



ACEM Workforce Sustainability Survey Report November 2016



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Message from the ACEM President

I am pleased to present the initial results of the inaugural ACEM Workforce Sustainability Survey. This comprehensive report gives us a quantified insight into the issues affecting the sustainability – that is the health, professional satisfaction, and career longevity – of our Australasian specialist emergency medicine workforce.

The survey took place in June and July of this year and covers a range of topics such as burnout, job satisfaction, workplace stressors, support networks, and personal health.

ACEM conducted this survey to explore the factors that impact on the sustainability of the emergency medicine workforce, and provide ACEM members with the opportunity to share their thoughts on the role ACEM might have in addressing these factors.

This is the first time a survey of this size, focusing solely on emergency physicians, has been conducted in Australasia. I would like to thank the FACEMs, SIMGs and trainees who took part in the survey, as well as the members of the Workforce Sustainability Reference Group, and the ACEM Policy and Research staff who made this piece of work possible.

It is clear from the report that we are facing a range of issues that affect career satisfaction and personal wellbeing. It may come as no surprise to many readers that some of our members are exhibiting signs of burnout, stress and poor work-life balance. However, thanks to the Workforce Sustainability Survey, we are now able to understand how prevalent these are and who is most affected.

I am heartened to know that the majority of respondents reported having moderate or high work satisfaction. The survey results show that the things we enjoy in emergency medicine include variety, spending time with patients, and team work. It is important that we enjoy what we do, and I believe the role of the College is to provide guidance, education, and resources to assist in making our careers in emergency medicine as fulfilling, sustainable and enjoyable as possible.

The Workforce Sustainability Survey is a starting point for the longer term work to address the issues affecting the workforce. The survey data will continue to be analysed and results will inform how ACEM supports its membership, ACEM's policy and advocacy work, and education programs.

I encourage you to read this report and discuss the findings with your colleagues.

Professor Anthony Lawler President Australasian College for Emergency Medicine

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ACRONYMS AND ABBREVIATIONS

ACEM	Australasian College for Emergency Medicine
ACT	Australian Capital Territory
AMA	Australian Medical Association
AUDIT	Alcohol Use Disorders Identification Test
AUDIT-C	Alcohol Use Disorders Identification Test-Consumption
CST	Clinical Support Time
DEM	Director of Emergency Medicine
DEMT	Director of Emergency Medicine Training
DHAS	Doctors' Health Advisory Service
DOPS	Direct observation of procedural skills
EAP	Employee Assistance Program
ED	Emergency Department
EM	Emergency Medicine
EP	Emergency Physician
FACEM	Fellow of the Australasian College for Emergency Medicine
GP	General Practitioner
IP	Internet Protocol
КРІ	Key Performance Indicator
MABEL	Medicine in Australia Balancing Employment and Life
MBI-HSS	Maslach Burnout Inventory-Human Services Survey
Ν	Number
NEAT	National Emergency Access Target
NSW	New South Wales
NZ	New Zealand
QLD	Queensland
SA	South Australia
SD	Standard Deviation
SESMAT	Santé Et Satisfaction des Médecins Au Travail
SIMG	Specialist international medical graduate
TAS	Tasmania
VIC	Victoria
WA	Western Australia
WBA	Workplace based assessment
WSP	Workforce Sustainability Project
WSS	Workforce Sustainability Survey

EXECUTIVE SUMMARY

The ACEM Workforce Sustainability Survey (WSS) is an output of the ACEM Workforce Sustainability Project (WSP). Made possible through funding from the Australian Government Department of Health, the WSP was established to consider issues that impact on the sustainability of the emergency medicine (EM) workforce and mechanisms to promote emergency physician (EP) and EM trainee health and wellbeing.

For the purpose of this report, a 'sustainable' workforce is one in which emergency doctors are able to maximise their health, professional satisfaction and career longevity, thereby optimising their ability to meet the emergency medical care needs of the Australian and New Zealand populations.

One of the aims of the WSS was to understand current trends in the Australian and New Zealand EM workforces on burnout, work-life balance, job satisfaction, work-related stressors, and personal health. The survey was conducted over a three-week period in June and July 2016. All 4,524 ACEM Fellows, EM trainees and specialist international medical graduates (SIMGs) living in Australia and New Zealand were invited to take part.

This report presents the results of the initial analysis.

SUMMARY OF FINDINGS

Workforce characteristics

- Overall, 1,187 surveys were received from ACEM members, a response rate of 26%
- 703 FACEMs (59%) and 484 EM trainees (41%) responded, or 653 men (55%) and 525 women (45%)
- Respondents' state/country and age distributions were similar to the ACEM membership
- Most (92%) worked in a public hospital ED
- 42% had less than 10 years of experience in the EM workforce
- 25% worked in a rural, regional or remote location.

Burnout

- According to the Maslach Burnout Inventory-Human Services Survey (MBI-HSS):
 - 39% and 31% showed a high and moderate degree of emotional exhaustion, respectively
 - 32% and 30% showed a high and moderate degree of depersonalisation, respectively
 - 31% and 23% showed a moderate and low degree of personal accomplishment, respectively.

Hours of work

- 64% of respondents reported working over 40 hours in their most recent usual working week
- In that week, 64% reported working more than one additional unpaid hour of work
- 13% reported receiving more than one hour of paid overtime
- 41% reported a desire to change their hours of work, with two-thirds in this group wanting to decrease these hours.

Breaks at work

- More than two-thirds (69%) reported that taking a break at work was either difficult or very difficult
- During clinical shifts, the most common barriers to eating and hydration were ED demand and time constraints, and work conditions (e.g. inadequate staff, unprotected breaks, and workplace norms).

Work-life balance

• 44% agreed that the balance between their personal and professional commitments was about right, while 39% disagreed

- Overall, 66% agreed that the demands of work interfere with home and family life
- 35% rated their work-life balance as fair, 32% as good and 16% as very good
- In the past 12 months, 52% of EM trainees and 34% of FACEMs had not taken four weeks of annual leave
- Higher percentages of EM trainees than FACEMs reported difficulty arranging leave.

Work satisfaction

- Overall, 52% reported moderate satisfaction with their EM career; a high level of satisfaction was reported by 22% of FACEMs and 10% of EM trainees
- Respondents reported greatest satisfaction with their immediate ED colleagues, career progression, and remuneration. They reported least satisfaction with ED staffing levels, recognition for good work, and time allocated to learning and/or core skill maintenance
- Respondents' comments on the most enjoyable aspects of working in EM were thematically classified as variety, clinical work, patient care, and team work
- Respondents' comments on the least enjoyable aspects of working in EM were thematically classified as work conditions, issues impacting clinical work, hospital dynamics and conflict, and health bureaucracy and system inefficiencies.

Work-related stressors

- The three most frequently ranked day-to-day work stressors were ED overcrowding, access block and conflicts with other clinical teams
- For EM trainees, the most commonly ranked stressors were ED overcrowding, conflicts with other teams, and patient expectations. For FACEMs, the most commonly ranked stressors were ED overcrowding, access block, and pressures from hospital administration and executives
- In the past year, 88% reported feeling threatened by a patient and 43% reported being physically assaulted, with 67% being aware of their workplace incident report process
- Three-quarters (74%) reported that critical incident debriefing (formal, informal or both) was available at their workplace and 90% reported a belief in the value of debriefing
- Respondents' comments on methods by employers to deal with work-related stress were thematically classified as none, unknown, or insufficient methods; employee assistance programs (EAPs) and counselling; and team culture/informal peer support. Stress reduction methods tended to be driven by respondents themselves.

Work-related support networks

- Overall, respondents felt supported by their immediate ED work colleagues, with the statements 'I have colleagues that I can confide in' and 'I can rely on colleagues to help if I ask' scoring the highest agreement from FACEMs and EM trainees
- Respondents most commonly reported that peer support programs and networks and mentor programs and networks could best support their careers.

