest. The numeric value of the mean score has no intrinsic value. The score is designed to enable comparison between groups. Higher mean scores reflect perceptions of more negative or stigmatising attitudes towards doctors with mental health conditions.

Perceived stigma in the medical community was common. For example, 40.5% believed that doctors with a history of mental health disorders were perceived as less competent by their peers and 44.8% believed that many doctors felt that experiencing a mental health condition was a sign of weakness. Almost half of doctors felt that those doctors with a history of anxiety or depression were less likely to be appointed (47.9%).

A greater proportion of female compared to male doctors felt doctors with a history of mental health disorders are as reliable as the average doctor (69.0%, 95%CI=67.7–70.3 and 55.22%, 95%CI=53.9–56.5 respectively). Males were more likely than females to believe that doctors should be able to avoid anxiety and depression (8.5%, 95%CI=7.8–9.2 and 5.2%, 95%CI=4.6–5.8 respectively). In addition, males more commonly indicated that doctors with mental health conditions should change to a non-clinical career (males: 4.4%, 95%CI=3.9–5.0, females: 2.8%, 95%CI=2.3– 3.3).

Younger doctors were more likely to think that doctors should portray a healthy image (18–30 year olds: 93.1%, 95%CI=91.8–94.4, all: 87.0%, 95%CI=86.3–87.6). The percentage of doctors who felt that those with mental health disorders should be optimistic about their recovery increased across age groups. It was lowest in young doctors (18–30 years 72.7 %, 95%CI=70.3–75.0) and highest in doctors who were aged 61 years and over (80.4%, 95%CI=78.7–82.7).

There were some differences in stigmatising attitudes, and the perception that stigmatising attitudes exist in the medical community, by specialty area. For example, a higher proportion of those working in mental health (72.1%, 95%CI=68.1–76.1) and emergency medicine (69.5%, 95%CI=65.1–74.0) agreed that being a patient causes embarrassment for a doctor when compared to the responses of all doctors (58.6%, 95%CI=57.7–59.6). Those working in imaging and pathology (59.1%, 95%CI=54.0–64.2) and anaesthetics (54.6%, 95%CI=50.8–58.4) were more likely to report they felt that doctors are less likely to appoint doctors with a history of depression or an anxiety disorder in comparison to all doctors (47.9%, 95%CI=47.0–48.9), and, in particular, general practitioners (41.9%, 95%CI=40.3–43.6). In addition, the perception that many doctors think less of doctors who have experienced depression or an anxiety disorder was greater in the area of mental health (mental health: 57.1%, 95%CI=52.6–61.6, all: 40.2%, 95%CI=39.3–41.2). Those working in surgery and imaging and pathology more commonly agreed with the statement that doctors who experience depression or an anxiety disorder should change to a non-clinical career (7.5%, 95%CI=5.2–9.9 and 6.8%, 95%CI=4.2–9.4 respectively) compared with all doctors (3.8%, 95%CI=3.4–4.2). Approximately 7% of respondents believed that doctors should be able to avoid depression or anxiety disorders (7.2%, 95%CI=6.7–7.7). This belief was more prevalent in those working in surgery (12.9%, 95%CI=9.9–16.0), and less common in those working in the area of mental health (2.9%, 95%CI=1.4–4.5). There was little difference between specialities regarding the expectation that doctors should portray a healthy image.

Mean scores for attitudes regarding the job performance and stigma relating to doctors with a history of mental health problems are shown in Table 38. Some differences in the attitudes of doctors who had ever and never been diagnosed with mental health conditions were evident. In addition, differences existed between the attitudes of those who received treatment and those who did not receive treatment for mental health conditions (Table 39). However, these differences may be confounded by other issues, if, for instance, doctors with more severe mental health problems are more likely to receive treatment. Doctors who self-prescribed for mental health problems perceived greater stigma about doctors with mental health conditions compared to those doctors who did not self prescribe (Table 40). Again, these differences are small and the practical significance is unknown.

The proportion of doctors agreeing with statements relating to stigmatising attitudes towards medical professionals with mental health conditions is shown in Table 41.

Table 37: Mean score for stigmatising and job performance attitudes for all doctors

	Mean	95%CI	
		Lower	Upper
Job performance	12.7	12.6	12.7
Stigma	18.7	18.6	18.8

Table 38: Attitudes towards doctors with mental health conditions for those who have ever or never been diagnosed with a mental health condition

Ever diagnosed		Mean	95%CI	
			Lower	Upper
No (n=8,471)	Job performance	13.0	12.9	13.0
	Stigma	18.4	18.3	18.5
Yes (n=2,781)	Job performance	11.7	11.5	11.8
	Stigma	19.7	19.5	19.9

Table 39: Attitudes towards doctors with mental health conditions for those who did and did not receive treatment

Current diagnosis		Mean	95%CI	
			Lower	Upper
No (n=141)	Job performance	13.0	12.5	13.6
	Stigma	19.9	19.1	20.8
Yes (n=2,640)	Job performance	11.6	11.5	11.7
	Stigma	19.7	19.5	19.9

Table 40: Attitudes towards doctors with mental health conditions for self-prescribed medication for a mental health condition in the previous 12 months

Self-prescribed		Mean	95%CI	
			Lower	Upper
No (n=10,653)	Job performance	12.7	12.6	12.7
	Stigma	18.6	18.5	18.7
Yes (n=599)	Job performance	12.4	12.2	12.7
	Stigma	20.4	20.0	20.7

Table 41: Proportion of doctors agreeing with statements relating to stigmatising attitudes towards medical professionals with mental health conditions

	n (est.)	Per cent	95%CI	
			Lower	Upper
Many doctors believe that a doctor with a history of depression or an anxiety disorder is less competent	28,429	40.5	39.5	41.4
Many doctors believe that experiencing depression or an anxiety disorder themselves is a sign of personal weakness	31,441	44.8	43.8	45.7
Doctors are less likely to appoint doctors with a history of depression or an anxiety disorder	33,667	47.9	47.0	48.9
Many doctors think less of doctors who have experienced depression or an anxiety disorder	28,254	40.2	39.3	41.2
Being a patient causes embarrassment for a doctor	41,163	58.6	57.7	59.6
Doctors tend to advise colleagues not to divulge a history of depression or an anxiety disorder	16,669	23.7	22.9	24.6
Doctors who experience depression or an anxiety disorder should change to a non-clinical career	2,668	3.8	3.4	4.2
Doctors who have experienced depression or an anxiety disorder can achieve as much in their careers as those who have not	51,906	73.9	73.0	74.8
A doctor with a history of depression or an anxiety disorder is as reliable as the average doctor	42,596	60.7	59.7	61.6
Doctors feel they need to portray a healthy image	61,069	87.0	86.3	87.6
Doctors should be able to avoid depression or an anxiety disorder	5,052	7.2	6.7	7.7
Doctors who experience depression or an anxiety disorder should be optimistic about their recovery	53,635	76.4	75.5	77.2

3.2.9 Barriers

As shown in Table 42, the most commonly identified reason for doctors being unwilling to seek for depression or anxiety was fear of lack of confidentiality or concerns about privacy. Few doctors identified that lack of knowledge of mental health symptoms or services were barriers to seeking help. Further, approximately one-third of doctors indicated that they were comfortable seeking help for mental health conditions (28.2%, 95%CI=27.4–29.1).

Table 42: Barriers to seeking help for anxiety or depression

	n (est.)	Per cent	95%CI	
			Lower	Upper
Fear of lack of confidentiality/privacy	36,897	52.5	51.6	53.5
Embarrassment	26,293	37.4	36.5	38.4
Impact on registration and right to practice	24,091	34.3	33.4	35.2
Reliance on self, do not want help	21,394	30.5	29.6	31.4
Lack of time	20,027	28.5	27.6	29.4
Concerns about career development/progression	19,345	27.5	26.7	28.4
Fear of unwanted intervention	17,840	25.4	24.5	26.3
Impact on colleagues	17,485	24.9	24.0	25.8
Stigmatising attitudes to mental illness	17,367	24.7	23.9	25.6
Lack of confidence in professional treatment	15,469	22.0	21.2	22.8
Do not want to burden others	15,362	21.9	21.1	22.7
Do not believe it will help	13,081	18.6	17.9	19.4
Income loss	10,393	14.8	14.1	15.5
Fear or stress about help seeking or the source of help	8,298	11.8	11.2	12.4
Impact on patients	6,675	9.5	8.9	10.1
Lack of locum cover	5,055	7.2	6.7	7.7
Cost	4,844	6.9	6.4	7.4
Lack of knowledge about mental health services	3,740	5.3	4.9	5.8
Difficulty identifying symptoms of mental illness	3,270	4.7	4.2	5.1

There were some differences between the barriers to help seeking between male and female practitioners (Table 43). Of interest, a significantly greater number of female doctors indicated that concerns about career progression or development posed a barrier to seeking help compared to male doctors (33.1%, 95%CI=31.7–34.4 and 23.9%, 95%CI=22.8–25.1). Further, more female compared to male doctors indicated that fear of lack of confidentiality or privacy was a barrier to seeking help (60.1%, 95%CI=58.7–61.5 and 47.6%, 95%CI=46.3–48.9 respectively).

Young doctors were more likely than older doctors to identify that almost all the listed reasons in Table 42 were barriers to seeking help for depression and anxiety. In particular, concerns about career development and progression were more commonly identified by young doctors (18–30 years: 45.6%, 95%CI=43.0–48.2 and all doctors: 27.5%, 95%CI=26.7–28.4). However, older doctors were more likely to view loss of income as a barrier to seeking help compared to younger doctors (18–30 years: 11.5%, 95%CI=9.8–13.2 and all doctors: 14.8%, 95%CI=14.1–15.5).

Table 43: Barriers to seeking help for depression or anxiety, by gender

	Gender	n (est.)	Per cent	95%CI	
				Lower	Upper
Impact on registration and right to practice	Male	14,138	33.3	32.0	34.6
	Female	9,953	35.8	34.5	37.2
Concerns about career development/progression	Male	10,162	23.9	22.8	25.1
	Female	9,183	33.1	31.7	34.4
Fear of lack of confidentiality/privacy	Male	20,204	47.6	46.3	48.9
	Female	16,693	60.1	58.7	61.5
Impact on colleagues	Male	9,868	23.2	22.1	24.4
	Female	7,618	27.4	26.1	28.7
Lack of confidence in professional treatment	Male	9,845	23.2	22.1	24.3
	Female	5,625	20.3	19.1	21.4
Reliance on self, do not want help	Male	13,299	31.3	30.1	32.6
	Female	8,095	29.2	27.8	30.5
Difficulty identifying symptoms of mental illness	Male	2,263	5.3	4.7	5.9
	Female	1,007	3.6	3.1	4.2
Do not want to burden others	Male	8,827	20.8	19.7	21.9
	Female	6,535	23.5	22.3	24.7
Do not believe it will help	Male	8,171	19.2	18.2	20.3
	Female	4,909	17.7	16.6	18.8
Embarrassment	Male	15,238	35.9	34.6	37.2
	Female	11,055	39.8	38.4	41.2
Lack of time	Male	10,893	25.7	24.5	26.8
	Female	9,134	32.9	31.5	34.2
Fear of unwanted intervention	Male	11,032	26.0	24.8	27.1
	Female	6,807	24.5	23.3	25.8
Fear or stress about help seeking or the source of help	Male	4,607	10.9	10.0	11.7
	Female	3,691	13.3	12.3	14.3
Cost	Male	2,343	5.5	4.9	6.2
	Female	2,501	9.0	8.2	9.8
Stigmatising attitudes to mental illness	Male	9,258	21.8	20.7	22.9
	Female	8,109	29.2	27.9	30.5
Lack of knowledge about mental health services	Male	2,440	5.7	5.1	6.4
	Female	1300	4.7	4.1	5.3
Impact on patients	Male	3807	9.0	8.2	9.7
	Female	2868	10.3	9.5	11.2

	Gender	n (est.)	Per cent	95%CI	
				Lower	Upper
Income loss	Male	6567	15.5	14.5	16.4
	Female	3825	13.8	12.8	14.8
Lack of locum cover	Male	2988	7.0	6.4	7.7
	Female	2067	7.4	6.7	8.2

3.2.10 Stress

Sources of work related stress are displayed in Table 44. The most commonly identified work stressors are related to workload (25%) and the competing demands between work/study and personal responsibility (26.8%). As shown in Table 45, female doctors more frequently reported feeling very stressed by work related factors than male doctors. There were few differences between work stressors for doctors living in different regions. However, doctors in remote settings less frequently reported feeling very stressed by fear of disclosing mistakes.

There were some differences in work related stressors by specialty (Appendix 9, Table A8). For example, doctors working in mental health, emergency medicine and oncology reported being very stressed by lack of resources (21.2%, 18.7% and 17.4% respectively). Those working in rural/remote/Aboriginal health and paediatrics were stressed by work hours (29.1% and 26.1% respectively). Approximately 6% of doctors working in mental health reported they were very stressed by the threat of violence, and doctors whose specialty was obstetrics and gynaecology were very stressed by fear of litigation (17%).

A smaller proportion of overseas trained doctors reported being very stressed by the included work stressors. For example, overseas trained doctors were significantly less stressed by work load (overseas trained doctors: 20.2%, Australian trained doctors: 26.7%), making the right decision at work (overseas trained: 12.0%, Australian trained: 19.1%) and responsibility (overseas trained: 16.2%, Australian trained: 22.5%). However, a higher proportion of overseas trained doctors reported being very stressed by racism than those doctors trained in Australia (4.3% and 0.74% respectively).

Table 44: Sources of work related stress

	n (est.)	Per cent	95%CI	
			Lower	Upper
Conflict between study/career and family/personal responsibilities	18,791	26.8	25.9	27.6
Too much to do at work	17,534	25.0	24.1	25.8
Responsibility at work	14,624	20.8	20.0	21.6
Long work hours	13,706	19.5	18.7	20.3
Fear of making mistakes	13,125	18.7	17.9	19.5
Making the right decision	12,100	17.2	16.5	18.0
Speaking in front of an audience	11,520	16.4	15.7	17.1
Demands of study and examinations	10,892	15.5	14.8	16.2
Sleep deprivation	9,665	13.8	13.1	14.5
Finances and debt	9,642	13.7	13.0	14.4
Dealing with difficult patients	9,621	13.7	13.0	14.4
Making mistakes	9,501	13.5	12.9	14.2
Keeping up to date with knowledge	9,459	13.5	12.8	14.1
Unpaid work hours	9,236	13.2	12.5	13.8
Limitations of resources	7,614	10.8	10.2	11.5
Litigation fears	7,020	10.0	9.4	10.6

	n (est.)	Per cent	95%CI	
			Lower	Upper
Difficult relations with senior colleagues	6,639	9.5	8.9	10.0
Talking to distressed patients and/or relatives	5,068	7.2	6.7	7.7
Disclosing mistakes to colleagues, patients and/or their relatives	4,777	6.8	6.3	7.3
Dealing with death	3,425	4.9	4.5	5.3
Being bullied	3,151	4.5	4.1	4.9
Threat of violence at work	1,290	1.8	1.6	2.1
Racism	1,173	1.7	1.4	1.9

Table 45: Sources of work related stress, by gender

	Gender	n (est.)	Per cent	95%CI	
				Lower	Upper
Conflict between study/career and family/personal responsibilities	Male	8,420	19.8	18.7	20.9
	Female	10,371	37.4	36.0	38.8
Litigation fears	Male	3,999	9.4	8.7	10.2
	Female	3,021	10.9	10.0	11.8
Finances and debt	Male	5,232	12.3	11.4	13.2
	Female	4,409	15.9	14.8	16.9
Responsibility at work	Male	6,719	15.8	14.8	16.8
	Female	7,905	28.5	27.2	29.7
Threat of violence at work	Male	622	1.5	1.1	1.8
	Female	668	2.4	2.0	2.9
Too much to do at work	Male	8,788	20.7	19.6	21.8
	Female	8,746	31.5	30.2	32.8
Long work hours	Male	7,260	17.1	16.1	18.1
	Female	6,446	23.2	22.0	24.4
Unpaid work hours	Male	4,726	11.1	10.3	12.0
	Female	4,510	16.2	15.2	17.3
Dealing with difficult patients	Male	2,119	5.0	4.4	5.6
	Female	2,949	10.6	9.7	11.5
Limitations of resources	Male	3,767	8.9	8.1	9.6
	Female	3,846	13.9	12.9	14.8
Keeping up to date with knowledge	Male	3,642	8.6	7.8	9.4
	Female	5,816	21.0	19.8	22.1
Making the right decision	Male	4,650	11.0	10.1	11.8

	Gender	n (est.)	Per cent	95%CI	
				Lower	Upper
	Female	7,449	26.8	25.5	28.1
Dealing with death	Male	1,358	3.2	2.7	3.7
	Female	2,066	7.4	6.7	8.2
Sleep deprivation	Male	4,474	10.5	9.7	11.4
	Female	5,190	18.7	17.6	19.8
Fear of making mistakes	Male	5,268	12.4	11.5	13.3
	Female	7,857	28.3	27.0	29.6
Difficult relations with senior colleagues	Male	3,382	8.0	7.2	8.7
	Female	3,257	11.7	10.8	12.7
Demands of study and examinations	Male	4,993	11.8	10.9	12.7
	Female	5,899	21.2	20.0	22.5
Racism	Male	748	1.8	1.4	2.1
	Female	425	1.5	1.2	1.9
Being bullied	Male	1,683	4.0	3.4	4.5
	Female	1,468	5.3	4.7	5.9
Making mistakes	Male	3,931	9.3	8.5	10.1
	Female	5,570	20.1	18.9	21.2
Disclosing mistakes to colleagues, patients and/or their relatives	Male	1,927	4.5	4.0	5.1
	Female	2,851	10.3	9.4	11.1
Speaking in front of an audience	Male	5,613	13.2	12.3	14.1
	Female	5,906	21.3	20.1	22.4
Dealing with difficult patients	Male	4,445	10.5	9.7	11.3
	Female	5,176	18.6	17.5	19.8

Life stress events experienced by doctors in the previous 12 months are provided in Table 46. The most commonly identified life stress events were caring for a family member (18.4%), and the death of a family member or close friend (15.5%). Some differences between older and younger doctors were evident. Older doctors more frequently reported experiencing a serious illness or accident, the death of someone close to them, or caring for a family member than younger doctors. In contrast, younger doctors more frequently reported having difficulty finding a job. A higher proportion of female doctors reported experiencing mental illness (11.8%) and the need to care for a family member (20.4%) in the past 12 months compared to male doctors (mental illness: 8.0%, caring for family member: 17.2%). Doctors living in remote areas more frequently reported being witness to violence or abuse in the previous 12 months (12%), compared to doctors working in other regions (4%). However, due to the small sample size in this subgroup interpretation of the significance of these differences is limited.

Table 46: Life stress events experienced in the past 12 months

	n (est.)	Per cent	95%CI	
			Lower	Upper
Serious illness/accident	6,808	9.7	9.1	10.3
Death of family member or close friend	10,851	15.5	14.8	16.2
Not able to get a job	2,613	3.7	3.3	4.1
Mental illness	6,653	9.5	8.9	10.0
Caring for a family member	12,954	18.4	17.7	19.2
Witness to violence or abuse	3,009	4.3	3.9	4.7

3.2.11 Models

General distress

Table 47 provides the demographic, work place and psychological factors associated with high or very high psychological distress. Odds ratios provide a general indication of which categories of doctors have a higher or lower probability of a particular outcome occurring, in this case reporting high or very high distress. An odds ratio of greater than one indicates increased risk of having high or very high distress, and those below one indicate a reduction in risk compared to the reference category. Differences between a category and the reference category can be considered significant where the confidence interval does not contain a value of one. For example, the odds of a doctor being classified as having high or very high distress were approximately 4 times higher in those with high emotional exhaustion compared to doctors with low levels of burnout in this domain. The odds of a doctor having high or very high distress were 3 times greater if the doctor reported high levels of depersonalisation, and 1.7 times higher if the doctor reported low professional efficacy compared to those with low levels of burnout within these domains. As seen in Table 48, a number of work related factors, including hours worked, training stage and burnout subscales, are associated with a high likelihood of psychiatric distress. These results suggest that the work environment may be contributing to high levels of distress in doctors.

Table 47: Factors associated with high or very high psychological distress in doctors

		Odds ratio	95%CI	
			Lower	Upper
Gender	Male	1		
	Female	1.34	1.13	1.59
Marital status	Committed relationship/married	1		
	Separated/divorced	1.59	1.11	2.28
	Widowed	2.53	0.85	7.58
	Single	1.36	1.08	1.72
Work area	Inner metropolitan	1		
	Outer metropolitan	1.27	1.01	1.59
	Regional	1.08	0.87	1.35
	Remote	0.96	0.47	1.93
	Rural	0.78	0.59	1.04
Work setting	Solo or group practice	1		
	Aboriginal Health Centre	1.18	0.66	2.08
	Hospital	1.52	1.25	1.83
	Non-patient care	1.45	0.77	2.71

		Odds ratio	95%CI	
			Lower	Upper
	Not working	0.85	0.37	1.97
	Other patient care	0.58	0.29	1.16
	University	1.07	0.48	2.38
Emotional exhaustion (MBI)	Low	1		
	Moderate	1.80	1.31	2.46
	High	4.20	3.18	5.53
Depersonalisation (MBI)	Low	1		
	Moderate	1.56	1.15	2.11
	High	2.98	2.25	3.97
Low professional efficacy (MBI)	Low	1		
	Moderate	1.39	1.13	1.70
	High	1.73	1.40	2.14
Alcohol dependence	Low/no	1		
	High	1.84	1.19	2.86
	Moderate	1.10	0.87	1.40
Self-prescription	No	1		
	Yes	2.02	1.51	2.70
Work impact	No/low	1		
	Moderate/high	2.22	1.81	2.72
Self Impact	No/low	1		
	Moderate/high	7.42	6.06	9.07

Table 48: Factors associated with a high likelihood of a minor psychiatric disorder (GHQ)

		Odds ratio	95%CI	
			Lower	Upper
Age group	18–30 years old	1		
	31–40 years old	1.22	1.01	1.47
	41–50 years	1.13	0.91	1.40
	51–60 years	0.89	0.71	1.13
	61+ years old	0.81	0.62	1.06
Gender	Male	1		
	Female	1.42	1.26	1.60
Training stage	Consultant	1		
	Intern	1.27	0.94	1.71
	Trainee	0.73	0.57	0.93
	Retired	1.09	0.74	1.60
	Missing	1.19	1.01	1.39
Emotional exhaustion (MBI)	Low	1		
	Moderate	1.77	1.52	2.06
	High	3.67	3.18	4.24
Depersonalisation (MBI)	Low	1		
	Moderate	1.28	1.11	1.48
	High	2.04	1.76	2.37
Low professional efficacy (MBI)	Low	1		
	Moderate	1.22	1.07	1.39
	High	1.55	1.33	1.80
Hours worked	37.5–50 hours per week	1		
	<37.5 hours per week	1.16	1.01	1.33
	>50 hours per week	1.34	1.14	1.57
Self-prescription	No	1		
	Yes	1.40	1.10	1.78
Work impact	No/low	1		
	Moderate/high	1.87	1.61	2.18
Self Impact	No/low	1		
	Moderate/high	3.26	2.75	3.87

Suicidal thoughts

Tables 49 and 50 show factors associated with thoughts of suicide in the previous 12 months. As evident in Table 49, those doctors classified as highly or very highly distressed by the K10 were at significantly greater risk of suicidal thoughts in the previous 12 months. This suggests that the K10 could be successfully used as a screening tool to identify doctors with high likelihood of suicidal thoughts.

While the association between psychological distress and suicidal ideation may be expected, identifying doctors with high levels of distress would require individual screening. To investigate if demographic or other categories of doctors were more at risk of suicidal ideation, the model was re-fitted excluding psychological distress. Table 50 indicates that while no single demographic characteristic allows for identification of those who are likely to have thoughts of suicide, there were characteristics that are associated with greater risk. This suggests systemic interventions, focusing on these at-risk categories, could be useful.