Personal health and wellbeing indicators

- The majority of respondents reported they were in good personal health, with 39% rating their general health as very good, 28% as good and 20% as excellent
- 30% reported taking three or more days of sick leave in the past 12 months and 29% reported no sick leave
- 94% reported working more than one day unwell during the past 12 months
- Respondents identified barriers to looking after their health, which most commonly related to work conditions (i.e. rostering, shift work, and on call; a lack of facilities; and a lack of staff), fatigue and general time constraints
- Respondents most commonly reported feeling anxious at work some of the time (41%), occasionally (33%) and most of the time (17%). Outside work, respondents most commonly reported feeling anxious occasionally (48%), some of the time (27%) and never (20%)

- 17% reported seeking help for stress, anxiety or depression in the past 12 months
- 10% of FACEMs and 3% of EM trainees who reported alcohol consumption in the past year were categorised as high risk for alcohol-related harm; half of respondents were categorised as medium risk for alcohol-related harm
- The majority (84%) reported that physical exercise outside of work was important or very important, with less than half of EM trainees and over half of FACEMs reporting exercise on more than three days per week.

Respondent 10-year career plans

- 60% of FACEMs and 71% of EM trainees reported being likely or very likely to reduce their hours of clinical practice in the next 10 years
- 29% of FACEMs and 12% of EM trainees reported being likely or very likely to leave clinical practice in the next 10 years
- 30% of FACEMs and 18% of EM trainees reported being likely or very likely to leave the specialist EM workforce in the next 10 years.

Work-related resources for support

• The most common resources of interest were podcasts dedicated to physician wellness (40%); online interactive resources on dealing with anxiety, resilience, substance use and disruptive behaviours (36%); and personal financial planning resources (32%).

The role of ACEM

- 74% of respondents reported that ACEM had a role in addressing the health, wellbeing and sustainability of the specialist EM workforce
- Respondents suggested that ACEM's role in supporting the specialist EM workforce was through stronger advocacy, member health, wellbeing and support, ED accreditation and training, workforce planning, provision of support resources, awareness raising and professional development.

1. PURPOSE AND SCOPE OF REPORT

This report presents the results of the Australasian College for Emergency Medicine (ACEM) Workforce Sustainability Survey (WSS), an output of the Workforce Sustainability Project (WSP). For the purpose of this report, a 'sustainable' workforce is one in which emergency doctors are able to maximise their health, professional satisfaction and career longevity, thereby optimising their ability to meet the emergency medical care needs of the Australian and New Zealand populations.

Specifically, the goals of the WSP were to:

- Consider issues that impact on the sustainability of the specialist emergency medicine (EM) workforce
- Consider mechanisms to promote emergency physician (EP)¹ and EM trainee² health and wellbeing, and
- Collect Australasian workforce data to inform strategies to support specialist EP wellness and retention.

Other outputs of the Project were to:

- Review relevant literature to identify and understand factors impacting on the health, wellbeing, job satisfaction and career longevity of the specialist EM workforce to inform WSS design
- Use WSS data to inform future workforce supply
- Facilitate the trial and evaluation of activities relating to the promotion of workforce sustainability at the 2016 ACEM Annual Scientific Meeting (ASM), and
- Develop an implementation plan for use of WSS data to inform ACEM's future work.

1.1 PROJECT CONTEXT

ACEM is the not-for-profit organisation responsible for the training and advancement of professional standards in the specialist EM workforces in Australia and New Zealand. ACEM's mission is to 'promote excellence in the delivery of quality emergency care to the community through ... committed and expert members' via the six strategic priorities of education, member support, advocacy, standards, awareness, and College operations (ACEM, 2015a).

ACEM was provided with funding support from the Australian Government Department of Health to undertake the WSP under the auspices of the National Program 'Improving Australia's Emergency Medicine Workforce'. The WSP arose from the larger Workforce Data and Utilisation Project and work undertaken by the College's Public Health Committee and Workforce Subcommittee.

The WSP was led from within ACEM and supported by the Workforce Sustainability Reference Group (WSRG).³ The WSRG, comprised of seven Australian based FACEMs and EM trainees, was established to share information with and provide advice to the WSP team.

¹ An EP is a registered medical practitioner trained and qualified in the specialty of EM. The recognised qualification of an EP in Australasia is the Fellowship of the ACEM (FACEM).

² An EM trainee is a medical doctor who is enrolled towards Fellowship in the ACEM Specialist Training Pathway.

³ For a list of WSRG members, see the Acknowledgements.

2. INTRODUCTION

Anecdotal reports from the ACEM membership suggest that EPs and EM trainees in the Australasian specialist EM workforce are suffering from work-related stress and burnout. These reports are consistent with previous international research showing that stress and burnout are leading EPs to change their career plans and/or leave the workforce entirely (Estryn-Behar, et al., 2010). Given the significant cost of specialist EM training, ensuring that EPs and EM trainees see a return on investment and lead sustainable careers is of paramount importance for the individual doctor and the communities they care for.

Burnout is related to prolonged periods of excessive stress and is defined as 'a syndrome of emotional exhaustion, loss of meaning in work, feelings of ineffectiveness, and a tendency to view people as objects rather than as human beings' (Maslach, Jackson, & Leiter, 1996). The syndrome is linked to poorer mental health, reduced proficiency and efficiency at work, and intention to leave the profession (Wallace, Lemaire, & Ghali, 2009; Lu, Dresden, McCloskey, Branzetti, & Gisondi, 2015; Dewa, Loong, Bonato, Thanh, & Jacobs, 2014; Estryn-Behar, et al., 2010). While studies show that burnout is widespread throughout the medical workforce, EPs and EM trainees show even higher rates than other medical specialties (Estryn-Behar, et al., 2010; Markwell & Wainer, 2009; Shanafelt, et al., 2015; beyondblue, 2013). Research also shows that EPs have a higher likelihood than other medical specialties of alcohol and substance use (Schmitz, et al., 2012).

EPs and EM trainees experience a range of external stressors related to the ED environment that can include unfavourable rostering, large workloads, overcrowding, traumatic events, high frequency rotations, staff conflict, lack of teamwork, and poor management practices (Healy & Tyrrell, 2011). Patient-related stressors include aggression and violence, death and/or resuscitation of children and young people, and treating sexual assault victims (Healy & Tyrrell, 2013; Estryn-Behar, et al., 2010). Another cause of stress is the perceived 'loss of autonomy' in delivering patient care that is driven by hospital policies and procedures directing EDs to meet an increasing number of administrative demands and targets (Ariely & Lanier, 2015).

There is a perception that doctors have better health than the general population (Schlicht, Gordon, Ball, & Christie, 1990; Frank & Segura, 2009). However, although many are enrolled with a general practitioner (GP), a number of barriers exist to adequate healthcare access for doctors at the patient, provider and system levels (Kay, Mitchell, Clavarino, & Doust, 2008). For instance, due to beliefs around appropriate health self-management, doctors are often reluctant to seek medical attention (Wallace, Lemaire, & Ghali, 2009). Many find it difficult to take on the role of the patient in a doctor-patient relationship, struggling to discuss with a GP their own personal health issues (Kay, et al., 2008; Thompson, Cupples, Sibbett, Skan, & Bradley, 2001). When ill, doctors can show a reluctance to take sick leave to avoid increasing colleagues' workloads because rosters are unable to be covered. Hospital culture also places an expectation on doctors to 'work through' illness to reduce burdening colleagues with additional work (McKevitt, Morgan, Dundas, & Holland, 1997; Thompson, et al., 2001).

Research exploring hospital workplace nutrition shows that while doctors emphasise to patients the importance of a healthy diet, they may not heed their own advice. Time constraints and the high pressure ED environment can prevent doctors from breaking to eat and hydrate during clinical shifts, negatively impacting both personal health and professional performance (Lemaire, Wallace, Dinsmore, & Roberts, 2011). Moreover, nutritious food is especially difficult to access at some hospital cafeterias (particularly during night shifts) and at times the only option is to purchase food from a vending machine (Lemaire, et al., 2011; Winston, Johnson, & Wilson, 2008).

Factors that reduce doctors' risk of work-related stress and burnout include maintaining good work-life balance and a supportive team of immediate colleagues. Work-life balance is the ability to simultaneously and

successfully balance the temporal, emotional and behavioural demands of work and personal priorities and responsibilities (Chittenden & Ritchie, 2011). Specialists have been identified as being generally better than trainees at maintaining work-life balance, particularly given trainees' commitments to study outside working hours (Henning, Hawken, & Hill, 2009). Further to this, doctors with dependent children find it harder than their colleagues without children to balance their personal and working lives (Gander, Briar, Garden, Purnell, & Woodward, 2010). Doctors also report improved levels of psychological health and job satisfaction when they have the social support of their colleagues (Yates, Benson, Harris, & Baron, 2011).

In recognising the importance of understanding the issues affecting its members⁴, ACEM undertook this first bi-national survey, specifically tailored for EPs and EM trainees to investigate factors impacting EM workforce sustainability in Australia and New Zealand.

2.1 SURVEY AIMS

The aims of the WSS were to:

- Understand current trends within the Australian and New Zealand EM workforces regarding burnout, work-life balance, job satisfaction, work-related stressors, and personal health
- Provide ACEM members with an opportunity to feedback the issues affecting their career sustainability, and the role ACEM might have in addressing these issues, and
- Collect data that will inform analyses of the future EM workforce, in terms of sustainability, supply and demand.

3. METHOD

3.1 SETTING AND PARTICIPANTS

At 17 June 2016, 4,524 ACEM members were eligible for WSS participation. As per the ACEM online member database, eligibility criteria were:

- Residence in Australia or New Zealand, and
- Fellow of ACEM (FACEM), or
- Provisional or advanced trainee enrolled in the ACEM specialist EM training program, or
- Specialist international medical graduate (SIMG) working towards ACEM Fellowship.

The ACEM President sent eligible members an email invitation to participate. Emails were also sent to 150 Directors of Emergency Medicine (DEMs) and 256 Directors of Emergency Medicine Training (DEMTs) asking them to promote WSS participation among FACEMs and EM trainees working in their EDs.

The WSS was advertised in the ACEM Bulletin and through relevant social media and online forums, as well as via various ACEM committees. Close to the end of the survey period, a reminder email was sent to all FACEMs. Participation was voluntary and respondents were able to withdraw at any time.

The survey was open for three weeks from 22 June to 13 July 2016 using the web based survey software tool QuestionPro. Online delivery was the most effective and efficient platform to maximise participation among FACEMs and EM trainees throughout Australasia. The WSS took an average of 23 minutes to complete.

⁴ In the context of this report, an ACEM member is an ACEM Fellow (FACEM), advanced or provisional trainee (EM trainee), or an ACEM enrolled specialist international medical graduate (SIMG). Candidates and holders of the ACEM EM Certificate and Diploma were not in WSP scope.

3.2 SURVEY

3.2.1 Survey content

WSS questions and question sets were selected based on findings from the review of the literature and discussions with the WSRG to ensure relevance to Australasian workplaces. Domains covered in the survey included: burnout, hours of work, work-life balance, job satisfaction, work-related stressors, support networks and resources, personal health, career plans, and ACEM's role in addressing workforce sustainability.

The first question of the WSS was compulsory and asked whether the respondent was a FACEM, EM trainee, SIMG or other; remaining questions were voluntary. At any point the respondent could navigate away from the survey and return later if they wished to continue.

Maslach Burnout Inventory Human Services Survey (MBI-HSS)

Burnout was assessed using the MBI-HSS, a validated 22-item measure for professionals working in human services (Maslach, Jackson, & Leiter, 1996). Two examples of MBI-HSS statements are 'I feel emotionally drained from my work' and 'I have accomplished many worthwhile things in this job'. Respondents rate their agreement with statements on a scale of zero (never) to six (every day). Responses were aggregated into each of the burnout syndrome subscales: emotional exhaustion, depersonalisation and personal accomplishment. As per the MBI-HSS scoring key, respondents were given an individual score for the three subscales and subsequently categorised as 'low', 'moderate' or 'high' on each.

Medicine in Australia Balancing Employment and Life (MABEL) Survey

MABEL is a longitudinal survey of Australian doctors undertaken annually since 2008 (Taylor, Scott, & Leahy, 2015). Each year MABEL is released in four versions for (1) specialist consultants, (2) specialist trainees, (3) GPs and registrars, and (4) non-specialist doctors. MABEL questions assess job satisfaction, role preferences, types of workplaces; workload, finances, geographic location; and family circumstances. With permission, seven questions were integrated into the WSS on work-life balance, recognition for good work, remuneration, and family circumstances. A further six MABEL questions on annual leave, sick leave, job satisfaction, and changing hours of work were modified slightly for inclusion.

Health and Satisfaction Doctors at Work (SESMAT) Survey

The SESMAT Survey is conducted in France to estimate the prevalence of burnout among specialist physicians in the French medical workforce (Estryn-Behar, et al., 2010). The work-life balance statement 'the demands of work interfere with my home or family life' was derived from the SESMAT Survey.

Alcohol use

Three questions from the World Health Organization's 10-item Alcohol Use Disorders Identification Test (AUDIT) were adapted for inclusion in the WSS to provide an indication of risky alcohol consumption in the past year among respondents (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). This adaptation is not validated, despite similarity with the three-item AUDIT-Consumption (AUDIT-C) (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998). Responses to the three questions were summed to generate an overall score out of 12, with respondents' risk of alcohol-related harm categorised as 'low' (0-3), 'medium' (4-7) or 'high' (8-12). Respondents who did not report alcohol use were excluded from analysis.

Final question set

To test the survey a pilot with 30 respondents was undertaken, with a number of small changes made to the questions based on received feedback. The final WSS edition contained 97 questions, of which 85 were structured (quantitative) and 12 were narrative (qualitative).

3.3 DATA ANALYSIS

Prior to analysis, WSS records were cleaned to remove responses classified as duplicate, incomplete or out of scope, with 447 responses removed from a total of 1,634 individual surveys. Incomplete responses were defined as those who had not completed the MBI-HSS, which was situated approximately half way through the survey. Because respondents' names and membership numbers were not collected, the Project Team manually searched for duplicate responses by sorting the data by Internet Protocol (IP) address and checking for identical characteristics and question responses. Respondents identified as out of scope included ACEM members not working in Australia or New Zealand, and/or not classified as a Fellow, EM trainee or SIMG (i.e. if they selected 'other' when nominating their ACEM role).

Responses were anonymous. Potentially identifiable information was deleted from the cleaned dataset to ensure participant confidentiality.

With the exception of Table 1, to ensure anonymity SIMG responses were aggregated with responses from FACEMs. Similarly, to allow for simpler comparisons between FACEMs and EM trainees, responses from provisional and advanced EM trainees were aggregated into a single 'EM trainee' variable.

3.3.1 Quantitative data

Distributions of response frequencies are presented in the WSS report as column percentages in tables, figures and within text. Medians and interquartile ranges (IQR) and means and standard deviations (SD) are presented for ordinal and/or continuous variables among respondents (N=1,187) and in subsamples in which they are relevant. Selected ordinal variables were analysed using Mann-Whitney tests. Where appropriate, categorical variables were analysed using χ^2 tests for percentages. Analyses of WSS data were conducted using Microsoft Office Excel 15.0 (Microsoft Corporation, 2013) and IBM SPSS Statistics 24.0 (IBM Corp, 2016).

3.3.2 Qualitative data

Qualitative responses to the 12 open ended questions varied substantively. For instance, some respondents provided rich, in-depth written responses to the questions, whereas others provided brief short answer responses. Some questions elicited nearly 300 written responses, while others elicited over 1,000. As with the quantitative component of this report, because the number of responses varied across questions there are different sample sizes for each.