Table 49: Factors associated with suicidal thoughts in the previous 12 months

		Odds ratio	95%CI	
			Lower	Upper
Age group	18–30 years old	1		
	31–40 years old	1.14	0.89	1.46
	41–50 years old	1.34	1.03	1.75
	51–60 years old	1.49	1.12	1.98
	61+ years old	1.10	0.78	1.55
Gender	Male	1		
	Female	0.79	0.68	0.93
Marital status	Committed relationship/married	1		
	Separated/divorced	1.65	1.24	2.21
	Widowed	0.96	0.41	2.22
	Single	1.71	1.37	2.14
Disability	No	1		
	Yes	1.98	1.49	2.62
Work setting	Solo or group practice	1		
	Aboriginal Health Centre	2.40	1.45	4.00
	Hospital	1.16	0.98	1.38
	Non-patient care	1.15	0.71	1.86
	Not working	1.08	0.53	2.20
	Other patient care	1.65	1.02	2.67
	University	0.63	0.34	1.16
Psychological distress (K10)	Low/no	1		
	Moderate	10.31	8.04	13.23
	High	4.96	4.10	6.00
	Very high	19.92	14.45	27.44
Impact on self	No/low	1		
	Moderate/high	2.30	1.89	2.79

Table 50: Factors associated with suicidal thoughts in the previous 12 months, without the K10 variable

		Odds ratio	95%CI	
			Lower	Upper
Age group	31–40 years old	1		
	18–30 years old	1.06	0.83	1.34
	41–50 years old	1.20	0.93	1.55
	51–60 years old	1.32	1.01	1.71
	61+ years old	0.84	0.62	1.15
Marital status	Committed relationship/married	1		
	Separated/divorced	1.86	1.40	2.46
	Widowed	1.04	0.48	2.25
	Single	1.89	1.53	2.34
Disability	No	1		
	Yes	2.20	1.69	2.88
Work setting	Solo or group practice	1		
	Aboriginal Health Centre	2.47	1.52	4.03
	Hospital	1.33	1.13	1.57
	Non-patient care	1.08	0.68	1.73
	Not working	1.04	0.55	1.98
	Other patient care	1.39	0.87	2.21
	University	0.64	0.35	1.19
Impact on self	No/low	1		
	Moderate/high	4.61	3.75	5.67
Impact on work	No/low	1		
	Moderate/high	2.04	1.66	2.50
Self-prescribed medication	No	1		
	Yes	1.76	1.36	2.26

Coping strategies

A number of doctors made use of negative coping strategies in order to deal with symptoms of poor mental health. Factors associated with regularly using negative strategies, and few positive strategies, to cope with mental health symptoms were investigated. The classification of coping strategies is included in Appendix 8. Factors associated with use of negative coping behaviours by level of distress are shown in Tables 51 and 52.

While doctors who experience no, or low levels of distress, may not need to employ coping strategies on a regular basis. A specific demographic profile was associated with the use of negative strategies, particularly in doctors with high levels of psychological distress. For example, male doctors who work long hours, and those who specialise in emergency medicine, anaesthetics, oncology, obstetrics or gynaecology, were more likely to make use of predominately negative coping behaviours. Negative coping techniques are associated with greater personal impact, high risk alcohol use and low professional efficacy. However, as the data is cross sectional, we are unable to determine whether doctors were experiencing high levels of distress because of the coping strategies they were employing, or whether the level of distress impeded doctors' ability to cope in a positive manner.

Table 51: Factors associated with use of negative coping strategies in doctors with high or very high psychological distress

		Odds ratio	95%CI	
			Lower	Upper
Age group	31–40 years old	1		
	18–30 years old	2.18	1.18	4.03
	41–50 years	2.61	1.38	4.96
	51–60 years	2.59	1.35	4.99
	61+ years old	1.73	0.74	4.03
Gender	Female	1		
	Male	0.60	0.42	0.86
Hours worked	37.5–50 hours per week	1		
	<37.5 hours per week	0.87	0.56	1.35
	>50 hours per week	1.54	0.97	2.43
Specialty	General practitioner	1		
	Anaesthetics	2.20	1.16	4.19
	Emergency medicine	2.99	1.49	6.01
	Imaging and pathology	1.39	0.59	3.28
	Mental health	1.23	0.53	2.84
	Non-patient	1.58	0.47	5.26
	Obstetrics and gynaecology	3.31	1.36	8.07
	Oncology	3.34	1.29	8.62
	Paediatrics	0.55	0.21	1.45
	Rural/remote/Aboriginal health	1.57	0.32	7.57
	Surgery	1.11	0.42	2.95
	Other	1.30	0.74	2.25
	Missing	1.68	0.96	2.92
Self impact	No/low impact	1		
	Moderate/high	1.64	1.13	2.39

		Odds ratio	95%CI	
			Lower	Upper
Above AUDIT cut-off	No	1		
	Yes	2.20	1.56	3.11
Low professional efficacy (MBI)	Low	1		
	Moderate	1.55	1.01	2.37
	High	2.55	1.70	3.83

Table 52: Factors associated with use of negative coping strategies in doctors with low or moderate psychological distress

		Odds ratio	95%CI	
			Lower	Upper
Hours worked	37.5–50 hours per week	1		
	<37.5 hours per week	1.50	1.15	1.97
	>50 hours per week	2.26	1.69	3.03
Self impact	No/low impact	1		
	Moderate/high	1.80	1.34	2.41
Above AUDIT cut-off	No	1		
	Yes	1.83	1.52	2.20
Emotional exhaustion (MBI)	Low	1		
	Moderate	0.90	0.65	1.19
	High	1.31	1.00	1.71
Depersonalisation (MBI)	Low	1		
	Moderate	1.47	1.08	2.00
	High	1.70	1.26	2.30
Low professional efficacy (MBI)	Low	1		
	Moderate	1.73	1.3	2.23
	High	2.50	1.90	3.28

3.3 Medical students

3.3.1 Demographic characteristics

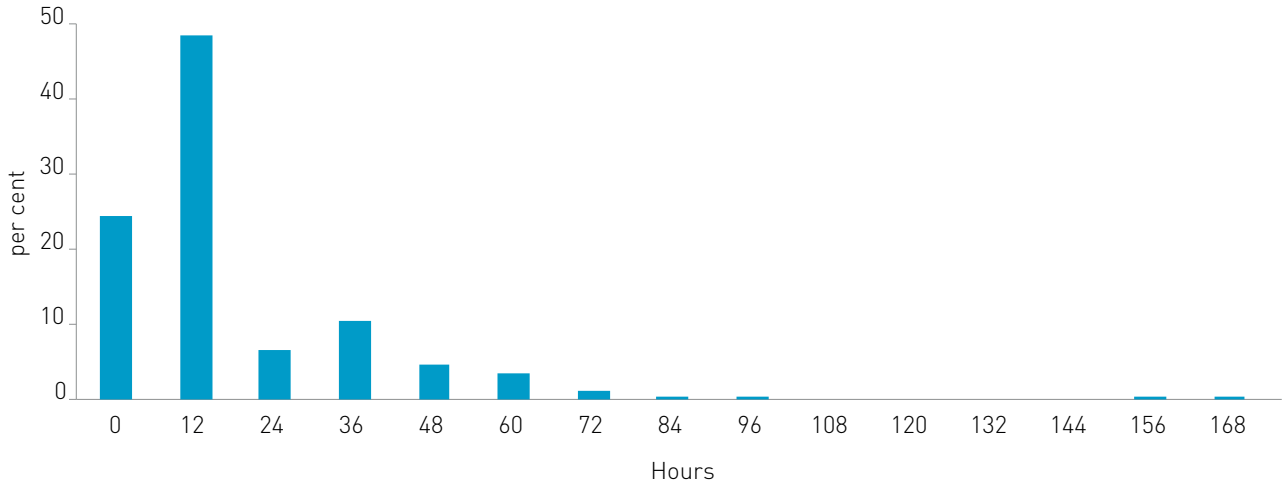
The demographic characteristics of medical students participating in the *beyondblue* survey are displayed in Table 53. As no population information exists for medical students, the representativeness of this sample was unable to be assessed. As a result the student sample has not been weighted.

Table 53: Demographic characteristics of students participating in the *beyondblue* survey

	n	Per cent
Age group		
18–21 years old	625	34.5
22–25 years old	817	45.1
26+ years old	369	20.4
Gender		
Male	677	37.4
Female	1,134	62.6
Indigenous status		
Non-Indigenous	1,789	98.8
Indigenous	22	1.2
State/territory		
ACT	17	0.9
NSW	525	29.0
NT	18	1.0
QLD	319	17.6
SA	187	10.3
TAS	88	4.9
VIC	487	26.9
WA	170	9.4
Region		
Metropolitan	1,204	66.5
Regional	406	22.4
Rural	195	10.8
Remote	6	0.3
Training stage		
Pre-clinical	589	32.5
Clinical	1,222	67.5

Nine hundred and ninety-five students reported working in a part time job. The average number of hours per week ranged between 0 and 168 (mean=17, median=10). The distribution of hours worked in displayed in Figure 12.

Figure 12: Distribution of number of hours worked for students with part time employment



3.3.2 General mental health

Minor psychiatric disorders (GHQ)

As shown in Table 54, higher rates of minor psychiatric disorders were reported in female students compared to male students (47.2% and 35.9% respectively). More students than doctors were classified as having a high likelihood of a minor psychiatric disorder (43.0% and 27.2% respectively).

Table 54: Medical students with a high likelihood of minor psychiatric disorders, by age, gender, region and training stage

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	262	41.9	38.1	45.8
22–25 years old	335	41.0	37.6	44.4
26+ years old	181	49.1	44.0	54.2
Gender				
Male	243	35.9	32.3	39.5
Female	535	47.2	44.3	50.1
Region				
Metropolitan	514	42.7	39.9	45.5
Regional	175	43.1	38.3	47.9
Rural	88	45.1	38.1	52.1
Remote	1	16.7	0.0	46.5
Indigenous status				
Non-Indigenous	762	42.6	40.3	44.9
Indigenous	16	72.7	54.1	91.4
Training stage				
Pre-clinical	244	41.4	37.4	45.4
Clinical	534	43.7	40.9	46.5
Total	778	43.0	40.7	45.2

Psychological distress (K10)

Levels of very high psychological distress were substantially higher in medical students than in the general population (9.2% and 3.1% respectively) (student population comparisons included in Appendix 5). Females had higher levels of distress than male students (26% and 18.2% reported high or very high distress respectively). Of note, the level of very high psychological distress reported by students was higher than those reported by intern doctors (9.2% and 4.4% respectively).

Table 55: Very high levels of psychological distress, by age, gender, region and training stage

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	59	9.4	7.2	11.7
22–25 years old	70	8.6	6.7	10.5
26+ years old	37	10.0	7.0	13.1
Gender				
Male	48	7.1	5.2	9.0
Female	118	10.4	8.6	12.2
Region				
Metropolitan	104	8.6	7.1	10.2
Regional	44	10.8	7.8	13.9
Rural	18	9.2	5.2	13.3
Remote	0	0.0	0.0	0.0
Indigenous status				
Non-Indigenous	160	8.9	7.6	10.3
Indigenous	6	27.3	8.6	45.9
Training stage				
Pre-clinical	63	10.7	8.2	13.2
Clinical	103	8.4	6.9	10.0
Total	166	9.2	7.8	10.5

3.3.3 Specific mental health disorders

Depression

Rates of current depression (Table 56) and ever having a depression diagnosis (Table 57) are substantially higher in medical students (current 8.1% and ever diagnosed with depression 18.1%) than in the general population (12 month prevalence 6.2%, lifetime prevalence 15.0%). As shown in Table 56, rates of current depression increased with age groups and were higher in female than male students. Due to the small sample living in rural and remote areas, it is difficult to draw comparisons.

Table 56: Currently diagnosed with depression, by age group, gender, region and stage of training

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	31	5.0	3.3	6.7
22–25 years old	67	8.2	6.3	10.1
26+ years old	48	13.0	9.6	16.4
Gender				
Male	35	5.2	3.5	6.8
Female	111	9.8	8.1	11.5
Region				
Metropolitan	142	7.9	6.7	9.2
Regional	4	18.2	2.1	34.3
Rural	0	0.0	0.0	0.0
Remote	0	0.0	0.0	0.0
Indigenous status				
Non-Indigenous	145	7.6	5.1	10.2
Indigenous	1	16.7	0.0	46.5
Training stage				
Pre-clinical	47	8.0	5.8	10.2
Clinical	99	8.1	6.6	9.6
Total	146	8.1	6.8	9.3

Table 57: Ever diagnosed with depression, by age group, gender, region and stage of training

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	66	10.6	8.2	13.0
22–25 years old	152	18.6	15.9	21.3
26+ years old	110	29.8	25.1	34.5
Gender				
Male	89	13.2	10.6	15.7
Female	239	21.1	18.7	23.5
Region				
Metropolitan	197	16.4	14.3	18.5
Regional	77	19.0	15.2	22.8
Rural	53	27.2	20.9	33.4
Remote	1	16.7	0.0	46.5
Indigenous status				
Non-Indigenous	319	17.8	16.1	19.6
Indigenous	9	40.9	20.3	61.5
Training stage				
Pre-clinical	95	16.1	13.2	19.1
Clinical	233	19.1	16.9	21.3
Total	328	18.1	16.3	19.9

Anxiety

Reported anxiety diagnoses, both current and ever, were higher in medical students than the general population. While current anxiety appears to be higher in students living in rural areas, the interpretation of this result is limited by the small sample size.

While rates of diagnoses for depression and anxiety are higher than those in the general population, they are similar to those reported for an Australian university population. Said et al. (2013) reported 8% of students had current depression and 12.6% had current anxiety. It is important to note the difference in measurement employed. Said et al reported rates based on the number of students meeting diagnostic criteria. In contrast, the results of the current study are based on specific diagnosis or treatment. Rates of diagnosis of, or treatment for, depression and anxiety are likely to be lower than the number meeting diagnostic criteria. This is supported by results obtained from the NSMHW which indicated that a significant number of individuals meeting diagnostic criteria for disorders did not seek treatment or support.

Table 58: Currently diagnosed with anxiety, by age group, gender, region, and stage of training

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	36	5.8	3.9	7.6
22–25 years old	69	8.5	6.5	10.4
26+ years old	30	8.1	5.3	10.9
Gender				
Male	35	5.2	3.5	6.8
Female	100	8.8	7.2	10.5
Region				
Metropolitan	76	6.3	4.9	7.7
Regional	37	9.1	6.3	11.9
Rural	22	11.3	6.8	15.7
Remote	0	0.0	0.0	0.0
Indigenous status				
Non-Indigenous	125	14.5	12.1	16.9
Indigenous	10	45.5	10.4	80.5
Training stage				
Pre-clinical	42	7.1	5.1	9.2
Clinical	93	7.6	6.1	9.1
Total	135	7.5	6.2	8.7

Table 59: Ever diagnosed with anxiety, by age-group, gender, region, and stage of training

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	64	10.2	7.9	12.6
22–25 years old	106	13.0	10.7	15.3
26+ years old	60	16.3	12.5	20.0
Gender				
Male	58	8.6	6.5	10.7
Female	172	15.2	13.1	17.3
Region				
Metropolitan	138	11.5	9.7	13.3
Regional	60	14.8	11.3	18.2
Rural	31	15.9	10.8	21.0
Remote	1	16.7	0.0	46.5
Indigenous status				
Non-Indigenous	221	12.4	10.8	13.9
Indigenous	9	40.9	20.3	61.5
Training stage				
Pre-clinical	73	12.4	9.7	15.1
Clinical	157	12.9	11.0	14.7
Total	230	12.7	11.2	14.2

Suicide

The number of attempted suicides was high compared to rates reported by the general population (Appendix 4, Tables A4 and A5). Approximately one in five medical students had thoughts of suicide in the previous 12 months (Table 61). As evident in Figure 13, this is substantially higher than the rate in the general population. It is important to note that this difference may be, in part, due to differences in the survey question wording.

Table 60: Suicide attempts, by age-group, gender, region, and stage of training

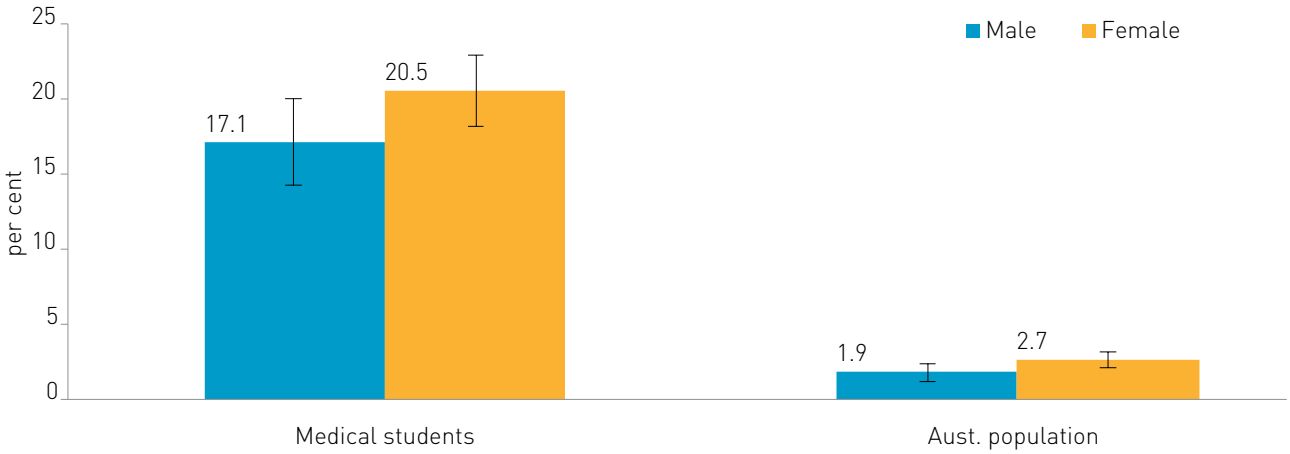
	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	19	3.0	1.7	4.4
22–25 years old	30	3.7	2.4	5.0
26+ years old	26	7.1	4.4	9.7
Gender				
Male	23	3.4	2.0	4.8
Female	52	4.6	3.4	5.8

	n	Per cent	95%CI	
			Lower	Upper
Region				
Metropolitan	48	4.0	2.9	5.1
Regional	17	4.2	2.2	6.1
Rural	9	4.6	1.7	7.6
Remote	1	16.7	0.0	46.5
Indigenous status				
Non-Indigenous	70	3.9	3.0	4.8
Indigenous	5	22.7	5.2	40.3
Training stage				
Pre-clinical	27	4.6	2.9	6.3
Clinical	48	3.9	2.8	5.0
Total	75	4.1	3.2	5.1

Table 61: Suicidal thoughts in the previous 12 months and prior to the previous 12 months, by age-group, gender, region and stage of training

	Previous 12 months				Prior to previous 12 months			
	n	Per cent	95%CI		n	Per cent	95%CI	
			Lower	Upper			Lower	Upper
Age group								
18–21 years old	119	19.0	16.0	22.1	175	28.0	24.5	31.5
22–25 years old	151	18.5	15.8	21.2	249	30.5	27.3	33.6
26+ years old	78	21.1	17.0	25.3	150	40.7	35.6	45.7
Gender								
Male	116	17.1	14.3	20.0	185	27.3	24.0	30.7
Female	232	20.5	18.1	22.8	389	34.3	31.5	37.1
Region								
Metropolitan	225	18.7	16.5	20.9	381	31.6	29.0	34.3
Regional	85	20.9	17.0	24.9	133	32.8	28.2	37.3
Rural	38	19.5	13.9	25.1	59	30.3	23.8	36.7
Remote	0	0.0	0.0	0.0	1	16.7	0.0	46.5
Indigenous status								
Non-Indigenous	341	19.1	17.2	20.9	564	31.5	29.4	33.7
Indigenous	7	31.8	12.3	51.3	10	45.5	24.6	66.3
Training stage								
Pre-clinical	122	20.7	17.4	24.0	187	31.8	28.0	35.5
Clinical	226	18.5	16.3	20.7	387	31.7	29.1	34.3
Total	348	19.2	17.4	21.0	574	31.7	29.6	33.8

Figure 13: Suicidal ideation in the previous 12 months in medical students and the Australian population



3.3.4 Substance use

Alcohol (AUDIT)

As shown in Table 62, male students had higher levels of moderate and high risk drinking behaviour than female students. There was some evidence of a decline in moderate, but not high, risk alcohol intake across age groups.

While rates of moderate and harmful drinking are of concern, Said et al. reported 8.1% of university students drank at harmful levels. This finding suggests that, while any moderate or high risk drinking behaviour is of concern, medical students have low levels of harmful drinking (4%) in comparison to the general student population. The decline in moderate drinking with age suggests that these behaviours may self correct somewhat (18–21 years=23.2%, 26 years and above=19.2%).

Table 62: Moderate and high risk alcohol use (AUDIT), by age group, gender, region, and stage of training

	Moderate				High			
	n	Per cent	95%CI		n	Per cent	95%CI	
			Lower	Upper			Lower	Upper
Age group								
18–21 years old	145	23.2	19.9	26.5	30	4.8	3.1	6.5
22–25 years old	169	20.7	17.9	23.5	25	3.1	1.9	4.2
26+ years old	71	19.2	15.2	23.3	17	4.6	2.5	6.8
Gender								
Male	185	27.3	24.0	30.7	39	5.8	4.0	7.5
Female	200	17.6	15.4	19.9	33	2.9	1.9	3.9
Region								
Metropolitan	261	21.7	19.4	24.0	49	4.1	3.0	5.2
Regional	80	19.7	15.8	23.6	9	2.2	0.8	3.7
Rural	44	22.6	16.7	28.4	14	7.2	3.6	10.8
Remote	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Indigenous status								
Non-Indigenous	379	21.2	19.3	23.1	71	4.0	3.1	4.9
Indigenous	6	27.3	8.6	45.9	1	4.6	0.0	13.3

	Moderate				High			
	n	Per cent	95%CI		n	Per cent	95%CI	
			Lower	Upper			Lower	Upper
Training stage								
Pre-clinical	136	23.1	19.7	26.5	27	4.6	2.9	6.3
Clinical	249	20.4	18.1	22.6	45	3.7	2.6	4.7
Total	385	21.3	19.4	23.1	72	4.0	3.1	4.8

Reported substance use was low with few students reporting that they smoked regularly, engaged in illicit drug use or took prescription medications (Table 63).

Table 63: Frequency of other substance use

		n	Per cent	95%CI	
				Lower	Upper
Tobacco	Never	1,645	90.8	89.5	92.2
	2–3 times a month or less	138	7.6	6.4	8.8
	1–6 times a week	12	0.7	0.3	1.0
	Daily	16	0.9	0.5	1.3
Illicit drugs	Never	1,618	89.3	87.9	90.8
	2–3 times a month or less	184	10.2	8.8	11.6
	1–6 times a week	9	0.5	0.2	0.8
Prescription drugs	Never	1,365	75.4	73.4	77.4
	2–3 times a month or less	352	19.4	17.6	21.3
	1–6 times a week	47	2.6	1.9	3.3
	Daily	47	2.6	1.9	3.3

3.3.5 Burnout

Students reported high rates of burnout and emotional exhaustion. There was little difference between age groups. However, females reported a slightly higher rate of burnout in all three domains (emotional exhaustion: 57.1%, cynicism: 26.4%, low professional efficacy: 31.2%) compared to male students (emotional exhaustion: 44.2%, cynicism: 24.4%, low professional efficacy: 25.6%). Differences in levels of professional efficacy between clinical and pre-clinical students may reflect differences in exposure to a professional setting.