To account for the breadth of qualitative data, content was analysed using an inductive approach and coded into one of several general themes. Where applicable, within each general theme, responses were further coded into one subtheme. Qualitative data may have also been coded across multiple general themes where relevant.

Because of the number of responses, in-depth iterative analysis of the data was not undertaken for the purposes of this report. Therefore, the qualitative themes presented should be regarded as preliminary in nature and interpreted in this context.

3.4 LIMITATIONS

There are several limitations to the WSS. Participation was voluntary and respondents were a self-selected convenience sample, therefore results may not be representative of all ACEM Fellows, EM trainees and SIMGs. Recruitment into the survey was reliant on the membership responding to the email from the College President or actively clicking on or finding the survey link through other WSS marketing. Therefore, eligible and willing survey respondents may not have taken part. It is possible that respondents who took part are those with a strong interest in workforce sustainability and physician wellbeing and burnout. Consequently, sampling bias may be an issue when interpreting WSS results.

Given respondents were able to exit the survey prior to completion, a dropout rate of approximately 27% was observed. From examining IP addresses and respondent characteristics it was evident that some returned to complete the questionnaire; however, others did not. Considering the average completion time of 23 minutes, it is possible that dropout occurred due to survey length. Issues with QuestionPro may have also influenced completion rates. The WSS used 'save and continue later' functionality that disabled other survey logic, which may have placed extra burden on respondents. As respondents' identification was not collected, there was no robust way to ensure that the survey was not complete more than once, neither was it possible to know how many of those who dropped out returned to complete the survey at a later date.

Some issues were identified with the WSS question set during data analysis. While validated measures from the MBI-HSS and MABEL Survey provide a good indication of burnout and work-life balance, responses to questions designed in-house by the Project Team and the WSRG provide exploratory data only.

Finally, information from the ACEM member database was used to compare WSS respondents with the ACEM membership. Due to incomplete member profiles, some workforce characteristics had missing data.

4. ACEM WORKFORCE SUSTAINABILITY SURVEY (WSS) RESULTS

4.1 RESPONDENT CHARACTERISTICS

Responses were received from 1,187 of the 4,524 members surveyed, representing a participation rate of 26%. The demographic characteristics of the WSS respondents are compared with the total ACEM membership in Table 1. The predominance of state/country and age group distributions was maintained; however, in the WSS sample FACEMs were overrepresented. In addition, almost all respondents (92%) worked in public hospital emergency departments (EDs) and 25% worked in a rural, regional or remote location.

	ACEM membership (N=4524) N (%)	WSS respondents (N=1187) N (%)
Gender ^a	N (70)	N (70)
Male	2664 (593)	653 (554)
Female	1830 (40.7)	525 (44.6)
Level of ACEM training ^b		
FACEM	2140 (47.3)	700 (59.0)
Advanced EM trainee	1594 (35.2)	338 (28.5)
Provisional EM trainee	744 (16.4)	146 (12.3)
SIMG	46 (1.0)	3 (0.3)
Age group in years ^c		
Less than 30	416 (9.2)	94 (8.3)
30-39	2062 (45.6)	457 (40.5)
40-49	1385 (30.6)	374 (33.2)
50-59	527 (11.7)	173 (15.3)
60 and over	125 (2.8)	30 (2.7)
Duration of EM career ^{d, e}		
Less than 10 years	2825 (62.7)	493 (41.5)
10-19 years	1123 (24.9)	409 (34.5)
20 + years	554 (12.3)	233 (19.6)
Jurisdiction ^f		
АСТ	64 (1.4)	14 (1.2)
NSW	1132 (25.2)	242 (21.6)
NT	70 (1.6)	16 (1.4)
QLD	984 (21.9)	200 (17.8)
SA	244 (5.4)	72 (6.4)
TAS	90 (2.0)	39 (3.5)
VIC	975 (21.7)	258 (23.0)
WA	451 (10.0)	110 (9.8)
New Zealand	488 (10.8)	171 (15.2)

 Table 1 Workforce characteristics of the ACEM membership and WSS respondents

^a Data missing for ACEM membership (n=30) and WSS respondents (n=9). Percentages exclude missing data

^b For the purposes of comparison in the remainder of this report, data for level of ACEM training were aggregated into two groups and labelled ACEM role, i.e. SIMGs were aggregated with FACEMs and advanced EM trainees were aggregated with provisional EM trainees

^c Data missing for ACEM membership (n=9) and WSS respondents (n=59). Percentages exclude missing data

^d Duration of EM career data are not directly comparable between the two groups and should be interpreted in this context. For the ACEM membership, career length was generated from the date of College registration to WSS distribution. For WSS respondents, duration of EM career was self-reported

^e Data missing for ACEM membership (n=22) and WSS respondents (n=52). Percentages exclude missing data

^f Data missing for ACEM membership (n=26) and WSS respondents (n=56). Percentages exclude missing data

4.2 BURNOUT

To measure burnout among the ACEM membership, respondents rated their agreement with statements on the MBI-HSS. Responses were scored and aggregated into the three MBI-HSS subscales to estimate the prevalence of emotional exhaustion, depersonalisation and personal accomplishment among the workforce. Emotional exhaustion indicates emotional overextension and exhaustion due to work. The classification depersonalisation indicates unfeeling and impersonal responses to recipients of the respondent's services, care, treatment or instruction, such as objectification of patients or students. By contrast, personal accomplishment indicates feelings of competence, success and achievement in the respondent's work with people (Maslach, Jackson & Leiter, 1996).

4.2.1 Emotional exhaustion

Ninety-five per cent of respondents completed the emotional exhaustion subscale of the MBI-HSS. Among these, 39% (n=437) were classified as having high emotional exhaustion, with 31% (n=350) classified as moderate and 30% (n=342) as low. Figure 1 presents the distribution of emotional exhaustion scores according to ACEM role. The differences between the two groups were significant, $\chi^2(2, N=1129) = 8.87$, p < 0.05. A higher percentage of EM trainees than FACEMs were classified in the high emotional exhaustion group and a higher percentage of FACEMs than EM trainees were classified in the low emotional exhaustion group (Figure 1).



Figure 1 Distribution of MBI-HSS emotional exhaustion, stratified by ACEM role

4.2.2 Depersonalisation

The MBI-HSS depersonalisation subscale was completed by 97% of respondents, with 32% (n=374) classified in the high depersonalisation group. Thirty per cent (n=343) were classified as having moderate depersonalisation, while 38% (n=437) were classified as low. Figure 2 shows the distribution of depersonalisation stratified by ACEM role. The differences between the two groups were significant, $\chi^2(2, N=1154) = 19.59$, p < 0.001. A higher percentage of EM trainees than FACEMs were classified in the high depersonalisation group and a higher percentage of FACEMs than EM trainees were classified in the low depersonalisation group (Figure 2).



Figure 2 Distribution of MBI-HSS depersonalisation, stratified by ACEM role

4.2.3 Personal accomplishment

Of respondents, 95% completed the personal accomplishment subscale of the MBI-HSS, with 47% (n=530) classified as having high personal accomplishment in the workplace. Thirty-one per cent (n=347) were classified as having moderate levels of personal accomplishment and 23% (n=254) were classified as low. Figure 3 shows that a higher percentage of FACEMs than EM trainees were classified in the high personal accomplishment group and a higher percentage of EM trainees than FACEMs were classified in the low personal accomplishment group. The differences between the two groups were significant, χ^2 (2, N=1131) = 6.69, p < 0.05.



Figure 3 Distribution of MBI-HSS personal accomplishment, stratified by ACEM role

4.3 HOURS OF WORK

Respondents indicated the number of hours usually worked per week in all EM-related workplace settings. Across all settings the reported median (paid and unpaid) hours worked per week was 44 (IQR 40-50 hours). For FACEMs (n=702) the reported median hours worked per week was 44 (IQR 39-50 hours) and for EM trainees (n=483) the reported median hours worked per week was 45 (IQR 40-50 hours). Sixty-four per cent of respondents reported working over 40 hours per week and a higher percentage of EM trainees than FACEMs reported working more than 40 hours per week (72% vs. 59%), $\chi^2(1, N=1185) = 22.47$, p < 0.001.

Continuous responses for the number of hours worked were aggregated into three groups: less than 37.5 hours per week (classified as part-time equivalent), 37.5 to 45 hours per week (full-time equivalent) and greater than 45 hours per week (excess overtime). Figure 4 shows the aggregated distribution of hours worked per week, stratified by ACEM role. The differences between the two groups were significant, $\chi^2(2, N=1185) = 25.02$, p < 0.001. A higher percentage of FACEMs than EM trainees reported working part-time equivalent hours, whereas higher percentages of EM trainees than FACEMs reported working full-time equivalent and excess overtime hours (Figure 4).



Figure 4 Distribution of hours worked per week, stratified by ACEM role

A higher percentage of female than male respondents reported working part-time equivalent hours, as shown in Figure 5. The differences between male and female respondents were significant, $\chi^2(2, N=1177) = 23.84$, p < 0.001.





Thirteen per cent (of 1,157 respondents) reported that one or more hours of their most recent usual week at work was paid as overtime. However, of 1,142 respondents, 64% reported working one or more additional unpaid hours at work (median=2 hours, IQR 0-5 hours).

4.3.1 Preferences for changing usual weekly working hours

Respondents were asked to indicate whether they would like to change their usual hours of work (e.g. increase or decrease hours). Of the 1,078 responses, 41% (n=441) indicated that they would like to change their working hours and, of these, 426 provided comments specifying their preferred change. From these, five general themes emerged: 'decrease hours', 'changes to clinical and clinical support time (CST)', 'reduce unpaid time', 'increase hours' and 'more roster flexibility'. Themes are presented from highest to lowest frequency in the left column of Table 2 and example quotes are provided in the right column of the table to contextualise the themes. The most common theme was 'decrease hours': 295 respondents expressed a desire to reduce the number of hours they worked per week (Table 2).

Theme	Example qualitative comments (n=426)			
Decrease hours (n=295)	Decrease shifts to 8 hours from 10 hours, decrease work from 0.75 FTE to 0.5 FTE (FACEM, VIC) I want to decrease the number of hours worked – but cannot due to my immigration status I must continue working full-time in the ED until I complete four years of service (FACEM, QLD) Would like to go part-time due to other pursuits. However, staff shortages mean the Department is unlikely to allow this (EM trainee, SA)			
Changes to clinical and/or CST (n=80)	I would prefer to be rostered sufficient clinical support time to do the things I have been asked to do. This wou result in a reduction in clinical time to 25-30 hours most weeks and 10-15 hours clinical support time (FACE ACT) More non-clinical time. To maintain satisfactory teaching and training and WBAs etc., you need more [non- clinical] time. The current state of job freeze, doesn't allow for this (FACEM, WA) Would like to have paid non-clinical time to complete various tasks – e.g. WBAs, follow up of patients/results, preparation for teaching sessions (EM trainee, TAS)			
Reduce unpaid time (n=66)	 I would like to be paid for the work that I undertake (FACEM, VIC) I would like to work what I'm paid, not more. In reality most of the 'efficiency' achieved by medical administrators is by restructuring in a way [that] extracts unpaid work. This is not efficiency, it is abuse (FACEM, QLD) It would be nice to reduce the unpaid time, as a Director, I do many more hours than I am paid (FACEM, QLD) 			
Increase hours (n=61)	I would like a greater public appointment but at present the hours are not available in a permanent capacity in the area that I work. Please be aware that [I am] a new Fellow who qualified in 2015 in a metropolitan area (FACEM, VIC) I would like to increase my hours but the intensity of the unmanageable workload make[s] this untenable and unsustainable (FACEM, NSW) Increase my usual 30 hours per week to alternating [between] 30 and 40 hours per week (FACEM, NSW)			
More roster flexibility (n=59)	Shorter shifts, with dedicated breaks An accredited hospital [needs] to provide healthier working hours, and shifts that are distributed in different times of the day I have noticed hospitals puts registrars on afternoon and night shifts more than mornings (EM trainee, VIC) Ideally fewer weekends, and more days. I currently work 3 in 4 weekends, and almost exclusively evening and night shifts (EM trainee, TAS) As I turn 60 this year, I intend to STOP doing the evening shift (approx. once per week) followed by on call/proximate call-back. Instead, I will do the other evening shift that goes home at midnight, but cannot be called back. Then will stop doing all evening shifts within 18 months (FACEM, QLD)			

Table 2 Preferences for changing usual weekly working hours, themes and quotes

Note: Where applicable, respondent quotes were coded across more than one theme

4.3.2 Taking breaks at work

The ease of taking breaks during shifts at work was assessed by asking respondents 'how easy or difficult is it for you to take at least one break (e.g. for meals) while you are working?' Thirty-nine per cent reported that taking a break was difficult, 30% reported it was very difficult, 28% reported it was easy and 4% very easy. Figure 6 shows the distribution of responses, stratified by ACEM role. The differences between the two groups were significant, $\chi^2(3, N=1140) = 15.92$, p < 0.01. A higher percentage of EM trainees than FACEMs reported that taking a break at work was very difficult, and higher percentages of FACEMs than EM trainees reported it was easy and very easy. The same percentage of FACEMs and EM trainees (39% each) reported that it was difficult to take a break at work (Figure 6).



Figure 6 Ease of taking a break at work, stratified by ACEM role

Where applicable, respondents were asked to comment on any barriers to eating well and staying hydrated at work. Of 961 responses, 95% (n=916) reported barriers. From these, seven general themes were identified: 'time constraints related to ED demand', 'work conditions', 'being in a senior and supervisory role', 'limited access to food/water at work', 'ED culture', 'performance indicators' and 'personal planning'. Themes are presented from highest to lowest frequency in the left column of Table 3 and example quotes are provided in the right column to give thematic context. Of all the general themes identified, the most common was 'time constraints related to ED demand', with 737 respondents indicating that barriers to eating well and staying hydrated at work were related to demand and time pressures (Table 3). Five per cent of respondents (n=45) commented that there were no workplace barriers to eating well and staying hydrated.

Theme	Subthemes Qualitative data examples (n=916)				
Time constraints related to ED	Time pressures. No replacements. Go on break and another 4 hour KPI is broken (FACEM, VIC) Workload, feeling guilty for leaving the floor when others are working hard and patients are waiting (EM trainee, NZ)				
demand (n=737)	Feeling that you can't leave the floor because it's so busy, despite knowing that if you eat you will feel better and be more productive (EM trainee, VIC)				
	Never-ending patients and no senior staff to relieve (FACEM, NSW)				
	staffing, 45%	Constant time pressures and no regulated breaks (FACEM, VIC)			
	Unprotected	Looking unprofessional, spills [on the floor] (FACEM, VIC)			
Work conditions	breaks, 34%Need to leave clinical areas to be able to eat or drink. Water bottles frowned uponED floorWA)				
(n=395)	policies, 10%	Night shift next to impossible to take a break (FACEM, NZ)			
	Shift work, 9%	Shift work and the sleep deprivation makes staying organised enough to prepare healthy meals difficult (EM trainee, QLD)			
	Lack of facilities, 3%	lf you drink enough to stay hydrated, then you have to find time for a toilet break and with the limited staff facilities in our department, this can be a problem (FACEM, QLD)			
Being in a	I am the trouble shooter for all problems small or large and it seems that others hand over responsibility for everything to the FACEM and do not respect their need for breaks (FACEM, TAS)				
senior & supervisory role	Feeling that you could get 'just one more' patient seen and sorted to try and keep [the ED] under control, making sure junior staff eat first (FACEM, NZ)				
(n=90)	Difficulty escaping the floor – even when it's 'quiet', as the senior decision maker, it can be hard to escape the queue of juniors and nursing staff who have a list of problems for me to solve (FACEM, NSW)				
Limited	No fresh (or even packaged) food available at work. Vending machines in waiting room only (EM trainee, VIC)				
food/water	Poor food choices available at the hospital, hospital cafe only open until 8 pm (EM trainee, NZ)				
at work (n=81)	There is only one water station in the department. I advise staff that they must take their breaks, there will always be patients waiting to be seen (FACEM, NZ)				
	Unfortunately, some people have a martyr type thinking which is dangerous – this in turn makes other staff … feel guilty for taking their well-earned breaks (FACEM, NZ)				
eD culture (n=66)	Culture of working through it (EM trainee, VIC)				
	The job is a barrier It is not that there are barriers, the whole ethos of the job is set up to squeeze every last second of your shift from you. There needs to be a culture change for there to be access to breaks (EM trainee, NSW)				
Performance	Demands from admin to meet KPIs – T2T, NEAT target. Not enough time to complete my clinical support duty within my clinical support hours (yes, I starve on my clinical support days too) (FACEM, VIC)				
indicators	Patients, time pressures, NEAT (FACEM, QLD)				
(Time pressures with 4 hour rule (always having to chase the results of subsequent patients). Not wanting patients to have to wait longer than necessary (EM trainee, NSW)				
Personal	Personal, i.e. (FACEM, QLD)	I do not have the ability to walk away and come back refreshed, even though I know I should			
planning (n=29)	Being organised enough to make something healthy to take to work. Getting too hungry and eating unhealthy snacks that someone has brought into share (EM trainee, VIC)				
	Lack of self-management (FACEM, NT)				