Table 64: High burnout in the domains of emotional exhaustion, by age group, gender, region and stage of training

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	331	53.0	49.0	56.9
22–25 years old	438	53.6	50.2	57.0
26+ years old	178	48.2	43.1	53.3
Gender				
Male	299	44.2	40.4	47.9
Female	648	57.1	54.3	60.0
Region				
Metropolitan	633	52.6	49.8	55.4
Regional	212	52.2	47.4	57.1
Rural	98	50.3	43.2	57.3
Remote	4	66.7	28.9	100.0
Indigenous status				
Non-Indigenous	934	52.2	49.9	54.5
Indigenous	13	59.1	38.5	79.7
Training stage				
Pre-clinical	306	52.0	47.9	56.0
Clinical	641	52.5	49.7	55.3
Total	947	52.3	50.0	54.6

Table 65: High burnout in the domains of cynicism, by age group, gender, region and stage of training

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	152	24.3	21.0	27.7
22–25 years old	222	27.2	24.1	30.2
26+ years old	90	24.4	20.0	28.8
Gender				
Male	165	24.4	21.1	27.6
Female	299	26.4	23.8	28.9

	n	Per cent	95%CI	
			Lower	Upper
Region				
Metropolitan	320	26.6	24.1	29.1
Regional	96	23.7	19.5	27.8
Rural	47	24.1	18.1	30.1
Remote	1	16.7	0.0	46.5
Indigenous status				
Non-Indigenous	455	25.4	23.4	27.5
Indigenous	9	40.9	20.3	61.5
Training stage				
Pre-clinical	139	23.6	20.2	27.0
Clinical	325	26.6	24.1	29.1
Total	464	25.6	23.6	27.6

Table 66: High burnout in the domains of professional efficacy, by age group, gender, region and stage of training

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	171	27.4	23.9	30.9
22–25 years old	256	31.3	28.2	34.5
26+ years old	100	27.1	22.6	31.6
Gender				
Male	173	25.6	22.3	28.8
Female	354	31.2	28.5	33.9
Region				
Metropolitan	356	29.6	27.0	32.2
Regional	118	29.1	24.6	33.5
Rural	52	26.7	20.5	32.9
Remote	1	16.7	0.0	46.5
Indigenous status				
Non-Indigenous	518	29.0	26.9	31.1
Indigenous	9	40.9	20.3	61.5
Training stage				
Pre-clinical	153	26.0	22.4	29.5
Clinical	374	30.6	28.0	33.2
Total	527	29.1	27.0	31.2

3.3.6 Impact

As with the doctors' data, impact was categorised into low, moderate and high within the domains of work and self. Summed scores of two or above, which represent daily occurrence of one experience, or weekly/monthly occurrence of two of the listed experiences, were considered to equate to high impact. Scores equal to one were considered to be moderate impact. Within the self domain, summed scores of six and four were used as cut points for high and moderate impact respectively.

As can be seen in Tables 67 and 68, a large proportion of students felt that being anxious or depressed had a high impact on their work and self. Female students reported higher impact in domains of self and work compared to male students. There was little difference between age groups. However, some differences in the impact on self were evident between students living in different regions.

Of those students who ever felt anxious or depressed (n=1,448), 12% felt their mental health symptoms caused them increased stress on a daily or weekly basis. In addition, 7.5% felt that these symptoms negatively impacted on their university or work performance (Table 69).

Table 67: Students who had ever felt anxious or depressed who reported high impact of mental health symptoms on work

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	120	19.2	16.1	22.3
22–25 years old	171	20.9	18.1	23.7
26+ years old	89	24.1	19.8	28.5
Gender				
Male	117	17.3	14.4	20.1
Female	263	23.2	20.7	25.7
Region				
Metropolitan	231	19.2	17.0	21.4
Regional	92	22.7	18.6	26.7
Rural	55	28.2	21.9	34.5
Remote	2	33.3	0.0	71.1
Indigenous status				
Non-Indigenous	368	20.6	18.7	22.4
Indigenous	12	54.6	33.7	75.4
Training stage				
Pre-clinical	139	23.6	20.2	27.0
Clinical	241	19.7	17.5	22.0
Total	380	26.2	24.0	28.5

Table 68: Students who had ever felt anxious or depressed who reported high impact of mental health symptoms on self

	n	Per cent	95%CI	
			Lower	Upper
Age group				
18–21 years old	83	13.3	10.6	15.9
22–25 years old	96	11.8	9.5	14.0
26+ years old	48	13.0	9.6	16.4
Gender				
Male	56	8.3	6.2	10.4
Female	171	15.1	13.0	17.2
Region				
Metropolitan	143	11.9	10.1	13.7
Regional	56	13.8	10.4	17.2
Rural	27	13.9	9.0	18.7
Remote	1	16.7	0.0	46.5
Indigenous status				
Non-Indigenous	222	12.4	10.9	13.9
Indigenous	5	22.7	5.2	40.3
Training stage				
Pre-clinical	86	14.6	11.8	17.5
Clinical	141	11.5	9.8	13.3
Total	227	15.7	13.8	17.6

Table 69: Areas of impact of mental health symptoms experienced daily or weekly by students who ever felt anxious or depressed

	n	Per cent	95%CI	
			Lower	Upper
Work				
Ostracised at university or work	34	2.3	1.6	3.1
Time off university or work	15	1.0	0.5	1.6
Overlooked for academic or career development opportunities	11	0.8	0.3	1.2
Negatively impacted on your university or work performance	109	7.5	6.2	8.9
Discriminated against at university or work	20	1.4	0.8	2.0
Bullied at university or work	18	1.2	0.7	1.8
Personal				
Physical health complaints	46	3.2	2.3	4.1
Embarrassed or shamed you	76	5.2	4.1	6.4

	n	Per cent	95%CI	
			Lower	Upper
Increased stress	172	11.9	10.2	13.5
Negatively impacted on personal relationships	94	6.5	5.2	7.8
Less able to contribute to household responsibilities	69	4.8	3.7	5.9
Socially isolated due to the fear of stigma or prejudice	103	7.1	5.8	8.4

3.3.7 Treatment and support

Coping techniques

The most commonly used coping strategies for students who felt anxious or depressed were positive behaviours (n=1,448). However, a number of negative strategies, such as avoidance of others and eating more than usual, were commonly used methods for dealing with symptoms of anxiety and depression in students (Table 70).

Table 70: Coping strategies often used by students who ever felt anxious or depressed

	n	Per cent	95%CI	
			Lower	Upper
Talk to others	522	36.0	33.6	38.5
Avoid being with people	379	26.2	23.9	28.4
Take yourself to bed	310	21.4	19.3	23.5
Eat more than usual	355	24.5	22.3	26.7
Smoke more cigarettes than usual	23	1.6	0.9	2.2
Drink more alcohol than usual	71	4.9	3.8	6.0
Take non-prescribed medication	9	0.6	0.2	1.0
Try to look on the bright side of things	529	36.5	34.1	39.0
Jog or do other exercise	519	35.8	33.4	38.3
Pray	215	14.8	13.0	16.7
Do something enjoyable	449	31.0	28.6	33.4
Practice mindfulness or another relaxation technique	166	11.5	9.8	13.1
Seek spiritual help	92	6.4	5.1	7.6

Types of treatment

Fifty-six per cent of students who felt seriously depressed, or had received a diagnosis of depression, sought treatment. The most commonly used treatment for depression differed between age groups. While counselling was the most frequently used treatment in younger students (18–21 years 35%), older students were more likely to be treated with both counselling and medication (26 years and above 55.2%). Of interest, the proportion of students using treatments other than medication and/or counselling was far greater than among doctors (less than 10%).

The most common sources of support for students with depression were general practitioners, family and friends. Few students with depression sought support from faculty services (Table 72) which may be indicative of perceptions of stigmatising attitudes or concerns regarding privacy and confidentiality.

Table 71: Treatment for depression, by age group, gender, region and stage of training

		n	Per cent	95%CI	
				Lower	Upper
Age group					
18–21 years old	Medication and counselling	32	27.4	19.2	35.5
	Counselling	41	35.0	26.4	43.7
	Medication	5	4.3	0.6	8.0
	Other	39	33.3	24.8	41.9
22–25 years old	Medication and counselling	91	42.7	36.1	49.4
	Counselling	48	22.5	16.9	28.2
	Medication	23	10.8	6.6	15.0
	Other	51	23.9	18.2	29.7
26+ years old	Medication and counselling	69	55.2	46.4	64.0
	Counselling	21	16.8	10.2	23.4
	Medication	17	13.6	7.6	19.6
	Other	18	14.4	8.2	20.6
Gender					
Male	Medication and counselling	54	43.2	34.5	51.9
	Counselling	30	24.0	16.5	31.5
	Medication	13	10.4	5.0	15.8
	Other	28	22.4	15.1	29.7
Female	Medication and counselling	138	41.8	36.5	47.2
	Counselling	80	24.2	19.6	28.9
	Medication	32	9.7	6.5	12.9
	Other	80	24.2	19.6	28.9
Region					
Metropolitan	Medication and counselling	114	42.5	36.6	48.5
	Counselling	56	20.9	16.0	25.8
	Medication	31	11.6	7.7	15.4
	Other	67	25.0	19.8	30.2
Regional	Medication and counselling	46	39.0	30.2	47.8
	Counselling	35	29.7	21.4	37.9
	Medication	8	6.8	2.2	11.3
	Other	29	24.6	16.8	32.4
Rural	Medication and counselling	32	47.1	35.2	59.0
	Counselling	18	26.5	15.9	37.0
	Medication	6	8.8	2.1	15.6

		n	Per cent	95%CI	
				Lower	Upper
	Other	12	17.6	8.6	26.7
Remote	Medication and counselling	0	0.0	0.0	0.0
	Counselling	1	100.0	100.0	100.0
	Medication	0	0.0	0.0	0.0
	Other	0	0.0	0.0	0.0
Stage of training					
Pre-clinical	Medication and counselling	53	37.9	29.8	45.9
	Counselling	39	27.9	20.4	35.3
	Medication	11	7.9	3.4	12.3
	Other	37	26.4	19.1	33.8
Clinical	Medication and counselling	139	44.1	38.6	49.6
	Counselling	71	22.5	17.9	27.2
	Medication	34	10.8	7.4	14.2
	Other	71	22.5	17.9	27.2
Total					
	Medication and counselling	192	42.2	37.6	46.8
	Counselling	110	24.2	20.2	28.1
	Medication	45	9.9	7.1	12.6
	Other	108	23.7	19.8	27.7

Table 72: Commonly used sources of personal and professional treatment and support for depression

	n	Per cent	95%CI	
			Lower	Upper
Personal				
Friend	300	65.9	61.6	70.3
Family member	249	54.7	50.1	59.3
Spouse/partner	167	36.7	32.3	41.1
Fellow student	119	26.2	22.1	30.2
Library	3	0.7	0.0	1.4
University services	120	26.4	22.3	30.4
Faculty services	36	7.9	5.4	10.4
Internet	117	25.7	21.7	29.7
Peer support program	4	0.9	0.0	1.7
Professional				
General practitioner	304	66.8	62.5	71.2

	n	Per cent	95%CI	
			Lower	Upper
Psychiatrist	97	21.3	17.5	25.1
Psychologist/counsellor	263	57.8	53.2	62.4
Indigenous support worker	3	0.7	0.0	1.4
University counselling services	104	22.9	19.0	26.7
Faculty service	18	4.0	2.2	5.8
Telephone helpline (e.g. Lifeline)	22	4.8	2.9	6.8
Doctors' Health Advisory Service	7	1.5	0.4	2.7
Workplace support	0	0.0	0.0	0.0

Approximately 40% of students who felt seriously anxious or who had been diagnosed with an anxiety disorder sought treatment. As seen in students with depression, the type of treatment for anxiety varied with age. Younger students were more likely to receive counselling only, and the use of medication increased across age groups. The proportion of students using treatments other than medication and/or counselling (23.7%) was higher compared to rates reported by doctors (10.7%). In addition, the main sources of support were general practitioners, family members and friends. Support from faculty services was rarely used (7.9%).

Of interest, less than a third (31.7%) of students who were classified as having a high likelihood of a minor psychiatric disorder had previously sought treatment for anxiety or depression.

Table 73: Treatment for anxiety, by age group, gender, region and stage of training

		n	Per cent	95%CI	
				Lower	Upper
Age group					
18–21 years old	Medication and counselling	27	27.3	18.5	36.1
	Counselling	41	41.4	31.7	51.2
	Medication	8	8.1	2.7	13.5
	Other	23	23.2	14.9	31.6
22–25 years old	Medication and counselling	60	42.3	34.1	50.4
	Counselling	47	33.1	25.3	40.9
	Medication	11	7.7	3.3	12.2
	Other	24	16.9	10.7	23.1
26+ years old	Medication and counselling	33	41.3	30.4	52.1
	Counselling	25	31.3	21.0	41.5
	Medication	8	10.0	3.4	16.6
	Other	14	17.5	9.1	25.9
Gender					
Male	Medication and counselling	29	35.4	25.0	45.8
	Counselling	30	36.6	26.1	47.1
	Medication	6	7.3	1.7	13.0
	Other	17	20.7	11.9	29.6

		n	Per cent	95%CI	
				Lower	Upper
Female	Medication and counselling	91	38.1	31.9	44.3
	Counselling	83	34.7	28.7	40.8
	Medication	21	8.8	5.2	12.4
	Other	44	18.4	13.5	23.3
Region					
Metropolitan	Medication and counselling	69	35.8	29.0	42.5
	Counselling	69	35.8	29.0	42.5
	Medication	19	9.8	5.6	14.1
	Other	36	18.7	13.1	24.2
Regional	Medication and counselling	31	37.3	26.9	47.8
	Counselling	28	33.7	23.5	44.0
	Medication	6	7.2	1.6	12.8
	Other	18	21.7	12.8	30.6
Rural	Medication and counselling	19	44.2	29.3	59.1
	Counselling	15	34.9	20.6	49.2
	Medication	2	4.7	0.0	11.0
	Other	7	16.3	5.2	27.4
Remote	Medication and counselling	1	50.0	0.0	100.0
	Counselling	1	50.0	0.0	100.0
	Medication	0	0.0	0.0	0.0
	Other	0	0.0	0.0	0.0
Stage of training					
Pre-clinical	Medication and counselling	34	35.1	25.5	44.6
	Counselling	37	38.1	28.4	47.9
	Medication	6	6.2	1.4	11.0
	Other	20	20.6	12.5	28.7
Clinical	Medication and counselling	86	38.4	32.0	44.8
	Counselling	76	33.9	27.7	40.2
	Medication	21	9.4	5.5	13.2
	Other	41	18.3	13.2	23.4
Total					
	Medication and counselling	120	37.4	32.1	42.7
	Counselling	113	35.2	29.9	40.5
	Medication	27	8.4	5.4	11.5
	Other	61	19.0	14.7	23.3

Table 74: Commonly used sources of treatment and support for anxiety

	n	Per cent	95%CI	
			Lower	Upper
Personal				
Friend	190	59.2	53.8	64.6
Family member	191	59.5	54.1	64.9
Spouse/partner	124	38.6	33.3	44.0
Fellow student	89	27.7	22.8	32.7
Library	2	0.6	0.0	1.5
University services	77	24.0	19.3	28.7
Faculty services	22	6.9	4.1	9.6
Internet	76	23.7	19.0	28.4
Peer support program	0	0.0	0.0	0.0
Professional				
General practitioner	218	67.9	62.8	73.0
Psychiatrist	68	21.2	16.7	25.7
Psychologist/counsellor	187	58.3	52.8	63.7
Indigenous support worker	2	0.6	0.0	1.5
University counselling services	68	21.2	16.7	25.7
Faculty service	16	5.0	2.6	7.4
Telephone helpline (e.g. Lifeline)	11	3.4	1.4	5.4
Doctors' Health Advisory Service	2	0.6	0.0	1.5
Workplace support	0	0.0	0.0	0.0

Sources of support

The sources of support that students commonly identified as being comfortable seeking help from for a mental health condition were friends, family members, general practitioners, psychologists and counsellors. In contrast, students appeared to be less willing to seek support from university services. Of interest, the proportion of medical students (45.4%) willing to seek help from the internet for a mental health problem was higher than the proportion of doctors (28%) willing to seek help from the internet.

As in the doctors' data, many students reported feeling both comfortable and uncomfortable seeking help from the same source which suggests that the preferred source of support may depend on the specific mental health condition or symptom.

Table 75: Sources of support students felt comfortable seeking help from

	n	Per cent	95%CI	
			Lower	Upper
Friend	1,383	76.4	74.4	78.3
Family member	1161	64.1	61.9	66.3
Spouse/partner	916	50.6	48.3	52.9
Fellow student	687	37.9	35.7	40.2
Library	90	5.0	4.0	6.0
University services	506	27.9	25.9	30.0
Faculty services	268	14.8	13.2	16.4
Internet	822	45.4	43.1	47.7
Peer support program through a professional college or organisation	208	11.5	10.0	13.0
General practitioner	1,377	76.0	74.1	78.0
Psychiatrist	650	35.9	33.7	38.1
Psychologist/counsellor	1,004	55.4	53.1	57.7
Indigenous support worker	21	1.2	0.7	1.7
University counselling services	629	34.7	32.5	36.9
Faculty service	232	12.8	11.3	14.4
Telephone helpline (e.g. Lifeline)	355	19.6	17.8	21.4

Table 76: Sources of support students did not feel comfortable seeking help from

	n	Per cent	95%CI	
			Lower	Upper
Friend	147	8.1	6.9	9.4
Family member	342	18.9	17.1	20.7
Spouse/partner	100	5.5	4.5	6.6
Fellow student	510	28.2	26.1	30.2
Library	995	54.9	52.6	57.2
University services	604	33.4	31.2	35.5
Faculty services	709	39.1	36.9	41.4
Internet	336	18.6	16.8	20.3
Peer support program through a professional college or organisation	443	24.5	22.5	26.4
General practitioner	149	8.2	7.0	9.5
Psychiatrist	366	20.2	18.4	22.1
Psychologist/counsellor	211	11.7	10.2	13.1
Indigenous support worker	903	49.9	47.6	52.2
University counselling services	448	24.7	22.7	26.7
Faculty service	617	34.1	31.9	36.3
Telephone helpline (e.g. Lifeline)	613	33.8	31.7	36.0

3.3.8 Attitudes

Stigmatising attitudes regarding the job performance of doctors with mental health conditions and their career progression were evident. Around 12% of medical students felt that doctors should be able to avoid anxiety or depression. In addition, 10% felt that doctors with a history of depression or anxiety were not as reliable as 'the average doctor', and 2.6% felt that doctors who have experienced depression, or an anxiety disorder, should change to a non-clinical career.

Medical students perceived that the medical community held stigmatising attitudes towards doctors with mental illness. Approximately 50% of students believed that doctors believe that experiencing depression or an anxiety disorder themselves is a sign of personal weakness. In addition, 41.5% felt that doctors with a history of depression or anxiety were less likely to be appointed.

There were some differences in stigmatising attitudes in those with a current diagnosis with a mental health condition compared to those who weren't currently diagnosed. Sixty per cent of students with a current diagnosis perceived that doctors think less of doctors who have experienced depression or anxiety. More than half of students with a current diagnosis (52.4%) felt that doctors with a mental health history are less competent whereas 38.2% of students who did not have a current diagnosis agreed with this. Further, 42% of students with a current diagnosis felt that doctors tend to advise colleagues not to divulge a history of depression or anxiety disorders compared to 22.6% of students who were not currently diagnosed with depression or anxiety.

Tables 77 to 79 provide the mean scores for stigmatising attitudes and attitudes regarding the career progression of doctors with mental health conditions amongst medical students. While there are some differences in attitudes between those students who were currently diagnosed with a mental health condition it is unlikely that these represent meaningful differences.

The distribution of scores for attitudes relating to stigma and career progression is included in Appendix 7 Figures A3 and A4.

Table 77: Mean scores for attitudes towards doctors with mental health conditions

	Mean	95%CI	
		Lower	Upper
Career progression	11.9	11.8	12.0
Stigma	18.7	18.5	18.9

Table 78: Mean scores for attitudes towards doctors with mental health conditions for those who have ever or never been diagnosed with a mental health condition

		Mean	95%CI	
			Lower	Upper
No (n=1397)	Career progression	12.1	12.0	12.2
	Stigma	18.2	18.0	18.4
Yes (n=414)	Career progression	11.3	11.0	11.6
	Stigma	20.2	19.8	20.6

Table 79: Mean scores for attitudes towards doctors with mental health conditions for students who are and are not currently diagnosed with a mental health condition

		Mean	95%CI	
			Lower	Upper
No (n=1599)	Career progression	12	11.9	12.2
	Stigma	18.4	18.2	18.6
Yes (n=212)	Career progression	11	10.6	11.4
	Stigma	20.6	20.0	21.2

3.2.9 Barriers

Approximately 20% of medical students indicated that they were comfortable seeking help for depression or anxiety (18.7%, 95%CI=16.8–20.4). As seen in Table 80, the most commonly identified barriers to seeking help were embarrassment (50.3%) and concerns regarding lack of confidentiality or privacy (49.9%). A large proportion of students indicated that they did not want help from others (47.7%). Few students identified that difficulty identifying symptoms of mental health conditions posed a barrier to seeking help (14.2%).

There were few difference between barriers to seeking help by gender (Table 81).

Table 80: Barriers to seeking help for depression or anxiety

	n	Per cent	95%CI	
			Lower	Upper
Impact on registration and right to practice	623	34.6	32.4	36.8
Concerns about career development/progression	666	37.0	34.7	39.2
Fear of lack of confidentiality/privacy	899	49.9	47.6	52.2
Impact on colleagues	361	20.0	18.2	21.9
Lack of confidence in professional treatment	401	22.3	20.3	24.2
Reliance on self, do not want help	860	47.7	45.4	50.0
Difficulty identifying symptoms of mental illness	256	14.2	12.6	15.8
Do not want to burden others	638	35.4	33.2	37.6
Do not believe it will help	525	29.1	27.0	31.2
Embarrassment	906	50.3	48.0	52.6
Lack of time	732	40.6	38.4	42.9
Fear of unwanted intervention	560	31.1	28.9	33.2
Fear or stress about help seeking or the source of help	391	21.7	19.8	23.6
Cost	570	31.6	29.5	33.8
Stigmatising attitudes to mental illness	578	32.1	29.9	34.2
Lack of knowledge about mental health services	190	10.5	9.1	12.0

Table 81: Barriers to seeking help for depression or anxiety, by gender

		n	Per cent	95%CI	
				Lower	Upper
Impact on registration and right to practice	Male	242	35.9	32.2	39.5
	Female	381	33.8	31.0	36.6
Concerns about career development/progression	Male	250	37	33.4	40.7
	Female	416	36.9	34.1	39.7
Fear of lack of confidentiality/privacy	Male	314	46.5	42.8	50.3
	Female	585	51.9	49.0	54.8
Impact on colleagues (i.e. letting fellow students down)	Male	136	20.2	17.1	23.2
	Female	225	20	17.6	22.3
Lack of confidence in professional treatment	Male	152	22.5	19.4	25.7
	Female	249	22.1	19.7	24.5
Reliance on self, do not want help	Male	333	49.3	45.6	53.1
	Female	527	46.8	43.8	49.7
Difficulty identifying symptoms of mental illness	Male	90	13.3	10.8	15.9
	Female	166	14.7	12.7	16.8
Do not want to burden others	Male	217	32.2	28.6	35.7
	Female	421	37.4	34.5	40.2
Do not believe it will help	Male	186	27.6	24.2	30.9
	Female	339	30.1	27.4	32.8
Embarrassment	Male	320	47.4	43.6	51.2
	Female	586	52	49.1	54.9
Lack of time	Male	235	34.8	31.2	38.4
	Female	497	44.1	41.2	47.0
Fear of unwanted intervention	Male	220	32.6	29.1	36.1
	Female	340	30.2	27.5	32.9
Fear or stress about help seeking or the source of help	Male	137	20.3	17.3	23.3
	Female	254	22.5	20.1	25.0
Cost	Male	198	29.3	25.9	32.8
	Female	372	33	30.3	35.8
Stigmatising attitudes to mental illness	Male	203	30.1	26.6	33.5
	Female	375	33.3	30.5	36.0
Lack of knowledge about mental health services	Male	80	11.9	9.4	14.3
	Female	110	9.8	8.0	11.5

3.3.10 Stress

The most commonly reported stressors related to the demands of study (58.4%) and university related workload (50.4%). In addition, the need to balance work and personal responsibilities was a commonly identified source of stress.