Table 3 Barriers to eating well and staying hydrated at work, themes and quotes

Note: Where applicable, respondent quotes were coded across more than one theme, but only one subtheme

4.4 WORK-LIFE BALANCE

Respondents rated the strength of their agreement with two statements pertaining to work-life balance. The first was 'the balance between my personal and professional commitments is about right'. Among 1,166 respondents, 44% agreed/strongly agreed, 18% were neutral and 39% disagreed/strongly disagreed with the statement. Responses are shown in Figure 7, stratified by ACEM role. The differences between the two groups were significant, $\chi^2(4, N=1166) = 49.88$, p < 0.001. Higher percentages of FACEMs than EM trainees agreed with the statement and higher percentages of EM trainees than FACEMs disagreed with the statement (Figure 7).



Figure 7 Balance between personal and professional commitments, stratified by ACEM role

The second statement pertaining to work-life balance was 'the demands of work interfere with my home and family life'. Among respondents, 66% agreed/strongly agreed with this statement and 17% disagreed/strongly disagreed (18% were neutral). Responses are presented in Figure 8, stratified by ACEM role. The differences between the two groups were significant, $\chi^2(4, N=1163) = 25.10$, p < 0.001. Higher percentages of EM trainees than FACEMs agreed with the statement and higher percentages of FACEMs than EM trainees disagreed (Figure 8).



Figure 8 Demands of work interfere with home and family life, stratified by ACEM role



Respondents rated their general work-life balance on a scale from poor to excellent. Among 1,182 respondents, 35% rated their work-life balance as fair, 32% rated it as good and 16% as very good. Figure 9 shows respondents' self-rated work-life balance, stratified by ACEM role. The differences between the two groups were significant, $\chi^2(4, N=1182) = 73.95$, p < 0.001. Higher percentages of EM trainees than FACEMs rated their work-life balance as fair and poor, whereas higher percentages of FACEMs than EM trainees rated their work-life balance as very good and excellent (Figure 9).



Figure 9 Self-rated work-life balance, stratified by ACEM role



Figure 10 shows the number of weeks of annual leave (excluding conference or study leave) taken by FACEMs and EM trainees in the 12 months preceding the WSS, from no annual leave to six or more weeks annual leave. Ninety-five per cent reported taking at least one week of leave in the past year (98% of FACEMs vs. 91% of EM trainees, $\chi^2(1, N=1165) = 22.05$, p < 0.001). As shown in the figure, there were differences in the number of weeks of annual leave taken between FACEMs and EM trainees, $\chi^2(6, N=1165) = 73.27$, p < 0.001 (Figure 10).





Respondents commented on the ease of arranging leave with their employers. The most common responses with regards to arranging annual leave were easy (32%), neutral (28%) and difficult (25%). Figure 11 shows these responses stratified by ACEM role. The differences between the two groups were significant, $\chi^2(4, N=1179) = 49.86$, p < 0.001. Higher percentages of EM trainees than FACEMs reported that arranging leave was difficult and very difficult, whereas higher percentages of FACEMs than EM trainees reported arranging leave was easy and very easy (Figure 11).



Figure 11 Ease of arranging leave, stratified by ACEM role

4.5 WORK SATISFACTION

Respondents rated their overall satisfaction with EM work; 52% reported that they were moderately satisfied. Overall satisfaction with work is presented in Figure 12, stratified by ACEM role. The differences between the two groups were significant, $\chi^2(4, N=1174) = 32.33$, p < 0.001 (Figure 12).



Figure 12 Overall satisfaction with EM career, stratified by ACEM role

Respondents also rated their satisfaction with various aspects of daily practice in their primary place of work: rostering, staffing levels, colleagues, recognition for good work, remuneration, career progression, and time allocated to learning and/or core skill maintenance. In addition, FACEMs were specifically asked to rate their satisfaction with their ability to focus on chosen projects in CST. Respondents rated each out of a possible five points (1=very dissatisfied, 2=dissatisfied, 3=neutral, 4=satisfied and 5=very satisfied) and a mean score was derived, with higher means implying higher satisfaction with each aspect. Table 4 presents the mean job satisfaction levels for FACEMs, EM trainees and respondents overall. There were differences in the mean scores between FACEMs and EM trainees for rostering, remuneration and career progression (Table 4).

Table 4 Mean job satisfaction levels, stratified by ACEM role

	FACEM	EM trainee	All
	Mean (SD)	Mean (SD)	Mean (SD)
Rostering (n=1170) ^a	3.8 (1.1)	3.2 (1.1)	3.5 (1.1)
Staffing levels (n=1171)	2.8 (1.4)	2.9 (1.2)	2.8 (1.3)
Colleagues (n=1177)	4.1 (0.9)	4.1 (0.9)	4.1 (0.9)
Recognition for good work (n=1180)	3.2 (1.2)	3.2 (1.2)	3.2 (1.2)
Remuneration (n=1178) ^b	3.9 (1.1)	3.4 (1.1)	3.7 (1.1)
Career progression (n=1176) ^c	4.0 (1.0)	3.6 (1.1)	3.8 (1.0)
Time allocated to learning/core skill maintenance (n=1170)	3.2 (1.1)	3.1 (1.1)	3.2 (1.1)
Ability to focus on chosen projects in CST (n=664)	3.2 (1.2)		

Note: Mean scores have been rounded to one decimal point

-- Not applicable

^a U = 115566, p < 0.001, r = .27^b U = 124319, p < 0.001, r = .23^c U = 130719, p < 0.001, r = .20

4.5.1 Enjoyment at work

Respondents were asked to comment on what they most enjoyed about work in EM. Almost all (92%) participants provided a response. From these, eight general themes emerged: 'variety', 'clinical work', 'patient care', 'team work', 'education', 'meaning', 'expertise', and 'work conditions'. Themes are presented from highest to lowest frequency in the left column of Table 5 and example quotes are provided in the right column to give context to the themes. The most common theme was 'variety', with comments from 475 respondents indicating that they most enjoyed the variety of EM practice and the challenging, diverse and dynamic nature of the work (Table 5).

Theme	Example qualitative comments (n=1097)
	Challenging clinical work, fast-paced and wide variety of patients and disease, educating and training junior doctors, working with an enthusiastic multidisciplinary team (FACEM, SA)
Variety (n=475)	I love the changing nature/variability and the very real chance to make significant positive outcomes I also very much enjoy the high acuity situations and working in a resus team (EM trainee, QLD)
	I love the opportunity to teach, interact[ing] with such a diverse group from medical student to senior registrar/fellow consultants, and see[ing] such a fascinating and diverse patient load (FACEM, QLD)
Clinical work	Clinical work in ED, treating patients first hand, treating acute pathologies to patient satisfaction and seeing the immediate results (FACEM, VIC)
(n=362)	Clinical work, problem-solving, procedures, opportunity to learn from other clinicians (EM trainee, NSW)
	Procedural things, reducing fractures/dislocations, suturing wounds the challenge of diagnosis (EM trainee, QLD)
	Patient care and the personal vignettes on life it affords Attempting to explain to patients (and their families) what is going on and how their journey through the complex healthcare system may look (FACEM, NSW)
Patient care (n=341)	Actually seeing patients; making a difference in my small regional community (FACEM, WA)
	Patient contact. I love dealing with patients and their families, I love educating patients and empowering them in their health. I enjoy the teaching from dedicated consultants and the 'buzz' of an emergency situation that has gone well (EM trainee, QLD)
	Case mix, 'making a difference', interaction with all specialities, excellent nursing and medical colleagues (EM trainee, VIC)
Team work (n=313)	Providing excellent patient care, supporting junior medical staff and providing education to junior staff. Working with a highly skilled team (FACEM, QLD)
	Working as part of extended ED team, camaraderie at work, being part of an innovative and proactive consultant group (FACEM, WA)
Education	Teaching (particularly on the shop floor), leadership development of FACEMs and other senior staff. Service development and improving efficiency in emergency care (FACEM, SA)
(n=231)	Teaching/mentoring continuous learning/CPD/self-development (FACEM, NSW)
	Daily challenge, constant learning and teaching opportunities, rewarding (EM trainee, WA)
Meaning	Being involved in primary healthcare [And serving] a population that can't always afford healthcare. Teaching junior staff (medical and nursing) so they can improve their clinical skills Treating the sickest patients [and] having an immediate effect on people's lives, whether that is giving paracetamol to a febrile child, having a discussion about end of life care, resuscitating a sick patient etc. (FACEM, VIC)
(n=218)	Enjoy the clinical work and how easy it is to make a difference to someone's life in small ways (EM trainee, NSW)
	People. One of the things I had to learn was to take reward from lower acuity presentations. That was good for me as a person – doing something because someone else was concerned rather than serving one's own needs to perform well (FACEM, NSW)
	Actually diagnosing and managing undifferentiated patients and teaching juniors. Mentoring. Gaining new skills and becoming a better doctor myself. Helping the sick and disadvantaged (FACEM, NSW)
Expertise (n=129)	Aeromedical retrieval, treating and managing patients pre-hospital [and] performing procedures in the field. Working with pilots/air crewmen [and] learning about aviation as well as medicine (EM trainee, QLD)
	Research – has allowed me to pursue some very interesting, unexplored ED questions which has been fascinating and allowed me to run very complex projects (FACEM, VIC)
	Clocking on and off, not taking work home (EM trainee, NSW)
Work conditions (n=113)	I like the fact I can walk away after my shift and not worry about my patients. I like the flexibility of being able to pick up extra shifts whenever I want, or change shifts when I need to (FACEM, NSW)
(1-115)	A very good balance between non-clinical and clinical responsibilities in my current role allows me to sustain enthusiasm for clinical work (FACEM, VIC)

Table 5 Most enjoyable aspects of work, themes and quotes

Note: Where applicable, respondent quotes were coded across more than one theme

To contrast the qualitative question (Table 5) regarding the most enjoyable aspects of EM work, respondents were also asked the question 'what do you not enjoy about your work?' Almost all (91%) participants provided a response. From these, nine general themes emerged: 'work conditions', 'issues impacting clinical work', 'hospital dynamics and conflict', 'health bureaucracy and system inefficiencies', 'ED demand', 'factors related to patients and the public', 'stress', 'access block and flow management', and 'training and teaching obligations'. Themes are presented from highest to lowest frequency in the left column of Table 6. Example quotes are provided in the right hand column to give thematic context. The most common theme was 'work conditions', with comments from 502 respondents classified in this theme, which included responses relating to staffing levels, shift work, salary and entitlements, career prospects and sustainability, as well as issues relating to a lack of CST (Table 6).

Theme	Example qualitative comments (n=1085)		
	Demand vs. staffing fighting continually for adequate staffing (FACEM, WA)		
conditions	Poor College/hospital support for research, and expectation that it is performed in personal time (FACEM, QLD)		
(n=502)	Countless unpaid overtime to meet both clinical and clinical support demands. Having to look elsewhere in order to progress in my career. The feeling that a profession I love may not be a sustainable one. (FACEM, VIC)		
Issues	Dealing with decisions of managers and bureaucrats that impede patient care rather than support it (FACEM, SA)		
clinical work	The huge amount of non-clinical work, most of which could be done by admin staff (FACEM, QLD)		
(n=428)	Being overwhelmed for hours at a time, taking shortcuts and significant clinical risks (FACEM, NZ)		
Hospital	Rudeness of inpatient registrars and nurses to my staff (FACEM, VIC)		
conflict	Dreadful leadership, leading to poor team dynamics, poor professional standing with other specialties (FACEM, TAS)		
(n=383)	The lack of hospital-wide recognition of this specialty (EM trainee, NSW)		
Health	Dealing with bureaucrats and [an] executive who only think about money (FACEM, WA)		
& system inefficiencies	Failure of government to adequately address health system efficiency and access block. I don't think this will ever be fixed until we have a single funder of health services (FACEM, TAS)		
(n=273)	Department overcrowding making caring for patients substandard (FACEM, SA)		
ED demand	EVERY shift on the floor is busy now with little time to have conversation with colleagues, let alone do anything other than keep seeing the queue of patients that have been waiting excessive amounts of time (FACEM, WA)		
(n=257)	The workload imbalance with the rest of the hospital (FACEM, WA)		
	Constantly feeling like there's not enough time, not enough staff, not enough beds (EM trainee, NT)		
Factors	Dealing with increasingly violent, intoxicated or drug affected patients routinely – and the fact that they remain an ED problem Increasing need to soak up mental health patients due to lack of appropriate services (FACEM, WA)		
patients & the public (n=226)	Being expected to be a substitute for general practice. Other specialities seeing ED as [a] 'lackey' Attitude of public that we are just there for their convenience. The College and city centric FACEM's claiming that GP cases don't represent a significant workload (FACEM, NSW)		
	Poor public education about what constitutes an emergency (EM trainee, NSW)		
Stress	Effect that shift work and the constant stress/busyness has on [my] own physical and mental health (EM trainee, QLD)		
(n=217)	'Conveyor belt' model placing enormous stress on medical and nursing staff (EM trainee, VIC)		
	Erratic sleeping and meal times. Lack of routine. Inability to plan ahead Chronic fatigue (EM trainee, NSW)		
Access block	Patients in inappropriate unsafe areas due to bed block (FACEM, NSW)		
& flow management	Political pressures re access block, NEAT targets; having to improve morale among staff due to above; refereeing difficult interactions with inpatient units (FACEM, SA)		
(n=201)	Politics. Bed block. Aggressive patients. Bed block again (FACEM, SA)		
Training &	Teaching requirements have overwhelmed non-clinical time – students, interns/residents, registrars, WBA/DOPS etc. (FACEM, VIC)		
teaching obligations (n=86)	Lack of flexible, dynamic training program that fails to incorporate past experience and learning goals for the individual (EM trainee, QLD)		
(n=86)	The conflicting roles of service provision vs. teaching (dropping the latter makes us *much* more efficient at the former) (EM trainee, ACT)		

Table 6 Non-enjoyable aspects of work, themes and quotes

Note: Where applicable, respondent quotes were coded across more than one theme

4.6 WORK-RELATED STRESSORS

From a list of 12 options, potential day-to-day stressors were: IT issues, continuing professional development (CPD), ACEM training requirements, complex patients (e.g. aggressive or violent), unrealistic patient or community expectations, negative media comments, conflicts within the work team, ED overcrowding, pressures from hospital administration and executives, threat of litigation, conflicts with other clinical teams in the hospital, and access block. Respondents ranked the three most stressful aspects of day-to-day work in the ED. Figure 13 shows the numerical distribution of stressors from least to most common, with the three most frequently ranked stressors being ED overcrowding (n=722), access block (n=602) and conflicts with other clinical teams (n=516).