Table 82: Sources of work stress

	n	Per cent	95%CI	
			Lower	Upper
Conflict between study/career and family/personal responsibilities	637	35.2	33.0	37.4
Finances and debt	481	26.6	24.5	28.6
Responsibility at university	564	31.1	29.0	33.3
Threat of violence at university	7	0.4	0.1	0.7
Too much to do at university	913	50.4	48.1	52.7
Not getting your first choice of placement	263	14.5	12.9	16.1
Unpaid work hours	171	9.4	8.1	10.8
Talking to distressed patients and/or their relatives	87	4.8	3.8	5.8
Limitations of resources	103	5.7	4.6	6.8
Keeping up to date with knowledge	619	34.2	32.0	36.4
Making the right decision	549	30.3	28.2	32.4
Dealing with death	162	8.9	7.6	10.3
Sleep deprivation	517	28.5	26.5	30.6
Fear of making mistakes	616	34.0	31.8	36.2
Difficult relations with senior colleagues	176	9.7	8.4	11.1
Demands of study and examinations	1,057	58.4	56.1	60.6
Racism	43	2.4	1.7	3.1
Being bullied	45	2.5	1.8	3.2
Making mistakes	489	27.0	25.0	29.0
Speaking in front of an audience	330	18.2	16.4	20.0
Dealing with difficult patients	145	8.0	6.8	9.3

Table 83: Life stress events

	n	Per cent	95%CI	
			Lower	Upper
Serious illness/accident	145	8.0	6.8	9.3
Death of family member or close friend	327	18.1	16.3	19.8
Not able to get a job	136	7.5	6.3	8.7
Mental illness	316	17.4	15.7	19.2
Witness to violence or abuse	76	4.2	3.3	5.1

As shown in Table 84, there were some differences between the proportion of male and female students who reported experiencing life stress events in the previous 12 months. Of interest, a greater number of females reported being witness to violence or abuse in the previous 12 months.

Table 84: Life stress events, by gender

		n	Per cent	95%CI	
				Lower	Upper
Serious illness/accident	Male	40	5.9	4.1	7.7
	Female	105	9.3	7.6	10.9
Death of family member or friend	Male	131	19.4	16.4	22.3
	Female	196	17.3	15.1	19.5
Unable to get a job	Male	47	6.9	5.0	8.9
	Female	89	7.8	6.3	9.4
Mental illness	Male	74	10.9	8.6	13.3
	Female	242	21.3	19.0	23.7
Witness to violence	Male	19	2.8	1.6	4.1
	Female	57	5.0	3.8	6.3

3.4 Indigenous doctors and students

Approximately 0.2% of doctors who responded to the *beyondblue* survey identified as being of Aboriginal and/or Torres Strait Islander origin. This is a similar proportion to that reported in the 2011 census (0.25% of doctors). Twenty-three Aboriginal and Torres Strait Islander doctors provided sufficient information to be included in the analysis. Twenty-two students identified as being of Aboriginal and Torres Strait Islander origin. This represented 1.2% of the student sample. The demographic characteristics of Indigenous doctors and students are shown in Tables 85 and 86. Note that in order to preserve privacy, categories with values of less than two have been suppressed.

As the sample size is small, it is difficult to make statistically valid comparisons of Aboriginal and Torres Strait Islander doctors and students with non-Indigenous respondents. Results should be interpreted with due caution.

Table 85: Key demographic characteristics of Indigenous doctors

	n	Per cent
Age group		
22–30 years old	2	8.7
31–40 years old	10	43.5
41–50 years old	5	21.7
51–60 years old	4	17.4
61+ years old	2	8.7
Gender		
Male	7	30.4
Female	16	69.6
State/territory		
NSW	6	26.1
NT	2	8.7
QLD	8	34.8
VIC	3	13.0
WA	4	17.4
Region		
Inner metropolitan	4	17.4
Outer metropolitan	4	17.4
Regional	9	39.1
Rural or remote	6	26.1
Disability		
No	3	13.0
Yes	20	87.0
Training stage		
Intern or trainee	10	43.5
Consultant	11	47.8
Missing	2	8.7

Table 86: Key demographic characteristics of Indigenous students

	n	Per cent
Age group		
18–21 years old	7	31.8
22–25 years old	6	27.3
26–30 years old	2	9.1
31–40 years old	5	22.7
41–50 years old	2	9.1
Gender		
Male	7	31.8
Female	15	68.2
State/territory		
NSW	7	31.8
NT	4	18.2
QLD	6	27.3
SA, VIC and WA	5	22.7
Region		
Metropolitan	9	40.9
Regional	9	40.9
Rural	4	18.2
Disability		
No	22	100.0
Yes	0	0.00
Training stage		
Intern	10	45.5
Prevocational trainee	12	54.6

General mental health

Seven doctors reported moderate distress and one doctor reported experiencing a high level of distress as measured by the K10. Five doctors were considered to have a high likelihood of having a minor psychiatric disorder.

Sixteen (73%) Aboriginal and Torres Strait Islander students were classified as having a high likelihood of a minor psychiatric disorder. While interpretation is limited by the small sample size, this is a substantially higher proportion in comparison to non-Indigenous students (43%). Six Indigenous students (27%) reported very high psychological distress. This is higher than is reported by non-Indigenous students (9%).

Specific mental health disorders

Six Aboriginal and Torres Strait Islander doctors had been diagnosed with depression in their lifetime and two reported a current depression diagnosis. Anxiety was less prevalent, with no doctors currently diagnosed and only three reporting having ever been diagnosed with an anxiety disorder. Eight doctors had thoughts of suicide in the previous 12 months. One Indigenous doctor reported an attempted suicide. Two doctors reported that their mental health symptoms highly impacted in the domains of work and self.

Nine medical students had received a diagnosis of depression in their lifetime, and four reported a current diagnosis of depression. A greater number of Indigenous students experienced anxiety, with nine students reporting having ever received a diagnosis of an anxiety disorder, and five students reporting a current diagnosis. Five students reported having attempted suicide. In addition, suicidal ideation was high with almost half (45%) reporting having thoughts of suicide in the previous 12 months. A large proportion of Aboriginal and Torres Strait Islander students who reported feeling anxious or depressed were highly impacted in the domains of work (63%) and self (58%).

Substance use

Substance use was low in this population. Three doctors were classified as having moderate risk alcohol use and all other Indigenous doctors were classified as having low or no alcohol use. One medical student met the criteria for high levels of harmful or hazardous alcohol use. Six students were considered to have moderate risk alcohol use.

Burnout

Levels of burnout were similar to those reported by the general doctors' population. Six Indigenous doctors were classified as having emotional exhaustion (27.3%), five had high levels of depersonalisation (21.7%), and three were classified as having low levels of professional efficacy (13.6%).

The majority of Aboriginal and Torres Strait Islander medical students reported high levels of emotional exhaustion (59.1%). In addition, 41% were classified as having burnout on the cynicism domain, and about half had low professional efficacy.

Sources of stress

Workload, the need to balance work and study, work relations with senior colleagues and fear of making mistakes were the most commonly identified stressors. Five (21.7%) doctors reported being very stressed by bullying, which is higher than levels reported by the general survey population (4.4%). Three Aboriginal and Torres Strait Islander doctors reported being very stressed by racism in the workplace.

In addition, Indigenous doctors more frequently reported being very stressed by the fear of disclosing mistakes (Indigenous: 28.0%, non-Indigenous: 13.5%), bullying (Indigenous: 24.1%, non-Indigenous: 4.4%), racism (Indigenous: 15.9%, non-Indigenous: 1.6%) and work relations (Indigenous: 24.7%, non-Indigenous: 9.4%). However, the small number of Indigenous doctors in the sample limits the interpretation of these differences.

Aboriginal and Torres Strait Islander medical students most commonly reported being very stressed by the demands of study and exams (82%), having too much to do at university (68%), and debt and finances (59%). Three students reported being very stressed by bullying, and six students were very stressed by racism.

A greater number of Indigenous medical students reported experiencing all survey listed life stress events in the previous 12 months in comparison to non-Indigenous students. The most commonly reported event was death of a family member or friend (nine students).

Treatment and support

The most commonly used sources of treatment and support by Indigenous doctors who had experienced depression were psychologists and counsellors (n=5), friends (n=5), family members (n=4) and general practitioners (n=4). Few Indigenous doctors with anxiety reported seeking help from any of the included services. The most common sources of support for anxiety were friends (n=2), work colleagues (n=2) and psychologists or counsellors (n=2). No doctors reported making use of Indigenous support workers, workplace support, employee assistance providers, or doctors' health advisory services for the treatment of depression or anxiety.

Coping strategies

Table 87 shows the number of Indigenous doctors and students who reported often using positive and negative strategies to cope with symptoms of mental health problems. The most commonly strategies reported by Indigenous doctors were exercise (n=9, 39.1%) and trying to look on the bright side (n=7, 30.4%). No Indigenous doctors reported using non-prescribed medicine, and few reported smoking (n=2) or increased use of alcohol (n=1) to cope with symptoms.

While Indigenous doctors most commonly made use of positive coping strategies, the most common strategies used by Indigenous medical students were negative. Seven students indicated that they often ate more than usual or avoided being with people in order to cope with mental health symptoms. Further, five students often drank more than usual to cope with poor mental health.

Table 87: Strategies used by Indigenous doctors to cope with mental health symptoms

	Doctors		Students	
	n	Per cent	n	Per cent
Jog or do other exercise	9	39.1	4	21.1
Try to look on the bright side of things	7	30.4	3	15.8
Talk to others	6	26.1	5	26.3
Do something enjoyable	6	26.1	4	21.1
Eat more than usual	5	21.7	7	36.8
Avoid being with people	4	17.4	7	36.8
Take yourself to bed	3	13.0	5	26.3
Pray	3	13.0	2	10.5
Practice mindfulness/relaxation technique	3	13.0	3	15.8
Smoke more cigarettes than usual	2	8.7	3	15.8
Seek spiritual help	2	8.7	2	10.5
Drink more alcohol than usual	1	4.4	5	26.3
Take non-prescribed medication	0	0.0	1	5.3

3.5 Transition from university to work

The inclusion of both doctors and students in the survey provides a unique opportunity to examine changing patterns of mental health with the transition from university to the work environment.

As shown in Table 88, a comparison of pre-clinical and clinical students with intern doctors suggested that while the prevalence of minor psychiatric distress was similar in these two populations, students had higher levels of psychological distress (pre-clinical: 10.7%, clinical: 8.4%) compared to intern doctors (4.4%). In addition, while rates of current depression were similar in students and interns (7.6% and 8% respectively), students had substantially higher levels of anxiety compared to interns (7.5% versus 4.9%). Hazardous drinking behaviour was lower in intern doctors (3.3%) compared to students, and in particular, pre-clinical students (clinical: 3.7%, pre-clinical: 4.6%).

Differences existed in the main work stressors between students and doctors. The major sources of stress in students related to university work load and the demands of study and exams. In contrast, the most commonly identified source of work stress in intern doctors related to making decisions and fear of making mistakes.

The number of students who were classified as having burnout in the domains of emotional exhaustion (52.3%) and low professional efficacy (29.1%) was higher than the number of interns classified as having burnout in these domains (emotional exhaustion: 45.7%, low professional efficacy:19.4%). However, interns had a far higher rate of burnout in the domain of cynicism compared to students (42.2% and 25.6% respectively).

There appears to be greater professional efficacy in young doctors than in students. This is perhaps due to increasing life and work experience, skill development, emotional maturity or support. However, the large difference in levels of cynicism, with many more young doctors classified as having high levels of cynicism or depersonalisation compared to students, is of concern.

Table 88: Comparison of mental health status of students and doctors across stages of training and work

	Pre-clinical	Clinical	Intern	Trainee	Consultant
GHQ case	41.1 (37.4–45.4)	43.7 (40.9–46.5)	38.4 (33.5–43.4)	35.5 (33.6–37.3)	24.1 (23.1–25.2)
K10 very high distress	10.7 (8.2–13.2)	8.4 (6.9–10.0)	4.4 (2.4–6.4)	5.6 (4.7–6.5)	2.4 (2.0–2.8)
Alcohol AUDIT – high risk	4.6 (2.9–6.3)	3.7 (2.6–4.7)	3.3 (1.4–5.2)	1.7 (1.2–2.2)	2.7 (2.3–3.1)
MBI exhaustion	52.0 (47.9–56.0)	52.5 (49.7–55.3)	45.7 (40.6–50.8)	40.7 (38.8–42.6)	28.1 (27.0–29.2)
MBI cynicism	23.6 (20.2–27.0)	26.6 (24.1–29.1)	42.2 (37.2–47.3)	41.1 (39.2–43.1)	32.2 (31.1–33.4)
MBI professional efficacy	26.0 (22.4–29.5)	30.6 (28.0–33.2)	19.4 (15.4–23.5)	17.2 (15.7–18.6)	12.9 (12.1–13.8)
Top two sources of stress	Demands of study and exams		Decisions	Conflict	Work quantity
	57.0 (53.0–61.0)	59.0 (56.2–61.8)	42.5 (37.6 – 47.4)	39.1 (37.2 – 40.9)	24.8 (23.8–25.8)
	Too much to do at university		Fear of making mistakes	Study	Conflict
	52.0 (47.9–56.0)	49.7 (46.9–52.5)	42.7 (37.8 – 47.6)	39.0 (37.0–40.7)	22.4 (21.4–23.3)

3.6 Method of survey completion

There were some differences in the demographic characteristics of online and hardcopy survey respondents. A greater proportion of young doctors completed the *beyondblue* survey online than older doctors (18–30 year olds: 25%, 61 years and older: 5%). There was little difference in the proportion of male doctors (16%) and female doctors (13%) who used the online method. In addition, there was little difference in response method by region, with the proportion responding online around 15% in all areas. However, there were some differences in the response by doctors from different specialities. The proportion who responded online ranged between 10% and 21%. The specialities with the highest online response were anaesthesiologists (21%), emergency medicine (18%) and those who did not provide speciality information (19%). Those specialties with the lowest online response were non-patient care (10%), obstetrics and gynaecology (11%), and rural or Aboriginal health (11%). There was no difference between those who had completed their degree overseas and those who were trained in Australia.

While there were some demographic and workplace differences in participants who used online and hardcopy, there was little difference in the general and specific mental health of these two populations. A slightly higher percentage of online respondents had very high levels of distress (5%) or high distress (9%) compared to hardcopy (very high 3%, high 7%). Further, 33% of online respondents had a high likelihood of a minor psychiatric disorder while 26% of hardcopy respondents were classified as having high likelihood of a disorder. There was no meaningful difference in the rates of ever or current diagnoses of depression or anxiety in online and hardcopy respondents.

4. Final considerations and recommendations

The results of this national survey provide a snapshot of the current mental health and work experience of doctors and students. A number of specific issues, and areas for potential intervention, have been identified.

4.1 Specific issues

- The working environment of doctors and medical students is challenging. Many survey participants reported long work hours, difficulty balancing work and personal responsibilities, and significant work related stress.
- The intense work environment may contribute to the high levels of general and specific mental health distress, including high rates of depression and suicidal ideation, in comparison to the general population.
- Females, Indigenous students, doctors working in rural areas, and young doctors appeared to be particularly vulnerable to poor mental health.
- Encouragingly, a high proportion of doctors sought treatment for their mental health symptoms. However, a number of barriers to treatment seeking were identified.
- The most commonly identified barriers were concerns about privacy, confidentiality and embarrassment.
- The reported impact of mental health conditions on work and personal functioning appeared to be modest. This suggests that many doctors are able to limit the negative impacts of poor mental health both at work and personally.
- There was some evidence of the existence of stigmatising attitudes, held by both students and doctors, towards doctors with mental health conditions.
- While it is not possible to determine the temporal relationship between the use of negative coping strategies and disorder severity due to use of data from one time point only, doctors who made use of predominately negative coping strategies appeared to be at risk of negative outcomes.

4.2 Recommended areas for intervention

This report identifies a number of areas for potential intervention with the aim of improving the mental health and wellbeing of Australian doctors and medical students. In developing a response to these issues it may be possible to draw on the experience of others. For example, the Physician Health Matters: Mental Health Strategy for Physicians in Canada.

1. Promote the importance of maintaining good mental health and wellbeing.

Education regarding the importance of maintaining mental wellbeing and dealing with negative mental health symptoms may promote improved mental health in the medical community. This could be achieved in a number of areas. The provision of education and training in positive coping strategies and stress minimisation as part of the university curriculum could build the resilience of students and young doctors. This may involve the development of pilot programs to test methodology and the effectiveness of these education programs within the university setting.

A social marketing campaign could be developed to highlight the high prevalence of mental health conditions within the medical community and the importance of identifying early warning signs and seeking early intervention. Further, all doctors should be encouraged to have a general practitioner outside of their work setting to promote help seeking, discourage self-prescription and address concerns about confidentiality and privacy within the workplace.

2. Address the stressful and demanding nature of the work environment.

Medicine is inherently challenging and doctors are regularly exposed to pain and suffering, required to work long hours and often need to complete ongoing study. Promoting greater work life balance and providing additional support to doctors may assist in reducing the stressful nature of the workplace where possible. Initiatives to increase the size of the workforce to ensure sufficient resource allocation to rural areas and demanding specialties may ease the burden on overworked doctors and promote greater wellbeing.

While increasing the workforce may reduce workload in the longer term, short term solutions are needed. Additional research into the impact of long working hours on the mental health of doctors could allow for a greater understanding of the relationship between workload and mental health. With engagement with regulatory bodies, this could provide a basis for the development of guidelines or standards relating to appropriate work hours for doctors, and in particular for young graduates, to reduce the impact of both short term fatigue and long term burnout.

3. Systemic intervention to address negative attitudes towards those with mental health symptoms.

The existence of stigmatising attitudes towards those with mental health issues not only provides a barrier to help seeking in this population but may have flow on effects to people with mental health conditions. Therefore, addressing these attitudes early in a medical professional's career is desirable. Education regarding not only the identification of characteristics, symptoms, risk factors and treatment options for mental health conditions, but also around addressing stigmatising attitudes, and exposure to doctors who have successfully managed mental health conditions, could be of use.

Again, education regarding mental health issues within the university curriculum may have positive effects which are realised in the long term. As these students enter the work environment, short term solutions are needed to address current mental health and negative attitudes regarding doctors with a history of mental health problems. An information campaign to highlight the issues identified in this report, including the high levels of distress and mental health diagnoses in this population and barriers to seeking help, could raise awareness of how common poor mental health is within the medical community. This may reduce embarrassment, stigma and therefore promote treatment seeking.

4. Target support for vulnerable subgroups.

Females, Indigenous students, those working in rural areas and young doctors were at risk of poor general and specific mental health problems. Additional support for these groups through specific mental health services, strengthened mentor/mentee relationships and training regarding the importance of maintaining good mental wellbeing and methods of coping with stress could be of benefit.

5. Ongoing monitoring of the mental health status of doctors and students.

The results of this national survey provide a snapshot of the current mental health and work experience of doctors and students. Ongoing monitoring of mental health status in doctors and medical students, particularly following the introduction of relevant interventions, would not only allow for the efficacy and uptake of programs to be determined, but could allow for the development of an evidence base and inform the development of interventions in other jurisdictions. The high level of mental health knowledge, understanding and education in this population suggests that any additional support, intervention or change in practice is likely to have good uptake.

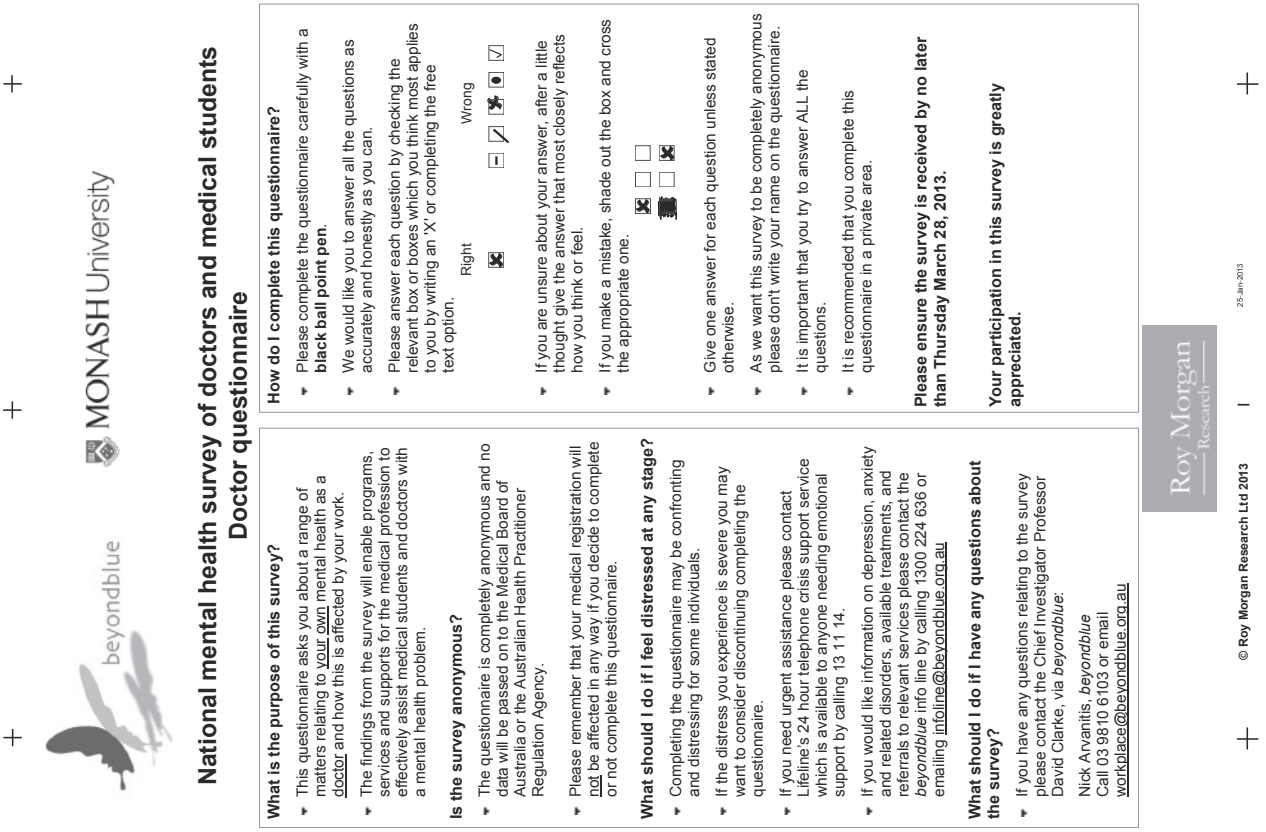
5. Appendices

Appendix 1

The paper-based questionnaires were printed double-sided on A3 paper, which when folded in half and stapled along the crease became an A4-sized booklet.

Copies of both the doctors' and medical students' questionnaire are included in the following pages. The layout is the same as how a respondent would have seen the questionnaire booklet.

Doctors' questionnaire



beyondblue

MONASH University

National mental health survey of doctors and medical students
Doctor questionnaire

What is the purpose of this survey?

- This questionnaire asks you about a range of matters relating to your own mental health as a doctor and how this is affected by your work.
- The findings from the survey will enable programs, services and supports for the medical profession to effectively assist medical students and doctors with a mental health problem.

Is the survey anonymous?

- The questionnaire is completely anonymous and no data will be passed on to the Medical Board of Australia or the Australian Health Practitioner Regulation Agency.
- Please remember that your medical registration will not be affected in any way if you decide to complete or not complete this questionnaire.

What should I do if I feel distressed at any stage?

- Completing the questionnaire may be confronting and distressing for some individuals.
- If the distress you experience is severe you may want to consider discontinuing completing the questionnaire.
- If you need urgent assistance please contact Lifeline's 24 hour telephone crisis support service which is available to anyone needing emotional support by calling 13 11 14.
- If you would like information on depression, anxiety and related disorders, available treatments, and referrals to relevant services please contact the *beyondblue* info line by calling 1300 224 636 or emailing infoline@beyondblue.org.au

What should I do if I have any questions about the survey?

- If you have any questions relating to the survey please contact the Chief Investigator Professor David Clarke, via *beyondblue*:

  Nick Arvanitis, *beyondblue*
  Call 03 9810 6103 or email
  workplace@beyondblue.org.au

How do I complete this questionnaire?

- Please complete the questionnaire carefully with a **black ball point pen**.
- We would like you to answer all the questions as accurately and honestly as you can.
- Please answer each question by checking the relevant box or boxes which you think most applies to you by writing an 'X' or completing the free text option.

  Right Wrong

- If you are unsure about your answer, after a little thought give the answer that most closely reflects how you think or feel.
- If you make a mistake, shade out the box and cross the appropriate one.
- Give one answer for each question unless stated otherwise.
- As we want this survey to be completely anonymous please don't write your name on the questionnaire.
- It is important that you try to answer ALL the questions.
- It is recommended that you complete this questionnaire in a private area.

Please ensure the survey is received by no later than Thursday March 28, 2013.

Your participation in this survey is greatly appreciated.

Roy Morgan Research

25-Jan-2013

→ Please Start here

Please note that this question and others in this survey are based on standardised response ranges and terminology that have been used in surveys with medical professionals in many countries in the past years.

The sources for these questions are identified on the last page of this questionnaire.

We would like to know if you have had any medical complaints, and how your health has been in general, over the past few weeks.

Have you recently:

(Please mark one answer in each row)

	Better than usual	Same as usual	Worse than usual	Much worse then usual
1. Been feeling perfectly well and in good health?	☐	☐	☐	☐
	Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
2. Been feeling in need of a good tonic?	☐	☐	☐	☐
3. Been feeling run down and out of sorts?	☐	☐	☐	☐
4. Felt that you were ill?	☐	☐	☐	☐
5. Been getting any pains in your head?	☐	☐	☐	☐
6. Been getting a feeling of tightness or pressure in your head?	☐	☐	☐	☐
7. Been having hot or cold spells?	☐	☐	☐	☐
8. Lost much sleep over worry?	☐	☐	☐	☐
9. Had difficulty in staying asleep once you are off?	☐	☐	☐	☐
10. Felt constantly under strain?	☐	☐	☐	☐
11. Been getting edgy and bad-tempered?	☐	☐	☐	☐
12. Been getting scared or panicky for no good reason?	☐	☐	☐	☐
13. Found everything getting on top of you?	☐	☐	☐	☐
14. Been feeling nervous and strung up all the time?	☐	☐	☐	☐
	More so than usual	**Same as usual**	**Rather less than usual**	**Much less than usual**
15. Been managing to keep yourself busy and occupied?	☐	☐	☐	☐

	Quicker than usual	Same as usual	Longer than usual	Much longer then usual
16. Been taking longer over the things you do?	☐	☐	☐	☐
	Better than usual	**About the same**	**Less well than usual**	**Much less well**
17. Felt on the whole you were doing things well?	☐	☐	☐	☐
	More satisfied	**About same as usual**	**Less satisfied than usual**	**Much less satisfied**
18. Been satisfied with the way you've carried out your task?	☐	☐	☐	☐
	More so than usual	**Same as usual**	**Rather less than usual**	**Much less than usual**
19. Felt that you are playing a useful part in things?	☐	☐	☐	☐
	More so than usual	**Same as usual**	**Rather less than usual**	**Much less capable**
20. Felt capable of making decisions about things?	☐	☐	☐	☐
	More so than usual	**Same as usual**	**Rather less than usual**	**Much less than usual**
21. Been able to enjoy your normal day-to-day activities?	☐	☐	☐	☐
	Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
22. Been thinking of yourself as a worthless person?	☐	☐	☐	☐
23. Felt that life is entirely hopeless?	☐	☐	☐	☐
24. Felt that life isn't worth living?	☐	☐	☐	☐
	Definitely not	**I don't think so**	**Has crossed my mind**	**Definitely have**
25. Thought of the possibility that you might make away with yourself?	☐	☐	☐	☐
	Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
26. Found at times you couldn't do anything because your nerves were too bad?	☐	☐	☐	☐
27. Found yourself wishing you were dead and away from it all?	☐	☐	☐	☐
	Definitely not	**I don't think so**	**Has crossed my mind**	**Definitely has**
28. Found that the idea of taking your own life kept coming into your mind?	☐	☐	☐	☐

28x. In the last four weeks, about how often....

(Please mark one answer in each row)

		None of the time	A little of the time	Some of the time	Most of the time	All of the time
a)	Did you feel tired out for no good reason?	☐	☐	☐	☐	☐
b)	Did you feel nervous?	☐	☐	☐	☐	☐
c)	Did you feel so nervous that nothing could calm you down?	☐	☐	☐	☐	☐
d)	Did you feel hopeless?	☐	☐	☐	☐	☐
e)	Did you feel restless or fidgety?	☐	☐	☐	☐	☐
f)	Did you feel so restless that you could not sit still?	☐	☐	☐	☐	☐
g)	Did you feel depressed?	☐	☐	☐	☐	☐
h)	Did you feel that everything was an effort?	☐	☐	☐	☐	☐
i)	Did you feel so sad that nothing could cheer you up?	☐	☐	☐	☐	☐
j)	Did you feel worthless?	☐	☐	☐	☐	☐

Remember that this survey is anonymous and no data will be passed on to the Medical Board of Australia or the Australian Health Practitioner Regulation Agency.

Are you filling in the boxes correctly?

Right ☒ Wrong ⊟ ⊘ ✱ ● ☑

29. Have you ever felt anxious or depressed?

Yes ☐ **Continue**

No ☐ **Go to Q32**

30. When you have felt anxious or depressed, how frequently do you use the following methods for coping?

(Please mark one answer in each row)

	Never	Rarely	Sometimes	Often
Talk to others	☐	☐	☐	☐
Avoid being with people	☐	☐	☐	☐
Take yourself to bed	☐	☐	☐	☐
Eat more than usual	☐	☐	☐	☐
Smoke more cigarettes than usual	☐	☐	☐	☐
Drink more alcohol than usual	☐	☐	☐	☐
Take non-prescribed medication	☐	☐	☐	☐
Try to look on the bright side of things	☐	☐	☐	☐
Jog or do other exercise	☐	☐	☐	☐
Pray	☐	☐	☐	☐
Do something enjoyable	☐	☐	☐	☐
Practice mindfulness or another relaxation technique	☐	☐	☐	☐
Seek spiritual help	☐	☐	☐	☐

Reminder:
Are you using a **black ball point pen**?

31. On average how often has feeling anxious or depressed:
(Please mark one answer in each row)

	Never	Once a year	Monthly	Weekly	Daily
Caused you to be ostracised at work	☐	☐	☐	☐	☐
Caused you to take time off work	☐	☐	☐	☐	☐
Caused you to be overlooked for career development opportunities	☐	☐	☐	☐	☐
Given you physical health complaints	☐	☐	☐	☐	☐
Embarrassed or shamed you	☐	☐	☐	☐	☐
Caused you increased stress	☐	☐	☐	☐	☐
Negatively impacted on personal relationships	☐	☐	☐	☐	☐
Negatively impacted on your work performance	☐	☐	☐	☐	☐
Made you less able to contribute to household responsibilities	☐	☐	☐	☐	☐
Made you feel socially isolated (e.g. from friends, community, and social support networks) due to the fear of stigma or prejudice	☐	☐	☐	☐	☐
Caused you to feel discriminated against at work	☐	☐	☐	☐	☐
Caused you to feel bullied at work	☐	☐	☐	☐	☐

32. Have you ever felt seriously depressed, even if not diagnosed?

Yes ☐
No ☐

33. Have you ever had a diagnosis of depression, or been treated for depression?

Yes ☐
No ☐

If you answered No to both Q32 & Q33 go to Q39: Otherwise continue.

34. Are you currently diagnosed with depression?

Yes ☐
No ☐

35. Did you take any time off from work because of depression?

Yes ☐
No ☐

36. Did you seek support or treatment for depression?

Yes ☐ **Continue**
No ☐ **Go to Q39**

OFFICE USE ONLY 1 2 3

37. Where did you seek personal support or professional treatment from?
(Please mark all that apply)

Personal Support

Friend ☐
Family member ☐
Spouse/Partner ☐
Work colleague ☐
Library ☐
University Services ☐
Internet ☐
Peer support program through a professional college or organisation (e.g. AMA Victoria Peer Support Service) ☐
Other personal support (please specify):
1 _____ ☐

Professional Treatment

General Practitioner ☐
Psychiatrist ☐
Psychologist/Counsellor ☐
Indigenous Support Worker ☐
Employee Assistance Provider (EAP) ☐
Telephone Helpline (e.g. Lifeline) ☐
Doctors' Health Advisory Service (e.g. Victorian Doctors' Health Program) ☐
Workplace support (e.g. workplace peer support program or workplace counsellor) ☐
Other professional treatment (please specify):
2 _____ ☐

38. What type of treatment did you receive?
(Please mark all that apply)

I did not receive any treatment ☐
Counselling (e.g. Cognitive Behaviour Therapy or Interpersonal Therapy) ☐
Medication ☐
Self-help group (e.g. Alcoholics Anonymous) ☐
Alternative/complementary therapy ☐
Other treatment (please specify):
3 _____ ☐

39. Have you ever felt seriously anxious, even if not diagnosed with an anxiety disorder?

Yes ☐
No ☐

40. Have you ever had a diagnosis of an anxiety disorder, or been treated for an anxiety disorder?

Yes ☐
No ☐

If you answered No to both Q39 & Q40 go to Q46: Otherwise continue.

41. Are you currently diagnosed with an anxiety disorder?

Yes ☐
No ☐

42. Did you take any time off from work because of an anxiety disorder?

Yes ☐
No ☐

43. Did you seek support or treatment for an anxiety disorder?

Yes ☐ **Continue**
No ☐ **Go to Q46**

Reminder:
Are you using a **black ball point pen**?

OFFICE USE ONLY 4 5 6

44. Where did you seek personal support or professional treatment from?
(Please mark all that apply)

Personal Support

Friend ☐
Family member ☐
Spouse/Partner ☐
Work colleague ☐
Library ☐
University Services ☐
Internet ☐
Peer support program through a professional college or organisation (e.g. AMA Victoria Peer Support Service) ☐
Other personal support (please specify):
4 ☐

Professional Treatment

General Practitioner ☐
Psychiatrist ☐
Psychologist/Counsellor ☐
Indigenous Support Worker ☐
Employee Assistance Provider (EAP) ☐
Telephone Helpline (e.g. Lifeline) ☐
Doctors' Health Advisory Service (e.g. Victorian Doctors' Health Program) ☐
Workplace support (e.g. workplace peer support program or workplace counsellor) ☐
Other professional treatment (please specify):
5 ☐

45. What type of treatment did you receive?
(Please mark all that apply)

I did not receive any treatment ☐
Counselling (e.g. Cognitive Behaviour Therapy or Interpersonal Therapy) ☐
Medication ☐
Self-help group (e.g. Alcoholics Anonymous) ☐
Alternative/complementary therapy ☐
Other treatment (please specify):
6 ☐

46. During the last 12 months have you had thoughts of taking your own life?

Yes ☐
No ☐

47. Prior to the last 12 months, have you ever had thoughts of taking your own life?

Yes ☐
No ☐

48. Have you ever made an attempt to take your own life?

Yes ☐
No ☐

Remember that this survey is anonymous and no data will be passed on to the Medical Board of Australia or the Australian Health Practitioner Regulation Agency.

If you need urgent assistance please contact Lifeline's 24 hour telephone crisis support service which is available to anyone needing emotional support by calling 13 11 14.

49. How often do you have a drink containing alcohol?

Never ☐ **Go to Q59**
Monthly or less ☐
2 to 4 times a month ☐
2 to 3 times a week ☐
4 or more times a week ☐
Continue

50. How many drinks containing alcohol do you have on a typical day when you are drinking?

1 or 2 ☐
3 or 4 ☐
5 or 6 ☐
7, 8 or 9 ☐
10 or more ☐

51. How often do you have six or more drinks on one occasion?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

52. How often during the last 12 months have you found that you were not able to stop drinking once you had started?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

53. How often during the last 12 months have you failed to do what was normally expected from you because of drinking?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

54. How often during the last 12 months have you been unable to remember what happened the night before because you had been drinking?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

55. How often during the last 12 months have you needed an alcoholic drink first thing in the morning to get yourself going after a night of heavy drinking?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

56. How often during the last 12 months have you had a feeling of guilt or remorse after drinking?

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily or almost daily

57. Have you or someone else been injured as a result of your drinking?

- ☐ No
- ☐ Yes, but not in the last 12 months
- ☐ Yes, during the last 12 months

58. Has a relative, friend, doctor, or another health professional expressed concern about your drinking or suggested you cut down?

- ☐ No
- ☐ Yes, but not in the last 12 months
- ☐ Yes, during the last 12 months

EVERYONE PLEASE ANSWER

59. How often do you currently consume the following substances?
(Please mark the one answer that most applies in each row)

	Never	Less often, but at least once every 6 months	About 1 day a month	2 to 3 days a month	1 to 2 days a week	3 to 4 days a week	5 to 6 days a week	Every day
Tobacco	☐	☐	☐	☐	☐	☐	☐	☐
Alcohol	☐	☐	☐	☐	☐	☐	☐	☐
Illicit drugs	☐	☐	☐	☐	☐	☐	☐	☐
Prescription drugs such as sedatives, opioids, hypnotics and analgesics	☐	☐	☐	☐	☐	☐	☐	☐

60. Over the last 12 months, have you self-prescribed to help with symptoms of depression or anxiety?

- ☐ Yes **Continue**
- ☐ No **Go to Q62**

61. How often have you used self-prescribed medication to help with symptoms of depression or anxiety?

- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily or almost daily

62. How stressed have you been by each of the following work related events?
(Please mark one answer in each row)

	Not at all stressed	Not that stressed	Very stressed
Conflict between study/career and family/personal responsiblilites	☐	☐	☐
Litigation fears	☐	☐	☐
Finances and debt	☐	☐	☐
Responsibility at work	☐	☐	☐
Threat of violence at work	☐	☐	☐
Too much to do at work	☐	☐	☐
Long work hours	☐	☐	☐
Un-paid work hours	☐	☐	☐
Talking to distressed patients and/or their relatives	☐	☐	☐
Limitations of resources	☐	☐	☐
Keeping up to date with knowledge	☐	☐	☐
Making the right decision	☐	☐	☐
Dealing with death	☐	☐	☐
Sleep deprivation	☐	☐	☐
Fear of making mistakes	☐	☐	☐
Difficult relations with senior colleagues	☐	☐	☐
Demands of study and examinations	☐	☐	☐
Racism	☐	☐	☐
Being bullied	☐	☐	☐
Making mistakes	☐	☐	☐
Disclosing mistakes to colleagues, patients and/or their relatives	☐	☐	☐
Speaking in front of an audience	☐	☐	☐
Dealing with difficult patients	☐	☐	☐
Other (please specify): 7 ☐	☐	☐	☐

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63. Have any of the following life events happened to you in the last 12 months?
(Please mark all that apply)

- Serious illness/accident ☐
- Death of a family member or close friend ☐
- Not able to get a job ☐
- Mental illness (e.g. depression, anxiety disorder) ☐
- Witness to violence or abuse ☐
- Caring for a family member ☐

64. Whether or not you have been depressed, anxious or had substance use problems, where would you be comfortable seeking help from for these mental health problems?
I would seek help from:
(Please mark all that apply)

Personal Support

- Friend ☐
- Family member ☐
- Spouse/Partner ☐
- Work colleague ☐
- Library ☐
- University Services ☐
- Internet ☐
- Peer support program through a professional college or organisation (e.g. AMA Victoria Peer Support Service) ☐
- Other personal support (please specify): 8 ☐

Professional Treatment

- General Practitioner ☐
- Psychiatrist ☐
- Psychologist/Counsellor ☐
- Indigenous Support Worker ☐
- Employee Assistance Provider (EAP) ☐
- Telephone Helpline (e.g. Lifeline) ☐
- Doctors' Health Advisory Service (e.g. Victorian Doctors' Health Program) ☐
- Workplace support (e.g. workplace peer support program or workplace counsellor) ☐
- Other professional treatment (please specify): 9 ☐

65. Whether or not you have been depressed, anxious or had substance use problems, where would you NOT be comfortable seeking help from for these mental health problems?
I would NOT seek help from:
(Please mark all that apply)

Personal Support

- Friend ☐
- Family member ☐
- Spouse/Partner ☐
- Work colleague ☐
- Library ☐
- University Services ☐
- Internet ☐
- Peer support program through a professional college or organisation (e.g. AMA Victoria Peer Support Service) ☐
- Other personal support (please specify): 10 ☐

Professional Treatment

- General Practitioner ☐
- Psychiatrist ☐
- Psychologist/Counsellor ☐
- Indigenous Support Worker ☐
- Employee Assistance Provider (EAP) ☐
- Telephone Helpline (e.g. Lifeline) ☐
- Doctors' Health Advisory Service (e.g. Victorian Doctors' Health Program) ☐
- Workplace support (e.g. workplace peer support program or workplace counsellor) ☐
- Other professional treatment (please specify): 11 ☐

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66. To the degree you would NOT be comfortable seeking help for depression, anxiety or a substance use disorder, which of the following contribute to your hesitation?
(Please mark all that apply)

- Impact on registration and right to practice ☐
- Concerns about career development/progression ☐
- Fear of lack of confidentiality/privacy ☐
- Impact on colleagues (i.e. letting colleagues down) ☐
- Lack of confidence in professional treatment ☐
- Reliance on self, do not want help ☐
- Difficulty identifying symptoms of mental illness ☐
- Do not want to burden others ☐
- Do not believe it will help ☐
- Embarrassment ☐
- Lack of time ☐
- Fear of unwanted intervention ☐
- Fear or stress about help seeking or the source of help ☐
- Cost ☐
- Stigmatising attitudes to mental illness ☐
- Lack of knowledge about mental health services ☐
- Impact on patients (i.e. letting patients down) ☐
- Income loss ☐
- Lack of locum cover ☐
- I am comfortable seeking help ☐

67. Please rate how strongly you agree with the following statements.
(Please mark one answer in each row)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Many doctors believe that a doctor with a history of depression or an anxiety disorder is less competent.	☐	☐	☐	☐	☐
Many doctors believe that experiencing depression or an anxiety disorder themselves is a sign of personal weakness.	☐	☐	☐	☐	☐
Doctors who experience depression or an anxiety disorder should change to a non-clinical career.	☐	☐	☐	☐	☐
Doctors are less likely to appoint doctors with a history of depression or an anxiety disorder.	☐	☐	☐	☐	☐
Many doctors think less of doctors who have experienced depression or an anxiety disorder.	☐	☐	☐	☐	☐
Doctors who have experienced depression or an anxiety disorder can achieve as much in their careers as those who have not.	☐	☐	☐	☐	☐
A doctor with a history of depression or an anxiety disorder is as reliable as the average doctor.	☐	☐	☐	☐	☐
Doctors feel they need to portray a healthy image.	☐	☐	☐	☐	☐
Doctors should be able to avoid depression or an anxiety disorder.	☐	☐	☐	☐	☐
Being a patient causes embarrassment for a doctor.	☐	☐	☐	☐	☐
Doctors tend to advise colleagues not to divulge a history of depression or an anxiety disorder.	☐	☐	☐	☐	☐
Doctors who experience depression or an anxiety disorder should be optimistic about their recovery.	☐	☐	☐	☐	☐

68. Below are 16 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job.
(Please mark one answer in each row)

		Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
a)	I feel emotionally drained from my work.	☐	☐	☐	☐	☐	☐	☐
b)	I feel used up at the end of the workday.	☐	☐	☐	☐	☐	☐	☐
c)	I feel tired when I get up in the morning and have to face another day on the job.	☐	☐	☐	☐	☐	☐	☐
d)	Working all day is really a strain for me.	☐	☐	☐	☐	☐	☐	☐
e)	I can effectively solve the problems that arise in my work.	☐	☐	☐	☐	☐	☐	☐
f)	I feel burned out from my work.	☐	☐	☐	☐	☐	☐	☐
g)	I feel I am making an effective contribution to what this organisation does.	☐	☐	☐	☐	☐	☐	☐
h)	I have become less interested in my work since I started this job.	☐	☐	☐	☐	☐	☐	☐
i)	I have become less enthusiastic about my work.	☐	☐	☐	☐	☐	☐	☐
j)	In my opinion, I am good at my job.	☐	☐	☐	☐	☐	☐	☐
k)	I feel exhilarated when I accomplish something at work.	☐	☐	☐	☐	☐	☐	☐
l)	I have accomplished many worthwhile things in this job.	☐	☐	☐	☐	☐	☐	☐
m)	I just want to do my job and not be bothered.	☐	☐	☐	☐	☐	☐	☐
n)	I have become more cynical about whether my work contributes anything.	☐	☐	☐	☐	☐	☐	☐
o)	I doubt the significance of my work.	☐	☐	☐	☐	☐	☐	☐
p)	At my work, I feel confident that I am effective at getting things done.	☐	☐	☐	☐	☐	☐	☐

69. Are you male or female?

Male ☐
Female ☐

70. What is your age?

18 – 21 ☐
22 – 25 ☐
26 – 30 ☐
31 – 40 ☐
41 – 50 ☐
51 – 60 ☐
61+ ☐

71. Are you of Aboriginal or Torres Strait Islander origin?
(For persons of both Aboriginal and Torres Strait Islander origin mark both 'Yes' boxes)

No ☐
Yes, Aboriginal ☐
Yes, Torres Strait Islander ☐

72. What is your current marital status?

Single, never married ☐
In a committed relationship ☐
Married ☐
Separated ☐
Divorced ☐
Widowed ☐

73. How many children do you have?

None ☐ **Go to Q75**
1 – 2 ☐
3 – 4 ☐ **Continue**
5+ ☐

74. How many children are living with you at home?

None ☐
1 – 2 ☐
3 – 4 ☐
5+ ☐

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75. Would you classify yourself as having a disability?

Yes ☐ **Continue**
No ☐ **Go to Q77**

76. Please specify what kind of disability you have:

12

77. Did you receive your primary medical degree overseas?

Yes ☐
No ☐

78. Have you experienced forced dislocation from your country or homeland?

Yes ☐
No ☐

79. In which area would you classify your primary place of work to be located?

Inner Metropolitan ☐
Outer Metropolitan ☐
Regional ☐
Rural ☐
Remote ☐

80. Which State/Territory do you work in?

ACT ☐
New South Wales ☐
Northern Territory ☐
Queensland ☐
South Australia ☐
Tasmania ☐
Victoria ☐
Western Australia ☐

81. What is your primary work setting?

- Hospital ☐
- University ☐
- Solo Practice ☐
- Group Practice ☐
- Other patient care ☐
- Aboriginal Health Centre ☐
- Non patient care ☐
- Not working ☐

82. What stage of training/career are you in?

- Intern ☐
- Pre-vocational Trainee (excluding internship) ☐

→ **Go to Q84**

- Vocational Trainee ☐
- Consultant ☐
- Retired ☐

→ **Continue**

83. What is your specialty?

13 ☐☐

84. How many hours per week do you work on average? (Maximum is 168 hours)

☐☐☐ Hours per week

Thank you for your time.

Please note that this questionnaire includes the following diagnostic tools:

- **General Health Questionnaire – 28 (GHQ-28)**
  © David Goldberg, 1978 All rights reserved.
  Published by GL Assessment Limited
  9th floor East, 389 Chiswick High Road, London. W4 4AL
  This edition published 1992.
  GL Assessment is part of the Granada Learning Group
  This work may not be photocopied or otherwise reproduced by any means, even within the terms of a Photocopying Licence, without the written permission of the Publishers.
- **Kessler Psychological Distress Scale (K10)**
  Kessler and Mroczek (1994). School of Survey Research Center of the Institute for Social Research. University of Michigan.
- **Maslach Burnout Inventory – General Survey (MBI-GS)**
  Copyright (c) 1986 by Wilmar B. Schaufeli, Michael P. Leiter, Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc. www.mindgarden.com
- **The Alcohol Use Disorders Identification Test (AUDIT)**
  Babor TF, de la Fuente JR, Saunders J, Grant M. (1992) The Alcohol Use Disorders Identification Test: guidelines for use in primary health care. World Health Organization, Geneva, Switzerland.

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D **2** 1 ☐ 2 ☐

National mental health survey of doctors and medical students
Medical student questionnaire

What is the purpose of this survey?

- This questionnaire asks you about a range of matters relating to your own mental health as a medical student and how this is affected by your studies.
- The findings from the survey will enable programs, services and supports for the medical profession to effectively assist medical students and doctors with a mental health problem.

Is the survey anonymous?

- The questionnaire is completely anonymous and no data will be passed on to the Medical Board of Australia or the Australian Health Practitioner Regulation Agency.
- Please remember that your medical registration will not be affected in any way if you decide to complete or not complete this questionnaire.

What should I do if I feel distressed at any stage?

- Completing the questionnaire may be confronting and distressing for some individuals.
- If the distress you experience is severe you may want to consider discontinuing completing the questionnaire.
- If you need urgent assistance please contact Lifeline's 24 hour telephone crisis support service which is available to anyone needing emotional support by calling 13 11 14.
- If you would like information on depression, anxiety and related disorders, available treatments, and referrals to relevant services please contact the *beyondblue* info line by calling 1300 224 636 or emailing infoline@beyondblue.org.au

What should I do if I have any questions about the survey?

- If you have any questions relating to the survey please contact the Chief Investigator Professor David Clarke, via *beyondblue*:

  Nick Arvanitis, *beyondblue*
  Call 03 9810 6103 or email
  workplace@beyondblue.org.au

How do I complete this questionnaire?

- Please complete the questionnaire carefully with a **black ball point pen**.
- We would like you to answer all the questions as accurately and honestly as you can.
- Please answer each question by checking the relevant box or boxes which you think most applies to you by writing an 'X' or completing the free text option.

  Right ☒ Wrong ⊖ ⊘ ☒ ● ☑
- If you are unsure about your answer, after a little thought give the answer that most closely reflects how you think or feel.
- If you make a mistake, shade out the box and cross the appropriate one.

  ☒ ☐ ☐
  ■ ☐ ☒
- Give one answer for each question unless stated otherwise.
- As we want this survey to be completely anonymous please don't write your name on the questionnaire.
- It is important that you try to answer ALL the questions.
- It is recommended that you complete this questionnaire in a private area.

Please ensure the survey is received by no later than Thursday March 28, 2013.

Your participation in this survey is greatly appreciated.

→ Please Start here

Please note that this question and others in this survey are based on standardised response ranges and terminology that have been used in surveys with medical professionals in many countries in the past years.

The sources for these questions are identified on the last page of this questionnaire.

We would like to know if you have had any medical complaints, and how your health has been in general, over the past few weeks.

Have you recently:

(Please mark one answer in each row)

	Better than usual	Same as usual	Worse than usual	Much worse then usual
1. Been feeling perfectly well and in good health?	☐	☐	☐	☐
	Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
2. Been feeling in need of a good tonic?	☐	☐	☐	☐
3. Been feeling run down and out of sorts?	☐	☐	☐	☐
4. Felt that you were ill?	☐	☐	☐	☐
5. Been getting any pains in your head?	☐	☐	☐	☐
6. Been getting a feeling of tightness or pressure in your head?	☐	☐	☐	☐
7. Been having hot or cold spells?	☐	☐	☐	☐
8. Lost much sleep over worry?	☐	☐	☐	☐
9. Had difficulty in staying asleep once you are off?	☐	☐	☐	☐
10. Felt constantly under strain?	☐	☐	☐	☐
11. Been getting edgy and bad-tempered?	☐	☐	☐	☐
12. Been getting scared or panicky for no good reason?	☐	☐	☐	☐
13. Found everything getting on top of you?	☐	☐	☐	☐
14. Been feeling nervous and strung up all the time?	☐	☐	☐	☐
	More so than usual	**Same as usual**	**Rather less than usual**	**Much less than usual**
15. Been managing to keep yourself busy and occupied?	☐	☐	☐	☐

	Quicker than usual	Same as usual	Longer than usual	Much longer then usual
16. Been taking longer over the things you do?	☐	☐	☐	☐
	Better than usual	**About the same**	**Less well than usual**	**Much less well**
17. Felt on the whole you were doing things well?	☐	☐	☐	☐
	More satisfied	**About same as usual**	**Less satisfied than usual**	**Much less satisfied**
18. Been satisfied with the way you've carried out your task?	☐	☐	☐	☐
	More so than usual	**Same as usual**	**Rather less than usual**	**Much less than usual**
19. Felt that you are playing a useful part in things?	☐	☐	☐	☐
	More so than usual	**Same as usual**	**Rather less than usual**	**Much less capable**
20. Felt capable of making decisions about things?	☐	☐	☐	☐
	More so than usual	**Same as usual**	**Rather less than usual**	**Much less than usual**
21. Been able to enjoy your normal day-to-day activities?	☐	☐	☐	☐
	Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
22. Been thinking of yourself as a worthless person?	☐	☐	☐	☐
23. Felt that life is entirely hopeless?	☐	☐	☐	☐
24. Felt that life isn't worth living?	☐	☐	☐	☐
	Definitely not	**I don't think so**	**Has crossed my mind**	**Definitely have**
25. Thought of the possibility that you might make away with yourself?	☐	☐	☐	☐
	Not at all	**No more than usual**	**Rather more than usual**	**Much more than usual**
26. Found at times you couldn't do anything because your nerves were too bad?	☐	☐	☐	☐
27. Found yourself wishing you were dead and away from it all?	☐	☐	☐	☐
	Definitely not	**I don't think so**	**Has crossed my mind**	**Definitely has**
28. Found that the idea of taking your own life kept coming into your mind?	☐	☐	☐	☐

28x. In the last four weeks, about how often....

(Please mark one answer in each row)

		None of the time	A little of the time	Some of the time	Most of the time	All of the time
a)	Did you feel tired out for no good reason?	☐	☐	☐	☐	☐
b)	Did you feel nervous?	☐	☐	☐	☐	☐
c)	Did you feel so nervous that nothing could calm you down?	☐	☐	☐	☐	☐
d)	Did you feel hopeless?	☐	☐	☐	☐	☐
e)	Did you feel restless or fidgety?	☐	☐	☐	☐	☐
f)	Did you feel so restless that you could not sit still?	☐	☐	☐	☐	☐
g)	Did you feel depressed?	☐	☐	☐	☐	☐
h)	Did you feel that everything was an effort?	☐	☐	☐	☐	☐
i)	Did you feel so sad that nothing could cheer you up?	☐	☐	☐	☐	☐
j)	Did you feel worthless?	☐	☐	☐	☐	☐

Remember that this survey is anonymous and no data will be passed on to the Medical Board of Australia or the Australian Health Practitioner Regulation Agency.

Are you filling in the boxes correctly?

Right ☒ Wrong ⊟ ⊘ ☒ ◉ ☑

29. Have you ever felt anxious or depressed?

Yes ☐ **Continue**

No ☐ **Go to Q32**

30. When you have felt anxious or depressed, how frequently do you use the following methods for coping?

(Please mark one answer in each row)

	Never	Rarely	Sometimes	Often
Talk to others	☐	☐	☐	☐
Avoid being with people	☐	☐	☐	☐
Take yourself to bed	☐	☐	☐	☐
Eat more than usual	☐	☐	☐	☐
Smoke more cigarettes than usual	☐	☐	☐	☐
Drink more alcohol than usual	☐	☐	☐	☐
Take non-prescribed medication	☐	☐	☐	☐
Try to look on the bright side of things	☐	☐	☐	☐
Jog or do other exercise	☐	☐	☐	☐
Pray	☐	☐	☐	☐
Do something enjoyable	☐	☐	☐	☐
Practice mindfulness or another relaxation technique	☐	☐	☐	☐
Seek spiritual help	☐	☐	☐	☐

Reminder:
Are you using a **black ball point pen**?

31. On average how often has feeling anxious or depressed:

(Please mark one answer in each row)

	Never	Once a year	Monthly	Weekly	Daily
Caused you to be ostracised at university or work	☐	☐	☐	☐	☐
Caused you to take time off university or work	☐	☐	☐	☐	☐
Caused you to be overlooked for academic or career development opportunities	☐	☐	☐	☐	☐
Given you physical health complaints	☐	☐	☐	☐	☐
Embarrassed or shamed you	☐	☐	☐	☐	☐
Caused you increased stress	☐	☐	☐	☐	☐
Negatively impacted on personal relationships	☐	☐	☐	☐	☐
Negatively impacted on your university or work performance	☐	☐	☐	☐	☐
Made you less able to contribute to household responsibilities	☐	☐	☐	☐	☐
Made you feel socially isolated (e.g. from friends, community, and social support networks) due to the fear of stigma or prejudice	☐	☐	☐	☐	☐
Caused you to feel discriminated against at university or work	☐	☐	☐	☐	☐
Caused you to feel bullied at university or work	☐	☐	☐	☐	☐

32. Have you ever felt seriously depressed, even if not diagnosed?

Yes ☐
No ☐

33. Have you ever had a diagnosis of depression, or been treated for depression?

Yes ☐
No ☐

If you answered No to both Q32 & Q33 go to Q39: Otherwise continue.

34. Are you currently diagnosed with depression?

Yes ☐
No ☐

35. Did you take any time off from work or studies because of depression?

Yes ☐
No ☐

36. Did you seek support or treatment for depression?

Yes ☐ **Continue**
No ☐ **Go to Q39**

37. Where did you seek personal support or professional treatment from?
(Please mark all that apply)

Personal Support

Friend ☐
Family member ☐
Spouse/Partner ☐
Fellow student ☐
Library ☐
University Services ☐
Faculty Services ☐
Internet ☐
Peer support program through a professional college or organisation (e.g. AMA Victoria Peer Support Service) ☐
Other personal support (please specify):
1 ☐

Professional Treatment

General Practitioner ☐
Psychiatrist ☐
Psychologist/Counsellor ☐
Indigenous Support Worker ☐
University counselling/psychological services ☐
Faculty Services ☐
Telephone Helpline (e.g. Lifeline) ☐
Doctors' Health Advisory Service (e.g. Victorian Doctors' Health Program) ☐
Other professional treatment (please specify):
2 ☐

38. What type of treatment did you receive?
(Please mark all that apply)

I did not receive any treatment ☐
Counselling (e.g. Cognitive Behaviour Therapy or Interpersonal Therapy) ☐
Medication ☐
Self-help group (e.g. Alcoholics Anonymous) ☐
Alternative/complementary therapy ☐
Other treatment (please specify):
3 ☐

OFFICE USE ONLY 1 2 3

39. Have you ever felt seriously anxious, even if not diagnosed with an anxiety disorder?

Yes ☐
No ☐

40. Have you ever had a diagnosis of an anxiety disorder, or been treated for an anxiety disorder?

Yes ☐
No ☐

If you answered No to both Q39 & Q40 go to Q46: Otherwise continue.

41. Are you currently diagnosed with an anxiety disorder?

Yes ☐
No ☐

42. Did you take any time off from work or studies because of an anxiety disorder?

Yes ☐
No ☐

43. Did you seek support or treatment for an anxiety disorder?

Yes ☐ **Continue**
No ☐ **Go to Q46**

Reminder:
Are you using a **black ball point pen**?

44. Where did you seek personal support or professional treatment from?
(Please mark all that apply)

Personal Support

Friend ☐
Family member ☐
Spouse/Partner ☐
Fellow student ☐
Library ☐
University Services ☐
Faculty Services ☐
Internet ☐
Peer support program through a professional college or organisation (e.g. AMA Victoria Peer Support Service) ☐
Other personal support (please specify):
4 ☐

Professional Treatment

General Practitioner ☐
Psychiatrist ☐
Psychologist/Counsellor ☐
Indigenous Support Worker ☐
University counselling/psychological services ☐
Faculty Services ☐
Telephone Helpline (e.g. Lifeline) ☐
Doctors' Health Advisory Service (e.g. Victorian Doctors' Health Program) ☐
Other professional treatment (please specify):
5 ☐

45. What type of treatment did you receive?
(Please mark all that apply)

I did not receive any treatment ☐
Counselling (e.g. Cognitive Behaviour Therapy or Interpersonal Therapy) ☐
Medication ☐
Self-help group (e.g. Alcoholics Anonymous) ☐
Alternative/complementary therapy ☐
Other treatment (please specify):
6 ☐

OFFICE USE ONLY 4 5 6

46. During the last 12 months have you had thoughts of taking your own life?

Yes ☐
No ☐

47. Prior to the last 12 months, have you ever had thoughts of taking your own life?

Yes ☐
No ☐

48. Have you ever made an attempt to take your own life?

Yes ☐
No ☐

Remember that this survey is anonymous and no data will be passed on to the Medical Board of Australia or the Australian Health Practitioner Regulation Agency.

If you need urgent assistance please contact Lifeline's 24 hour telephone crisis support service which is available to anyone needing emotional support by calling 13 11 14.

49. How often do you have a drink containing alcohol?

Never ☐ **Go to Q59**
Monthly or less ☐
2 to 4 times a month ☐
2 to 3 times a week ☐
4 or more times a week ☐
Continue

50. How many drinks containing alcohol do you have on a typical day when you are drinking?

1 or 2 ☐
3 or 4 ☐
5 or 6 ☐
7, 8 or 9 ☐
10 or more ☐

51. How often do you have six or more drinks on one occasion?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

52. How often during the last 12 months have you found that you were not able to stop drinking once you had started?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

53. How often during the last 12 months have you failed to do what was normally expected from you because of drinking?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

54. How often during the last 12 months have you been unable to remember what happened the night before because you had been drinking?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

55. How often during the last 12 months have you needed an alcoholic drink first thing in the morning to get yourself going after a night of heavy drinking?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

56. How often during the last 12 months have you had a feeling of guilt or remorse after drinking?

Never ☐
Less than monthly ☐
Monthly ☐
Weekly ☐
Daily or almost daily ☐

57. Have you or someone else been injured as a result of your drinking?

No ☐
Yes, but not in the last 12 months ☐
Yes, during the last 12 months ☐

58. Has a relative, friend, doctor, or another health professional expressed concern about your drinking or suggested you cut down?

No ☐
Yes, but not in the last 12 months ☐
Yes, during the last 12 months ☐

EVERYONE PLEASE ANSWER

59. How often do you currently consume the following substances?
(Please mark the one answer that most applies in each row)

	Never	Less often, but at least once every 6 months	About 1 day a month	2 to 3 days a month	1 to 2 days a week	3 to 4 days a week	5 to 6 days a week	Every day
Tobacco	☐	☐	☐	☐	☐	☐	☐	☐
Alcohol	☐	☐	☐	☐	☐	☐	☐	☐
Illicit drugs	☐	☐	☐	☐	☐	☐	☐	☐
Prescription drugs such as sedatives, opioids, hypnotics and analgesics	☐	☐	☐	☐	☐	☐	☐	☐

60. How stressed have you been by each of the following study/work related events?
(Please mark one answer in each row)

	Not at all stressed	Not that stressed	Very stressed
Conflict between study/career and family/personal responsiblilites	☐	☐	☐
Finances and debt	☐	☐	☐
Responsibility at university	☐	☐	☐
Threat of violence at university	☐	☐	☐
Too much to do at university	☐	☐	☐
Not getting your first choice of placement	☐	☐	☐
Un-paid work hours	☐	☐	☐
Talking to distressed patients and/or their relatives	☐	☐	☐
Limitations of resources	☐	☐	☐
Keeping up to date with knowledge	☐	☐	☐
Making the right decision	☐	☐	☐
Dealing with death	☐	☐	☐
Sleep deprivation	☐	☐	☐
Fear of making mistakes	☐	☐	☐
Difficult relations with senior colleagues	☐	☐	☐
Demands of study and examinations	☐	☐	☐
Racism	☐	☐	☐
Being bullied	☐	☐	☐
Making mistakes	☐	☐	☐
Speaking in front of an audience	☐	☐	☐
Dealing with difficult patients	☐	☐	☐
Other (please specify): 7 [ ]	☐	☐	☐

OFFICE USE ONLY 7 [ ]

61. Have any of the following life events happened to you in the last 12 months?
(Please mark all that apply)

- Serious illness/accident ☐
- Death of a family member or close friend ☐
- Not able to get a job ☐
- Mental illness (e.g. depression, anxiety disorder) ☐
- Witness to violence or abuse ☐
- Caring for a family member ☐

62. Whether or not you have been depressed, anxious or had substance use problems, where would you be comfortable seeking help from for these mental health problems?
I would seek help from:
(Please mark all that apply)

Personal Support

- Friend ☐
- Family member ☐
- Spouse/Partner ☐
- Fellow student ☐
- Library ☐
- University Services ☐
- Faculty Services ☐
- Internet ☐
- Peer support program through a professional college or organisation (e.g. AMA Victoria Peer Support Service) ☐
- Other personal support (please specify): 8 [ ] ☐

Professional Treatment

- General Practitioner ☐
- Psychiatrist ☐
- Psychologist/Counsellor ☐
- Indigenous Support Worker ☐
- University counselling/psychological services ☐
- Faculty Services ☐
- Telephone Helpline (e.g. Lifeline) ☐
- Doctors' Health Advisory Service (e.g. Victorian Doctors' Health Program) ☐
- Other professional treatment (please specify): 9 [ ] ☐

63. Whether or not you have been depressed, anxious or had substance use problems, where would you NOT be comfortable seeking help from for these mental health problems?
I would NOT seek help from:
(Please mark all that apply)

Personal Support

- Friend ☐
- Family member ☐
- Spouse/Partner ☐
- Fellow student ☐
- Library ☐
- University Services ☐
- Faculty Services ☐
- Internet ☐
- Peer support program through a professional college or organisation (e.g. AMA Victoria Peer Support Service) ☐
- Other personal support (please specify): 10 [ ] ☐

Professional Treatment

- General Practitioner ☐
- Psychiatrist ☐
- Psychologist/Counsellor ☐
- Indigenous Support Worker ☐
- University counselling/psychological services ☐
- Faculty Services ☐
- Telephone Helpline (e.g. Lifeline) ☐
- Doctors' Health Advisory Service (e.g. Victorian Doctors' Health Program) ☐
- Other professional treatment (please specify): 11 [ ] ☐

OFFICE USE ONLY 8 [ ] 9 [ ] 10 [ ] 11 [ ]

64. To the degree you would NOT be comfortable seeking help for depression, anxiety or a substance use disorder, which of the following contribute to your hesitation?
(Please mark all that apply)

- Impact on registration and right to practice ☐
- Concerns about career development/progression ☐
- Fear of lack of confidentiality/privacy ☐
- Impact on colleagues (i.e. letting fellow students down) ☐
- Lack of confidence in professional treatment ☐
- Reliance on self, do not want help ☐
- Difficulty identifying symptoms of mental illness ☐
- Do not want to burden others ☐
- Do not believe it will help ☐
- Embarrassment ☐
- Lack of time ☐
- Fear of unwanted intervention ☐
- Fear or stress about help seeking or the source of help ☐
- Cost ☐
- Stigmatising attitudes to mental illness ☐
- Lack of knowledge about mental health services ☐
- I am comfortable seeking help ☐

65. Please rate how strongly you agree with the following statements.
(Please mark one answer in each row)

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Many doctors believe that a doctor with a history of depression or an anxiety disorder is less competent.	☐	☐	☐	☐	☐
Many doctors believe that experiencing depression or an anxiety disorder themselves is a sign of personal weakness.	☐	☐	☐	☐	☐
Doctors who experience depression or an anxiety disorder should change to a non-clinical career.	☐	☐	☐	☐	☐
Doctors are less likely to appoint doctors with a history of depression or an anxiety disorder.	☐	☐	☐	☐	☐
Many doctors think less of doctors who have experienced depression or an anxiety disorder.	☐	☐	☐	☐	☐
Doctors who have experienced depression or an anxiety disorder can achieve as much in their careers as those who have not.	☐	☐	☐	☐	☐
A doctor with a history of depression or an anxiety disorder is as reliable as the average doctor.	☐	☐	☐	☐	☐
Doctors feel they need to portray a healthy image.	☐	☐	☐	☐	☐
Doctors should be able to avoid depression or an anxiety disorder.	☐	☐	☐	☐	☐
Being a patient causes embarrassment for a doctor.	☐	☐	☐	☐	☐
Doctors tend to advise colleagues not to divulge a history of depression or an anxiety disorder.	☐	☐	☐	☐	☐
Doctors who experience depression or an anxiety disorder should be optimistic about their recovery.	☐	☐	☐	☐	☐

66. Below are 15 statements of study-related feelings. Please read each statement carefully and decide if you ever feel this way about your studies.
(Please mark one answer in each row)

		Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
a)	I feel emotionally drained by my studies.	☐	☐	☐	☐	☐	☐	☐
b)	I feel used up at the end of a day at university.	☐	☐	☐	☐	☐	☐	☐
c)	I feel tired when I get up in the morning and I have to face another day at the university.	☐	☐	☐	☐	☐	☐	☐
d)	Studying or attending a class is really a strain for me.	☐	☐	☐	☐	☐	☐	☐
e)	I feel burned out from my studies.	☐	☐	☐	☐	☐	☐	☐
f)	I have become less interested in my studies since my enrolment at the university.	☐	☐	☐	☐	☐	☐	☐
g)	I have become less enthusiastic about my studies.	☐	☐	☐	☐	☐	☐	☐
h)	I have become more cynical about the potential usefulness of my studies.	☐	☐	☐	☐	☐	☐	☐
i)	I doubt the significance of my studies.	☐	☐	☐	☐	☐	☐	☐
j)	I can effectively solve the problems that arise in my studies.	☐	☐	☐	☐	☐	☐	☐
k)	I believe that I make an effective contribution to the classes that I attend.	☐	☐	☐	☐	☐	☐	☐
l)	In my opinion, I am a good student.	☐	☐	☐	☐	☐	☐	☐
m)	I feel stimulated when I achieve my study goals.	☐	☐	☐	☐	☐	☐	☐
n)	I have learned many interesting things during the course of my studies.	☐	☐	☐	☐	☐	☐	☐
o)	During class I feel confident that I am effective in getting things done.	☐	☐	☐	☐	☐	☐	☐

67. Are you male or female?

Male ☐
Female ☐

68. What is your age?

18 – 21 ☐
22 – 25 ☐
26 – 30 ☐
31 – 40 ☐
41 – 50 ☐
51 – 60 ☐
61+ ☐

69. Are you of Aboriginal or Torres Strait Islander origin?
(For persons of both Aboriginal and Torres Strait Islander origin mark both 'Yes' boxes)

No ☐
Yes, Aboriginal ☐
Yes, Torres Strait Islander ☐

70. What is your current marital status?

Single, never married ☐
In a committed relationship ☐
Married ☐
Separated ☐
Divorced ☐
Widowed ☐

71. How many children do you have?

None ☐ **Go to Q73**
1 – 2 ☐
3 – 4 ☐ **Continue**
5+ ☐

72. How many children are living with you at home?

None ☐
1 – 2 ☐
3 – 4 ☐
5+ ☐

12
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73. Would you classify yourself as having a disability?

Yes ☐ **Continue**
No ☐ **Go to Q75**

74. Please specify what kind of disability you have:

12 ☐

75. Are you a domestic or international student?

Domestic ☐ **Continue**
International ☐ **Go to Q77**

76. If you are a domestic student, did you move interstate to attend your university?

Yes ☐
No ☐

77. In which area are you currently based?

Metropolitan ☐
Regional ☐
Rural ☐
Remote ☐

78. Which State/Territory are you currently based?

ACT ☐
New South Wales ☐
Northern Territory ☐
Queensland ☐
South Australia ☐
Tasmania ☐
Victoria ☐
Western Australia ☐

79. What stage of training are you in?

Student – pre-clinical ☐
Student – clinical ☐

80. If you have a part-time job, how many hours per week do you work on average?

☐☐☐ Hours per week

Thank you for your time.

Please note that this questionnaire includes the following diagnostic tools:

- **General Health Questionnaire – 28 (GHQ-28)**
  © David Goldberg, 1978 All rights reserved.
  Published by GL Assessment Limited
  9th floor East, 389 Chiswick High Road, London. W4 4AL
  This edition published 1992.
  GL Assessment is part of the Granada Learning Group
  This work may not be photocopied or otherwise reproduced by any means, even within the terms of a Photocopying Licence, without the written permission of the Publishers.
- **Kessler Psychological Distress Scale (K10)**
  Kessler and Mroczek (1994). School of Survey Research Center of the Institute for Social Research. University of Michigan.
- **The Alcohol Use Disorders Identification Test (AUDIT)**
  Babor TF, de la Fuente JR, Saunders J, Grant M. (1992) The Alcohol Use Disorders Identification Test: guidelines for use in primary health care. World Health Organization, Geneva, Switzerland.
- **Maslach Burnout Inventory – Student Survey (MBI-SS)**
  Schaufeli, W. B., Martinez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross-national study. Journal of cross-cultural psychology, 33, 464-481.

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M 2 1 ☐ 2 ☐

Appendix 2

Project Advisory Group

A Project Advisory Group has been established to provide advice to *beyondblue* and the *beyondblue* Doctors' Mental Health Program Advisory Committee regarding the planning, development, implementation and evaluation of the survey. The Project Advisory Group members are:

- Professor David Clarke (Chair) – Professor of Psychological Medicine at Monash University, Clinical Director at Southern Health, former Research Advisor at *beyondblue*, bbDMHP Advisory Committee
- A/Professor Michael Baigent – Associate Professor of Psychiatry at Flinders University, *beyondblue* Board Director and former *beyondblue* Clinical Advisor, bbDMHP Advisory Committee
- Dr Rob Parker – NT psychiatrist, NT Doctors' Health Program, bbDMHP Advisory Committee
- Dr Raymond Martyres AM – Chair of RACGP Doctors' Health Committee, bbDMHP Advisory Committee
- Dr Trevor Mudge – Medical Board of Australia
- Professor Constantine Michael AO – Agency Management Committee, Australian Health Practitioner Regulation Authority
- Professor Richard Hays – Dean of the Faculty of Health Sciences and Medicine, Bond University
- Professor Geoff Dobb – Executive Councillor, Australian Medical Association
- Dr Caitlin O'Mahony – Co-Chair, National Junior Medical Officers' Forum
- Mr Falk Reinholz – Former Community and Wellbeing Officer, Australian Medical Students' Association
- Dr James Hillis – President, Doctors in Training Subdivision, AMA Victoria
- Dr Erica Frank – Physician, Professor, Canada Research Chair, University of British Columbia
- Dr Naomi Harris – consumer representative, bbDMHP Advisory Committee
- Professor Allan Carmichael, OAM – Dean of the Faculty of Health Science and Head of the School of Medicine at the University of Tasmania, was a member of this group before his passing in 2012.

Appendix 3

Recode rule for Q72

Question text	Answer codes	Code combination	Count	Rule application
What is your current marital status?	Single, never married (1) In a committed relationship (2) Married (3) Separated (4) Divorced (5) Widowed (6)	2, 3	9	Recode as 3
		2, 3, 4, 5	1	Recode as 2
		2, 4	4	Recode as 2
		2, 5	14	Recode as 2
		2, 6	1	Recode as 2
		3, 5	3	Recode as 5
		3, 6	1	Recode as 6
		4, 5	1	Recode as 5
		5, 6	1	Recode as 6

Appendix 4

Several questions in the *beyondblue* survey of mental health of doctors and students were comparable to questions asked in the NSMHW, which was conducted by the Australian Bureau of Statistics in 1997. While the NSMHW is a general population wide survey and does not include a large enough sample of any individual professional group to allow estimates of the mental health and wellbeing of that particular group to be calculated, the survey allows for the comparison between doctors and students as assessed in the *beyondblue* survey, with the general population as a whole, and with all other professionals, as classified by the Australian Standard Classification of Occupations.

Comparative data obtained from the NSMHW for psychological distress, mental health diagnoses, suicidal ideation and attempts and treatment for mental health conditions are shown below. Values were calculated for all adults and 'other professionals'.

Table A1: Reported psychological distress (K10) for doctors (from the *beyondblue* survey), professionals and all adults (from the NSMHW, 2007), by gender and age group

		Doctors		Professionals		All adults	
		Per cent	95%CI	Per cent	95%CI	Per cent	95%CI
Low distress							
Male	<30	58.1	(53.6–62.6)	65.9	(53.3–78.5)	70.6	(67.1–74.2)
	31–40	64.8	(61.8–67.8)	83.4	(77.4–89.3)	71.6	(66.9–76.4)
	41–50	67.9	(65.1–70.6)	81.1	(69.0–93.2)	74.5	(69.6–79.4)
	51–60	73.1	(70.9–75.3)	81.4	(63.6–99.2)	75.9	(71.2–80.6)
	61+	84.7	(83.1–86.4)	90.4	(80.1–100.0)	83.7	(81.1–86.2)
	Total	70.8	(69.6–72.1)	78.8	(73.0–84.7)	75.0	(73.0–77.0)
Female	<30	50.0	(46.9–53.2)	60.5	(49.3–71.7)	62.2	(58.9–65.5)
	31–40	60.4	(57.9–62.9)	70.2	(60.4–79.9)	65.2	(61.3–69.1)
	41–50	66.0	(63.4–68.6)	61.9	(46.8–76.9)	62.4	(56.0–68.9)
	51–60	67.2	(64.2–70.2)	78.0	(66.5–89.6)	70.3	(64.1–76.5)
	61+	83.3	(79.5–87.0)	86.5	(75.2–97.7)	77.1	(74.4–79.9)
	Total	61.1	(59.7–62.5)	68.3	(62.2–74.4)	67.2	(65.4–69.1)
Moderate distress							
Male	<30	29.4	(25.3–33.5)	29.1	(16.7–41.6)	23.6	(20.1–27.0)
	31–40	25.2	(22.5–28.0)	14.6	(8.9–20.2)	21.4	(16.2–26.5)
	41–50	21.4	(19.0–23.8)	15.7	(4.1–27.4)	16.7	(12.7–20.7)
	51–60	18.7	(16.8–20.7)	15.5	(0.0–33.2)	17.4	(12.7–22.2)
	61+	11.7	(10.3–13.2)	5.1	(0.0–13.1)	12.3	(10.1–14.4)
	Total	20.5	(19.4–21.6)	17.8	(12.0–23.5)	18.7	(16.8–20.5)
Female	<30	32.1	(29.2–35.1)	30.1	(18.7–41.6)	26.7	(23.2–30.1)
	31–40	26.1	(23.8–28.3)	21.3	(14.2–28.3)	24.4	(20.7–28.1)
	41–50	22.2	(19.9–24.6)	30.1	(16.9–43.3)	25.8	(19.6–31.9)
	51–60	21.8	(19.2–24.4)	16.9	(6.8–27.1)	19.5	(14.1–25.0)
	61+	11.6	(8.4–14.9)	10.8	(0.0–21.8)	17.1	(14.9–19.4)
	Total	25.4	(24.2–26.7)	24.1	(18.9–29.3)	22.9	(21.1–24.7)

		Doctors		Professionals		All adults	
		Per cent	95%CI	Per cent	95%CI	Per cent	95%CI
High distress							
Male	<30	7.5	(5.1–9.9)	4.6	(0.8–8.4)	4.2	(2.6–5.9)
	31–40	6.4	(4.8–7.9)	1.7	(0.0–3.6)	5.3	(3.0–7.5)
	41–50	7.6	(6.1–9.2)	2.8	(0.0–5.6)	5.5	(3.3–7.6)
	51–60	5.7	(4.5–6.8)	3.1	(0.0–9.4)	4.1	(2.1–6.1)
	61+	2.6	(1.9–3.3)	4.5	(0.0–10.9)	2.9	(1.6–4.2)
	Total	5.9	(5.2–6.5)	3.1	(1.4–4.8)	4.4	(3.6–5.2)
Female	<30	11.3	(9.2–13.3)	8.7	(3.7–13.8)	7.7	(5.7–9.7)
	31–40	9.7	(8.2–11.2)	7.9	(3.3–12.6)	8.0	(6.1–9.9)
	41–50	8.3	(6.7–9.8)	5.2	(0.9–9.5)	7.9	(4.8–11.0)
	51–60	8.1	(6.4–9.8)	4.5	(0.0–9.5)	6.8	(3.9–9.7)
	61+	3.9	(2.0–5.9)	0.5	(0.0–2.1)	3.4	(2.3–4.5)
	Total	9.3	(8.5–10.1)	6.4	(4.2–8.5)	6.8	(5.8–7.7)
Very high distress							
Male	<30	5.0	(3.0–7.0)	0.4	(0.0–1.6)	1.6	(0.6–2.6)
	31–40	3.6	(2.4–4.8)	0.4	(0.0–1.3)	1.7	(0.8–2.6)
	41–50	3.1	(2.1–4.1)	0.4	(0.0–1.2)	3.3	(1.2–5.5)
	51–60	2.5	(1.8–3.3)	0.0	(0.0–0.0)	2.5	(1.1–4.0)
	61+	0.9	(0.5–1.4)	0.0	(0.0–0.0)	1.2	(0.2–2.1)
	Total	2.8	(2.4–3.3)	0.3	(0.0–0.7)	2.0	(1.4–2.6)
Female	<30	6.6	(5.0–8.1)	0.6	(0.0–1.7)	3.4	(2.2–4.7)
	31–40	3.8	(2.8–4.8)	0.6	(0.0–1.9)	2.4	(0.7–4.1)
	41–50	3.5	(2.5–4.5)	2.8	(0.0–8.0)	3.9	(1.7–6.2)
	51–60	2.9	(1.8–3.9)	0.6	(0.0–1.7)	3.4	(1.9–4.8)
	61+	1.2	(0.1–2.2)	2.2	(0.0–7.3)	2.3	(1.4–3.3)
	Total	4.1	(3.6–4.7)	1.2	(0.0–2.5)	3.1	(2.5–3.7)

Table A2: Treatment for depressive disorders for all adults and other professionals, by gender

		All adults		Professionals	
		Per cent	95%CI	Per cent	95%CI
Male	Counselling and medication	23.8	(16.0–31.5)	34.0	(11.2–56.8)
	Counselling	11.2	(4.7–17.7)	18.9	(0.4–37.4)
	Medication	7.6	(2.7–12.6)	5.1	(0.0–12.6)
	Neither	57.4	(48.0–66.8)	42.0	(18.4–65.6)
Female	Counselling and medication	35.9	(27.9–43.9)	30.7	(16.6–44.8)
	Counselling	13.0	(8.7–17.3)	10.5	(4.0–17.0)
	Medication	16.4	(11.2–21.7)	6.5	(0.0–15.1)
	Neither	34.7	(26.0–43.5)	52.3	(36.1–68.6)

Table A3: Treatment for anxiety disorders for all adults and other professionals, by gender

		All adults		Professionals	
		Per cent	95%CI	Per cent	95%CI
Male	Counselling and medication	17.1	(10.8–23.4)	22.2	(0.0–48.5)
	Counselling	9.9	(5.3–14.5)	7.6	(0.0–15.6)
	Medication	5.2	(2.1–8.2)	1.6	(0.0–4.0)
	Neither	67.8	(60.2–75.4)	68.6	(43.4–93.8)
Female	Counselling and medication	16.6	(13.0–20.2)	15.4	(6.8–24.1)
	Counselling	10.7	(8.3–13.0)	15.8	(7.7–23.8)
	Medication	10.2	(7.8–12.6)	4.9	(1.1–8.7)
	Neither	62.5	(58.3–66.8)	63.9	(51.5–76.3)

Table A4: Suicidal thoughts and attempts for all adults and other professionals in the past 12 months, by age group and sex

		All adults				Professionals			
		Thoughts		Attempt		Thoughts		Attempt	
		Per cent	95%CI	Per cent	95%CI	Per cent	95%CI	Per cent	95%CI
Male	<30	1.7	(0.8–2.5)	0.5	(0.1 – 1.0)	1.8	(0.0–4.1)	0.4	(0.0–1.6)
	31–40	2.1	(0.9–3.3)	0.5	(0.0–1.3)	1.0	(0.0–2.8)	a	
	41–50	3.0	(1.2–4.8)	0.1	(0.0–0.2)	1.5	(0.0–3.5)	0.4	(0.0–1.1)
	51–60	1.3	(0.4–2.1)	0.2	(0.0–0.5)	a		a	
	61+	1.3	(0.6–2.0)	0.1	(0.0–0.2)	a		a	
	Total	1.9	(1.3–2.4)	0.3	(0.1–0.5)	1.0	(0.2–1.8)	0.2	(0.0–0.5)
Female	<30	3.7	(2.5–5.0)	1.3	(0.6–2.0)	2.4	(0.0–5.1)	a	
	31–40	3.8	(2.1–5.6)	0.6	(0.1–1.1)	3.0	(0.3–5.7)	a	
	41–50	2.2	(1.3–3.1)	0.3	(0.0–0.9)	0.9	(0.0–2.2)	a	
	51–60	2.9	(0.6–5.3)	a		2.3	(0.0–6.8)	a	
	61+	0.7	(0.3–1.1)	0.1	(0.0–0.3)	a		a	
	Total	2.7	(2.1–3.3)	0.5	(0.3–0.8)	2.0	(0.5–3.6)	a	

a=suppressed due to small cell size

Table A5: Lifetime suicidal thoughts and attempts for all adults and other professionals, by age group and sex

		All adults				Professionals			
		Thoughts		Attempt		Thoughts		Attempt	
		Per cent	95%CI	Per cent	95%CI	Per cent	95%CI	Per cent	95%CI
Male	<30	9.1	(6.8–11.4)	2.0	(1.0–3.1)	7.7	(1.5–13.8)	1.9	(0.0–4.4)
	31–40	15.2	(11.5–19.0)	2.6	(1.2–3.9)	10.9	(0.0–22.9)	a	
	41–50	13.9	(10.2–17.6)	2.9	(1.0–4.8)	10.8	(2.7–19.0)	0.4	(0.0–1.1)
	51–60	14.4	(10.5–18.4)	2.5	(1.3–3.7)	24.5	(6.5–42.5)	0.6	(0.0–1.7)
	61+	6.8	(5.1–8.6)	0.8	(0.3–1.3)	17.8	(1.4–34.2)	3.0	(0.0–7.9)
	Total	11.5	(10.0–13.0)	2.1	(1.6–2.7)	13.6	(7.7–19.4)	0.9	(0.2–1.6)
Female	<30	15.2	(12.5–18.0)	6.0	(4.3–7.8)	9.2	(3.2–15.2)	0.6	(0.0–1.7)
	31–40	15.6	(12.7–18.5)	4.4	(2.9–5.8)	11.2	(5.9–16.5)	4.9	(0.5–9.2)
	41–50	18.5	(13.8–23.3)	4.1	(2.1–6.1)	13.2	(5.1–21.3)	3.6	(0.7–6.5)
	51–60	16.0	(12.4–19.6)	4.4	(1.9–6.8)	15.1	(5.0–25.2)	0.9	(0.0–2.6)
	61+	9.8	(8.0–11.7)	2.4	(1.1–3.7)	12.2	(1.7–22.6)	3.8	(0.0–10.5)
	Total	15.0	(13.6–16.3)	4.4	(3.6–5.1)	12.1	(8.8–15.4)	2.6	(1.3–4.0)

a=suppressed due to small cell size

Appendix 5

Table A6: Reported psychological distress (K10) for medical students (from the *beyondblue* survey), all students and all adults (from the NSMHW, 2007), by gender and age group

		Medical students		All Students		All adults	
		Per cent	95%CI	Per cent	95%CI	Per cent	95%CI
Low distress							
Male	18–21	54.3	(47.9–60.7)	73.1	(61.9–84.2)	71.6	(65.1–78.2)
	22–25	48.8	(43.1–54.5)	73.0	(54.7–91.2)	77.0	(70.1–83.9)
	26+	51.3	(43.3–59.3)	45.0	(22.7–67.3)	75.1	(72.8–77.4)
	Total	51.3	(47.5–55.0)	63.5	(53.0–74.1)	75.0	(73.0–77.0)
Female	18–21	37.1	(32.3–41.9)	56.0	(43.9–68.0)	58.8	(51.8–65.8)
	22–25	42.0	(37.8–46.2)	57.4	(38.9–75.8)	64.8	(57.9–71.8)
	26+	42.9	(36.4–49.5)	57.4	(41.5–73.3)	68.3	(66.1–70.4)
	Total	40.5	(37.6–43.3)	56.7	(49.7–63.8)	67.2	(65.4–69.1)
Moderate distress							
Male	18–21	29.5	(23.6–35.3)	22.2	(13.2–31.3)	22.1	(16.9–27.3)
	22–25	33.1	(27.7–38.5)	25.7	(7.3–44.1)	19.7	(13.1–26.4)
	26+	27.3	(20.2–34.5)	49.7	(25.8–73.7)	18.2	(15.9–20.5)
	Total	30.6	(27.1–34.0)	32.2	(21.7–42.6)	18.7	(16.8–20.5)
Female	18–21	36.6	(31.8–41.4)	37.4	(25.7–49.0)	32.3	(25.6–38.9)
	22–25	31.5	(27.5–35.5)	27.0	(15.9–38.1)	23.1	(17.7–28.4)
	26+	32.9	(26.6–39.1)	23.2	(6.1–40.2)	22.0	(19.9–24.0)
	Total	33.5	(30.8–36.3)	30.5	(23.9–37.1)	22.9	(21.1–24.7)
High distress							
Male	18–21	9.4	(5.7–13.1)	3.9	(0.0–10.5)	4.2	(1.1–7.2)
	22–25	11.6	(7.9–15.3)	1.3	(0.0–4.1)	2.8	(0.6–5.1)
	26+	12.7	(7.3–18.0)	4.6	(0.0–10.0)	4.5	(3.6–5.4)
	Total	11.1	(8.7–13.4)	3.7	(0.1–7.3)	4.4	(3.6–5.2)
Female	18–21	15.3	(11.8–18.9)	2.6	(0.0–6.4)	4.5	(1.8–7.2)
	22–25	16.8	(13.6–20.0)	7.0	(0.1–13.9)	7.8	(4.6–11.1)
	26+	13.2	(8.7–17.7)	17.0	(5.8–28.1)	6.9	(5.9–7.9)
	Total	15.6	(13.5–17.7)	8.1	(3.5–12.8)	6.8	(5.8–7.7)

		Medical students		All Students		All adults	
		Per cent	95%CI	Per cent	95%CI	Per cent	95%CI
Very high distress							
Male	18–21	6.8	(3.6–10.1)	0.8	(0.0–2.4)	2.1	(0.0–4.4)
	22–25	6.5	(3.7–9.3)	a		0.4	(0.0–1.0)
	26+	8.7	(4.2–13.2)	0.7	(0.0–2.2)	2.2	(1.5–2.9)
	Total	7.1	(5.2–9.0)	0.6	(0.0–1.6)	2.0	(1.4–2.6)
Female	18–21	11.0	(7.9–14.1)	4.1	(0.0–9.8)	4.4	(1.6–7.2)
	22–25	9.7	(7.2–12.3)	8.6	(0.0–18.0)	4.3	(1.4–7.1)
	26+	11.0	(6.8–15.1)	2.5	(0.0–6.2)	2.9	(2.2–3.6)
	Total	10.4	(8.6–12.2)	4.7	(1.2–8.1)	3.1	(2.5–3.7)

a=suppressed due to small cell size

Appendix 6

The impact of mental health conditions within the domains of work and self were assessed. The questions which make up these two subscales are included below.

Factor 1 – Work

- Caused you to be ostracised at work
- Caused you to take time off work
- Caused you to be overlooked for career development opportunities
- Negatively impacted on your work performance
- Caused you to feel discriminated against at work
- Caused you to feel bullied at work

Factor 2 – Self

- Given you physical health complaints
- Caused you increased stress
- Embarrassed or shamed you
- Negatively impacted on personal relationships
- Made you less able to contribute to household responsibilities
- Made you feel socially isolated (e.g. from friends, community, and social support networks) due to the fear of stigma or prejudice

Appendix 7

The existence of potentially stigmatising attitudes towards mental illness and the functioning of doctors with mental health problems was assessed using a scale that was developed for this survey. Respondents were asked to rate their level of agreement or disagreement with 12 statements about stigmatising attitudes towards mental illness. In order to develop an overall measure of doctor's attitudes towards mental illness, the responses to these items were analysed to develop a method for combining the responses for each item into an overall score. This included a Euclidean distance analysis described in section 2.7 and a factor analysis. The results of the factor analysis are included below (Table A7).

The purpose of these analyses was to identify whether the series of questions were measuring one or more consistent underlying concepts. Two such factors were identified. The first factor related to attitudes regarding the job performance of doctors with mental health conditions and the second factor related to stigmatising attitudes to mental illness in general. Higher scores equate to more negative attitudes towards job performance and greater levels of stigma.

The questions included in the attitude subscales are shown below.

These scales related to the job performance of doctors with mental health conditions, and stigmatising attitudes regarding doctors with mental health conditions.

Factor 1 – Job performance

3 – Doctors who experience depression or an anxiety disorder should change to a non-clinical career.

6 – Doctors who have experienced depression or an anxiety disorder can achieve as much in their careers as those who have not.

7 – A doctor with a history of depression or an anxiety disorder is as reliable as the average doctor.

8 – Doctors feel they need to portray a healthy image.

9 – Doctors should be able to avoid depression or an anxiety disorder.

12 – Doctors who experience depression or an anxiety disorder should be optimistic about their recovery.

Factor 2 – Stigma

1 – Many doctors believe that a doctor with a history of depression or an anxiety disorder is less competent.

2 – Many doctors believe that experiencing depression or an anxiety disorder themselves is a sign of personal weakness.

4 – Doctors are less likely to appoint doctors with a history of depression or an anxiety disorder.

5 – Many doctors think less of doctors who have experienced depression or an anxiety disorder.

10 – Being a patient causes embarrassment for a doctor.

11 – Doctors tend to advise colleagues not to divulge a history of depression or an anxiety disorder.

The responses to each question within each factor were summed to produce a total score for that factor. Higher scores indicate more negative attitudes. The distribution of these scores for doctors are shown in Figures A1 and A2, and for medical students in Figures A3 and A4.

Figure A1: Distribution of scores for attitudes towards job performance and career progression of doctors with mental health conditions (doctors)

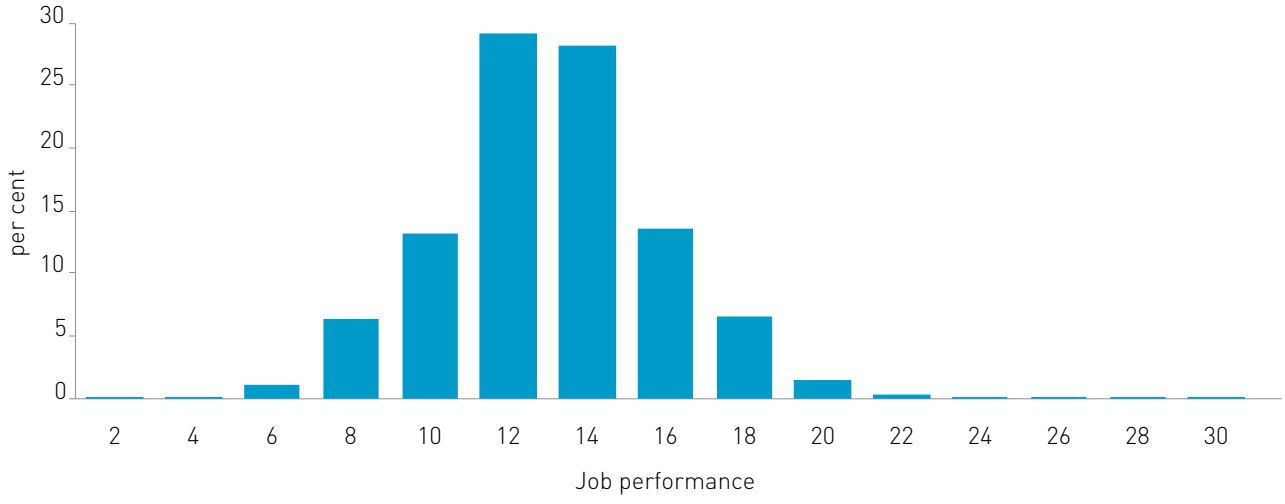


Figure A2: Distribution of scores for stigmatising attitudes towards doctors with mental health conditions (doctors)

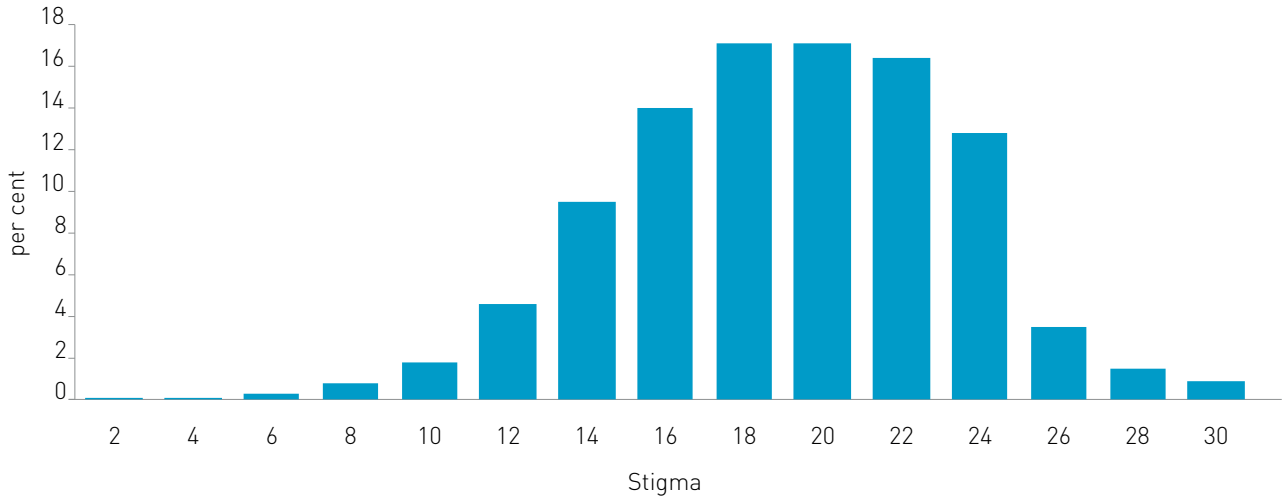


Figure A3: Distribution of scores for attitudes towards job performance and career progression of doctors with mental health conditions (students)

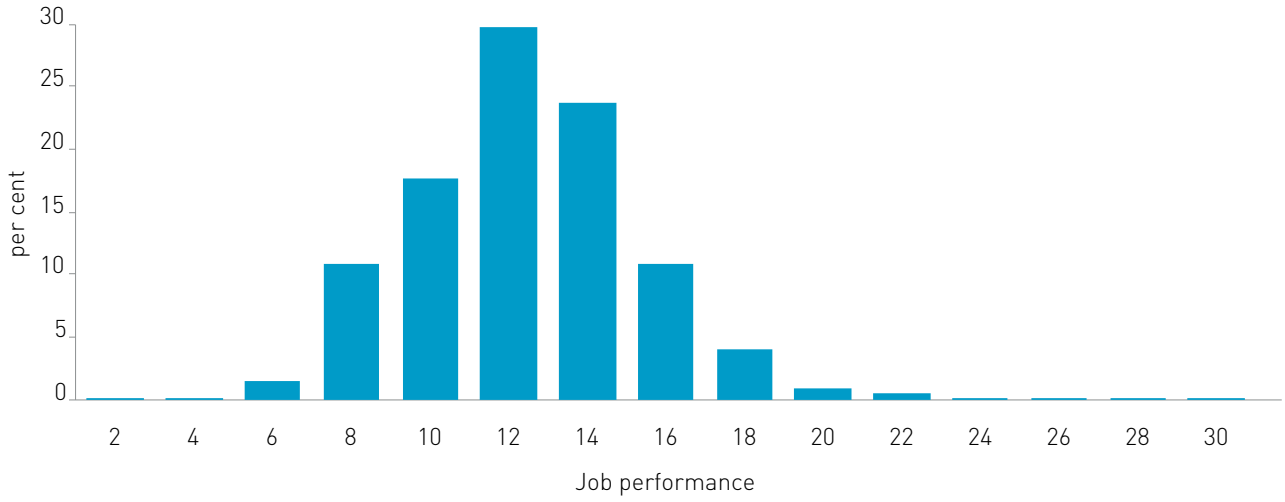
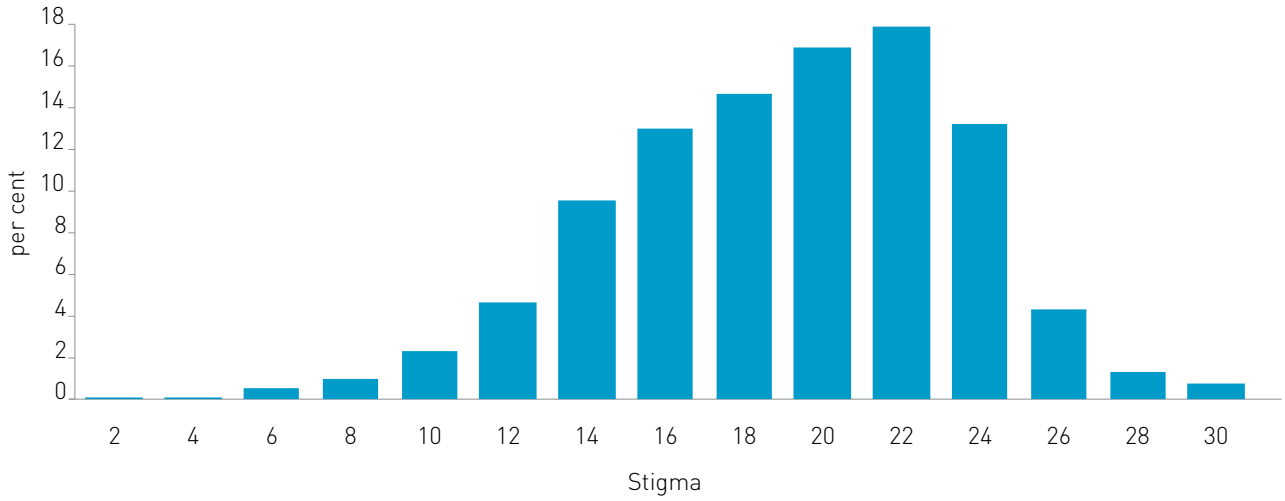


Figure A4: Distribution of scores for stigmatising attitudes towards doctors with mental health conditions (students)



Factor analysis

Factor analysis is a method used for data reduction which allows for the identification of underlying concepts or factors. A principal factor extraction with a varimax rotation was used, in combination with a Euclidean distance analysis, to identify underlying factors relating to attitudes towards doctors with mental health conditions and identify two underlying domains. These domains include stigmatising attitudes towards medical professionals with mental health disorders, and attitudes regarding the job performance of doctors with a mental health history. The results of the factor analysis are included below.

Table A7: Rotated factor matrix

Attitude	Factor 1	Factor 2
Many doctors believe that a doctor with a history of depression or an anxiety disorder is less competent	0.730	-0.269
Many doctors believe that experiencing depression or an anxiety disorder themselves is a sign of personal weakness	0.752	-0.118
Doctors who experience depression or an anxiety disorder should change to a non-clinical career	0.192	-0.662
Doctors are less likely to appoint doctors with a history of depression or an anxiety disorder	0.728	-0.263
Many doctors think less of doctors who have experienced depression or an anxiety disorder	0.792	-0.185
Doctors who have experienced depression or an anxiety disorder can achieve as much in their careers as those who have not	0.024	0.726
A doctor with a history of depression or an anxiety disorder is as reliable as the average doctor	-0.037	0.741
Doctors feel they need to portray a healthy image	0.435	0.351
Doctors should be able to avoid depression or an anxiety disorder	0.087	-0.410
Being a patient causes embarrassment for a doctor.	0.581	0.107
Doctors tend to advise colleagues not to divulge a history of depression or an anxiety disorder	0.532	-0.023
Doctors who experience depression or an anxiety disorder should be optimistic about their recovery	-0.060	0.506

Standardised Cronbach alpha were 0.78 and 0.60 for factor 1 and 2 respectively.

Appendix 8

Coping strategies used by doctors and students with mental health conditions are included below. These were classified into positive and negative strategies.

Positive

1. Do something enjoyable
2. Try to look on the bright side of things
3. Talk to others
4. Jog or do other exercise
5. Pray
6. Practice mindfulness or another relaxation technique
7. Seek spiritual help

Negative

1. Avoid being with people
2. Eat more than usual
3. Take yourself to bed
4. Drink more alcohol than usual
5. Smoke more cigarettes than usual
6. Take non-prescribed medication

Appendix 9

Table A8: Sources of stress, by doctor specialty

		estimated n	Per cent	95%CI	
				Lower	Upper
Work hours	General practitioner	3,947	17.1	15.8	18.4
	Anaesthetics	797	16.4	13.6	19.2
	Mental health	651	19.6	16.0	23.3
	Emergency medicine	435	13.8	10.5	17.1
	Paediatrics	768	26.1	21.9	30.4
	Surgery	650	18.1	14.6	21.6
	Rural/remote/Aboriginal health	318	29.9	22.8	37.0
	Non-patient	172	16.0	10.3	21.7
	Oncology	253	21.8	15.3	28.3
	Obstetrics and gynaecology	414	20.7	16.1	25.3
	Imaging and pathology	623	25.1	20.5	29.6
	Other	1,851	18.8	16.7	20.9
	Missing	2,827	24.3	22.1	26.4
Work quantity	General practitioner	5,722	24.8	23.4	26.2
	Anaesthetics	570	11.7	9.3	14.2
	Mental health	1,046	31.5	27.3	35.8
	Emergency medicine	772	24.5	20.4	28.6
	Paediatrics	877	29.8	25.4	34.2
	Surgery	623	17.3	13.9	20.8
	Rural/remote/Aboriginal health	332	31.3	24.1	38.6
	Non-patient	319	29.7	22.8	36.5
	Oncology	362	31.2	23.8	38.5
	Obstetrics and gynaecology	510	25.5	20.6	30.4
	Imaging and pathology	805	32.4	27.4	37.3
	Other	2,381	24.2	21.9	26.5
	Missing	3,215	27.6	25.4	29.8
Unpaid work	General practitioner	3,201	13.9	12.7	15.0
	Anaesthetics	291	6.0	4.2	7.8
	Mental health	414	12.5	9.5	15.5
	Emergency medicine	276	8.7	6.0	11.5
	Paediatrics	504	17.1	13.5	20.8
	Surgery	293	8.2	5.6	10.7
	Rural/remote/Aboriginal health	171	16.1	10.4	21.8

		estimated n	Per cent	95%CI	
				Lower	Upper
	Non-patient	155	14.4	9.0	19.9
	Oncology	159	13.7	8.3	19.0
	Obstetrics and gynaecology	191	9.5	6.2	12.9
	Imaging and pathology	304	12.2	8.8	15.7
	Other	1,130	11.5	9.8	13.2
	Missing	2,146	18.4	16.5	20.4
Conflict	General practitioner	5,532	24.0	22.5	25.4
	Anaesthetics	1,495	30.8	27.2	34.3
	Mental health	893	26.9	22.9	30.9
	Emergency medicine	884	28.1	23.7	32.4
	Paediatrics	1,002	34.1	29.5	38.6
	Surgery	893	24.8	20.9	28.8
	Rural/remote/Aboriginal health	232	21.9	15.3	28.5
	Non-patient	245	22.8	16.3	29.3
	Oncology	385	33.1	25.6	40.6
	Obstetrics and gynaecology	635	31.7	26.5	37.0
	Imaging and pathology	730	29.3	24.5	34.2
	Other	2,638	26.8	24.4	29.2
	Missing	3,229	27.7	25.5	29.9
Responsibility	General practitioner	4,333	18.8	17.5	20.1
	Anaesthetics	732	15.1	12.3	17.8
	Mental health	843	25.4	21.4	29.4
	Emergency medicine	648	20.6	16.7	24.4
	Paediatrics	781	26.6	22.3	30.8
	Surgery	615	17.1	13.7	20.5
	Rural/remote/Aboriginal health	204	19.2	13.2	25.3
	Non-patient	264	24.5	17.9	31.1
	Oncology	268	23.1	16.4	29.9
	Obstetrics and gynaecology	525	26.3	21.3	31.2
	Imaging and pathology	596	23.9	19.4	28.5
	Other	1,726	17.5	15.5	19.6
	Missing	3,089	26.5	24.3	28.7
Sleep deprivation	General practitioner	2,522	10.9	9.9	12.0
	Anaesthetics	815	16.8	13.9	19.7
	Mental health	435	13.1	10.0	16.2

		estimated n	Per cent	95%CI	
				Lower	Upper
	Emergency medicine	446	14.2	10.9	17.5
	Paediatrics	557	19.0	15.2	22.7
	Surgery	461	12.8	9.8	15.9
	Rural/remote/Aboriginal health	178	16.8	10.9	22.6
	Non-patient	130	12.1	7.2	17.0
	Oncology	119	10.3	5.5	15.0
	Obstetrics and gynaecology	359	17.9	13.6	22.3
	Imaging and pathology	306	12.3	8.8	15.8
	Other	1,188	12.1	10.3	13.8
	Missing	2,149	18.4	16.5	20.4
Debt	General practitioner	3,073	13.3	12.2	14.4
	Anaesthetics	718	14.8	12.0	17.6
	Mental health	456	13.7	10.6	16.9
	Emergency medicine	320	10.2	7.2	13.1
	Paediatrics	350	11.9	8.8	15.0
	Surgery	463	12.9	9.8	16.0
	Rural/remote/Aboriginal health	112	10.6	5.8	15.4
	Non-patient	160	14.9	9.4	20.3
	Oncology	148	12.8	7.6	17.9
	Obstetrics and gynaecology	310	15.5	11.3	19.7
	Imaging and pathology	315	12.7	9.1	16.3
	Other	1,341	13.6	11.7	15.5
	Missing	1,875	16.1	14.3	17.9
Decisions	General practitioner	3,491	15.1	13.9	16.3
	Anaesthetics	642	13.2	10.6	15.8
	Mental health	430	13.0	9.9	16.1
	Emergency medicine	634	20.1	16.3	23.9
	Paediatrics	572	19.4	15.7	23.2
	Surgery	390	10.9	8.1	13.6
	Rural/remote/Aboriginal health	119	11.2	6.4	16.0
	Non-patient	157	14.6	9.0	20.2
	Oncology	143	12.3	7.2	17.4
	Obstetrics and gynaecology	266	13.3	9.4	17.3
	Imaging and pathology	462	18.6	14.4	22.7
	Other	1,302	13.2	11.4	15.0

		estimated n	Per cent	95%CI	
				Lower	Upper
	Missing	3,492	30.0	27.7	32.2
Fear of making mistakes	General practitioner	3,900	16.9	15.6	18.1
	Anaesthetics	698	14.4	11.7	17.1
	Mental health	440	13.3	10.2	16.4
	Emergency medicine	598	19.0	15.2	22.7
	Paediatrics	577	19.6	15.8	23.4
	Surgery	500	13.9	10.8	17.0
	Rural/remote/Aboriginal health	161	15.1	9.5	20.8
	Non-patient	168	15.6	10.0	21.3
	Oncology	169	14.6	9.1	20.0
	Obstetrics and gynaecology	438	21.9	17.2	26.7
	Imaging and pathology	547	22.0	17.6	26.4
	Other	1,265	12.8	11.1	14.6
	Missing	3,665	31.5	29.2	33.8
Making mistakes	General practitioner	2,869	12.4	11.3	13.5
	Anaesthetics	526	10.8	8.4	13.2
	Mental health	302	9.1	6.5	11.7
	Emergency medicine	405	12.9	9.7	16.0
	Paediatrics	377	12.8	9.6	16.0
	Surgery	328	9.1	6.6	11.7
	Rural/remote/Aboriginal health	92	8.7	4.4	13.0
	Non-patient	136	12.7	7.4	17.9
	Oncology	141	12.2	7.0	17.3
	Obstetrics and gynaecology	336	16.8	12.5	21.1
	Imaging and pathology	408	16.4	12.4	20.4
	Other	895	9.1	7.6	10.6
	Missing	2,686	23.1	21.0	25.1
Knowledge	General practitioner	2,824	12.2	11.1	13.3
	Anaesthetics	455	9.4	7.2	11.6
	Mental health	297	9.0	6.4	11.5
	Emergency medicine	493	15.7	12.2	19.1
	Paediatrics	433	14.7	11.3	18.2
	Surgery	194	5.4	3.3	7.5
	Rural/remote/Aboriginal health	122	11.5	6.6	16.4
	Non-patient	99	9.2	5.0	13.4

		estimated n	Per cent	95%CI	
				Lower	Upper
	Oncology	232	20.0	13.6	26.3
	Obstetrics and gynaecology	268	13.4	9.5	17.3
	Imaging and pathology	466	18.7	14.7	22.8
	Other	1,155	11.7	10.0	13.4
	Missing	2,421	20.8	18.8	22.8
Disclosing mistakes	General practitioner	1,630	7.1	6.2	7.9
	Anaesthetics	230	4.7	3.1	6.3
	Mental health	134	4.0	2.3	5.8
	Emergency medicine	154	4.9	2.9	6.9
	Paediatrics	182	6.2	3.9	8.5
	Surgery	181	5.0	3.1	6.9
	Rural/remote/Aboriginal health	65	6.1	2.4	9.8
	Non-patient	54	5.0	1.9	8.2
	Oncology	75	6.5	2.5	10.4
	Obstetrics and gynaecology	179	9.0	5.7	12.2
	Imaging and pathology	172	6.9	4.3	9.5
	Other	563	5.7	4.5	6.9
	Missing	1,159	9.9	8.5	11.4
Study	General practitioner	2,459	10.7	9.6	11.7
	Anaesthetics	970	20.0	16.8	23.1
	Mental health	660	19.9	16.2	23.6
	Emergency medicine	839	26.6	22.3	30.9
	Paediatrics	555	18.9	15.1	22.7
	Surgery	476	13.2	10.1	16.4
	Rural/remote/Aboriginal health	116	11.0	5.9	16.0
	Non-patient	165	15.4	9.7	21.0
	Oncology	133	11.4	6.3	16.5
	Obstetrics and gynaecology	442	22.1	17.3	26.9
	Imaging and pathology	434	17.4	13.3	21.6
	Other	1,369	13.9	12.0	15.8
	Missing	2,273	19.5	17.5	21.5
Talking to patients	General practitioner	1,955	8.5	7.5	9.4
	Anaesthetics	206	4.2	2.7	5.8
	Mental health	311	9.4	6.7	12.1
	Emergency medicine	128	4.1	2.2	6.0

		estimated n	Per cent	95%CI	
				Lower	Upper
	Paediatrics	202	6.9	4.5	9.3
	Surgery	150	4.2	2.4	6.0
	Rural/remote/Aboriginal health	56	5.3	1.9	8.7
	Non-patient	27	2.5	0.1	5.0
	Oncology	142	12.2	7.1	17.3
	Obstetrics and gynaecology	87	4.4	2.0	6.7
	Imaging and pathology	77	3.1	1.1	5.0
	Other	685	7.0	5.6	8.3
	Missing	1,042	8.9	7.6	10.3
Dealing with patients	General practitioner	4,050	17.5	16.3	18.8
	Anaesthetics	486	10.0	7.7	12.3
	Mental health	466	14.0	10.9	17.2
	Emergency medicine	375	11.9	8.8	15.0
	Paediatrics	385	13.1	9.9	16.3
	Surgery	274	7.6	5.3	9.9
	Rural/remote/Aboriginal health	140	13.2	7.9	18.4
	Non-patient	64	6.0	2.4	9.6
	Oncology	206	17.7	11.7	23.7
	Obstetrics and gynaecology	228	11.4	7.8	15.0
	Imaging and pathology	106	4.3	2.1	6.4
	Other	1,090	11.1	9.4	12.7
	Missing	1,749	15.0	13.3	16.8
Death	General practitioner	1,099	4.8	4.0	5.5
	Anaesthetics	278	5.7	4.0	7.5
	Mental health	177	5.3	3.3	7.4
	Emergency medicine	76	2.4	1.0	3.8
	Paediatrics	162	5.5	3.3	7.7
	Surgery	63	1.7	0.7	2.8
	Rural/remote/Aboriginal health	18	1.7	0.0	3.7
	Non-patient	14	1.3	0.0	2.8
	Oncology	66	5.7	2.0	9.3
	Obstetrics and gynaecology	143	7.2	4.2	10.1
	Imaging and pathology	70	2.8	1.1	4.6
	Other	404	4.1	3.1	5.1
	Missing	856	7.3	6.1	8.6

		estimated n	Per cent	95%CI	
				Lower	Upper
Litigation	General practitioner	3,032	13.1	12.0	14.3
	Anaesthetics	401	8.3	6.1	10.4
	Mental health	406	12.2	9.2	15.2
	Emergency medicine	137	4.4	2.4	6.3
	Paediatrics	143	4.9	2.8	6.9
	Surgery	455	12.7	9.7	15.6
	Rural/remote/Aboriginal health	118	11.1	6.3	16.0
	Non-patient	82	7.6	3.4	11.7
	Oncology	87	7.5	3.6	11.4
	Obstetrics and gynaecology	342	17.1	12.8	21.3
	Imaging and pathology	259	10.4	7.2	13.7
	Other	667	6.8	5.5	8.1
	Missing	891	7.6	6.4	8.9
Violence	General practitioner	526	2.3	1.8	2.8
	Anaesthetics	14	0.3	0.0	0.7
	Mental health	196	5.9	3.8	8.0
	Emergency medicine	88	2.8	1.3	4.3
	Paediatrics	20	0.7	0.0	1.4
	Surgery	33	0.9	0.0	1.8
	Rural/remote/Aboriginal health	5	0.5	0.0	1.5
	Non-patient	12	1.1	0.0	2.8
	Oncology	16	1.4	0.0	3.3
	Obstetrics and gynaecology	40	2.0	0.3	3.7
	Imaging and pathology	7	0.3	0.0	0.8
	Other	105	1.1	0.6	1.6
	Missing	228	2.0	1.3	2.6
Resources	General practitioner	2,063	8.9	8.0	9.9
	Anaesthetics	307	6.3	4.5	8.1
	Mental health	702	21.2	17.5	24.8
	Emergency medicine	589	18.7	15.0	22.4
	Paediatrics	431	14.6	11.2	18.0
	Surgery	335	9.3	6.6	12.0
	Rural/remote/Aboriginal health	134	12.6	7.6	17.6
	Non-patient	91	8.5	4.3	12.7
	Oncology	202	17.4	11.4	23.4

		estimated n	Per cent	95%CI	
				Lower	Upper
	Obstetrics and gynaecology	199	10.0	6.6	13.3
	Imaging and pathology	230	9.2	6.2	12.3
	Other	1,172	11.9	10.2	13.6
	Missing	1,159	10.0	8.5	11.4
Public speaking	General practitioner	4,472	19.4	18.1	20.7
	Anaesthetics	1,013	20.9	17.8	23.9
	Mental health	416	12.5	9.6	15.5
	Emergency medicine	463	14.7	11.3	18.1
	Paediatrics	323	11.0	8.0	13.9
	Surgery	394	11.0	8.2	13.7
	Rural/remote/Aboriginal health	141	13.3	8.1	18.5
	Non-patient	78	7.2	3.6	10.8
	Oncology	134	11.5	6.5	16.5
	Obstetrics and gynaecology	324	16.2	12.2	20.2
	Imaging and pathology	358	14.4	10.7	18.0
	Other	1,124	11.4	9.7	13.1
	Missing	2,280	19.6	17.6	21.5
Bullying	General practitioner	733	3.2	2.6	3.8
	Anaesthetics	182	3.7	2.3	5.2
	Mental health	160	4.8	2.9	6.8
	Emergency medicine	121	3.8	1.9	5.7
	Paediatrics	154	5.3	3.1	7.4
	Surgery	199	5.5	3.4	7.7
	Rural/remote/Aboriginal health	43	4.1	1.0	7.2
	Non-patient	133	12.4	7.1	17.7
	Oncology	70	6.0	2.1	10.0
	Obstetrics and gynaecology	107	5.3	2.7	8.0
	Imaging and pathology	149	6.0	3.5	8.5
	Other	489	5.0	3.8	6.1
	Missing	611	5.2	4.2	6.3
Racism	General practitioner	331	1.4	1.0	1.9
	Anaesthetics	59	1.2	0.3	2.1
	Mental health	73	2.2	0.8	3.6
	Emergency medicine	91	2.9	1.2	4.6
	Paediatrics	12	0.4	0.0	1.0

		estimated n	Per cent	95%CI	
				Lower	Upper
	Surgery	66	1.8	0.5	3.1
	Rural/remote/Aboriginal health	15	1.4	0.0	3.5
	Non-patient	26	2.4	0.0	4.8
	Oncology	0	0.0	0.0	0.0
	Obstetrics and gynaecology	15	0.7	0.0	1.8
	Imaging and pathology	40	1.6	0.2	3.0
	Other	113	1.1	0.6	1.7
	Missing	332	2.9	2.0	3.7
Work relations	General practitioner	1,236	5.4	4.6	6.1
	Anaesthetics	465	9.6	7.3	11.8
	Mental health	426	12.8	9.8	15.9
	Emergency medicine	257	8.2	5.6	10.8
	Paediatrics	373	12.7	9.5	15.9
	Surgery	394	11.0	8.0	13.9
	Rural/remote/Aboriginal health	99	9.3	4.6	14.0
	Non-patient	195	18.1	12.2	24.1
	Oncology	157	13.5	8.1	19.0
	Obstetrics and gynaecology	265	13.3	9.5	17.1
	Imaging and pathology	287	11.5	8.1	14.9
	Other	989	10.0	8.5	11.6
	Missing	1,496	12.8	11.2	14.5

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