Also shown in Figure 13 are the percentages of FACEMs (n=703) and EM trainees (n=484) that ranked each stressor. For instance, a higher percentage of FACEMs than EM trainees ranked access block as one of their top three day-to-day stressors, and a higher percentage of EM trainees than FACEMs ranked ACEM training requirements as one of their top three stressors.



Figure 13 Day-to-day workplace stressors, stratified by ACEM role

Respondents were also able to provide further comments on work-related stressors. Seven general themes were identified from 744 comments: 'practice and performance' (n=386), 'work conditions' (n=241), 'communication issues and conflict' (n=177), 'ED overcrowding and system inefficiencies' (n=168), 'teaching and training pressures' (n=100), 'public and patient factors' (n=91), and 'executive priorities and pressures' (n=77). Within four of these general themes, up to eight subthemes were identified, which are summarised in Table 7.

Practice & performance (n=386)	Work conditions (n=241)	Communication & conflict (n=177)	Public & patient factors (n=91)
KPIs, 19%	Staffing & rostering, 57%	Inpatient teams, 28%	Vulnerable/complex, 42%
Limited resources, 19%	Salary & entitlements, 14%	Recognition/support, 27%	Patient expectations, 30%
Under-skilled staff, 14%	Workload, 8%	Unprofessionalism, 26%	High acuity, 11%
Admin/IT issues, 13%	Insufficient CST, 7%	Team conflict, 9%	Threat of litigation, 11%
Supervision, 13%	Shift work, 7%	Management/seniors, 8%	GP patients, 7%
Access block, 11%	Career planning, 4%	Interactions, 2%	
Interruptions, 6%	Limited facilities, 3%		
Decision-making, 5%			

Table 7 List of subthemes from	four qualitative themes	relating to other	workplace stressors
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Note: Where applicable, respondent quotes were coded across more than one theme, but only once in each subtheme. Therefore, percentages for each column total 100%, except in cases where figures have been rounded

4.6.1 Stressors related to aggressive presentations

Respondents indicated the frequency of experiencing patient initiated aggression and violence. Aggression was measured by asking 'approximately how many times in the last 12 months have you felt threatened by a patient?' Violence was measured by asking 'approximately how many times in the last 12 months have you been physically assaulted by a patient?'

Respondents reported feeling threatened once every two to four months (23%), twice a year (17%), once a month (14%), two to three times per month (14%), never (12%), once a year (12%) and once or more per week (8%). Table 8 shows that a higher percentage of EM trainees than FACEMs reported feeling threatened by a patient in the past year, $\chi^2(1, N=1167) = 19.21$, p < 0.001. When stratified by gender, a higher percentage of females than males reported feeling threatened in the past year (91% vs. 85%), $\chi^2(1, N=1160) = 10.15$, p < 0.01.

Respondents most commonly reported experiencing no assault (57%). However, the remainder reported being assaulted once (20%), twice a year (13%), once every two to four months (6%), once per month (3%) and two to four times per month (1%). A higher percentage of EM trainees than FACEMs reported experiencing assault in the past year, $\chi^2(1, N=1164) = 4.70$, p < 0.05 (Table 8). When stratified by gender, there was no significant difference between males and females (25% vs. 19%).

Sixty-seven per cent were aware of the process to follow if they were threatened or assaulted in their workplace. A higher percentage of FACEMs than EM trainees indicated an awareness of their workplace incident report process, $\chi^2(2, N=1182) = 65.45$, p < 0.001 (Table 8).

4.6.2 Critical incident debriefing

Table 8 shows that critical incident debriefing (formal, informal, or both) was available to almost threequarters of respondents. Thirty-nine per cent indicated that their workplace offered informal debriefing sessions by senior ED medical or nursing staff, while 7% indicated that formal debriefing sessions by trained staff were offered and 16% indicated both formal and informal debriefing sessions were available. Twenty-two per cent reported that their workplace offered no debriefing; 12% did not know. A higher percentage of FACEMs than EM trainees reported that critical incident debriefing was available, $\chi^2(1, N=982) = 7.00, p < 0.01$. A higher percentage of EM trainees than FACEMs indicated a belief in the value of debriefing following a critical incident, $\chi^2(1, N=1017) = 21.37, p < 0.001$ (Table 8).

	FACEM	EM trainee	All
	%	%	%
Felt threatened at least once by patient in past year	84.1	92.7	87.7
Physically assaulted at least once by patient in past year	40.7	47.1	43.3
Aware of incident report process	75.7	55.4	67.4
Any critical incident debriefing	76.9	69.3	74.0
Value in critical incident debriefing	86.0	94.9	89.8

Table 8 Patient-related workplace stressors, stratified by ACEM role

4.6.3 Employer methods to relieve stress

Respondents were asked to provide examples of methods used by employers (other than critical incident debriefing) to ameliorate work-related stress: 826 commented. From these comments, 12 general themes were identified: 'none, unknown, or insufficient methods', 'employee assistance programs (EAPs) and counselling', 'team culture/informal peer support', 'mentoring/formal peer support', 'supportive leadership', 'social events', 'resources for wellbeing', 'improved conditions', 'leave entitlements', 'professional development', 'debriefing', and 'free food/coffee'. Themes are presented from highest to lowest frequency in the left column of Table 9, with example quotes provided to give context for each theme.

The most common theme was 'none, unknown, or insufficient methods': 414 respondents in this theme noted that employers did not use other methods to relieve work-related stress, or that other methods were unknown to employees, or deemed by respondents to be insufficient (Table 9). Note that some stress reduction methods mentioned by respondents were neither initiated nor provided by the primary workplace (EAP being the exception), rather respondents reported that these were driven by staff themselves. Where employers provide staff with formal stress management methods, respondents reported that adequate time to attend offsite programs was a barrier to access.

Theme	Qualitative data examples (n=826)		
None, unknown, or insufficient methods (n=414)	Basically nothing. We just have to suck it up (FACEM, TAS) Ha-ha! You're kidding, right? Seriously, none. (FACEM, QLD) Clinical work is not the stressor in majority of cases in our workplace (FACEM, NSW)		
EAPs & counselling (n=121)	Access to a counselling service is provided as per usual workplace processes – I don't know anyone in ED that has used it! (FACEM, WA) Offers employee assistance programme (counselling) but to be honest, a better strategy would be to resource the department properly which would target the root cause (FACEM, NZ)		
Team culture/ informal peer support (n=91)	Culture of openness and able to discuss with colleagues and seniors (EM trainee, QLD) I am fortunate to work with a fantastic team of colleagues who all value and respect each other, and work within a hospital which has excellent inter specialty relationships (FACEM, WA)		
Mentoring/ formal peer support (n=65)	Access to a mentor, who is not associated with training/teaching (EM trainee, VIC) Mentor system – all EM trainees are paired up with a FACEM who is independent from their DEMT/clinical supervisor – and we are encouraged to meet regularly (EM trainee, VIC)		
Supportive leadership (n=61)	Approachable DEM in the private sector. I'm not discouraged from discussing issues with more experienced colleagues which is the greatest benefit (FACEM, VIC) My FACEM consultants are very supportive and are always there when the trainees need them however there are still situations beyond their control and we just have to accept and deal with the circumstances (EM trainee, NSW)		
Social events (n=49)	Monthly senior medical meetings, off site, off the record, dinner included! (FACEM, VIC) Regular events both during work time and after work e.g post winter celebration (FACEM, QLD)		
Resources for wellbeing (n=46)	Ironically they have a massage service, but you have to go to them! When are we able to leave the ED? There isn't even a doctor's common room and the ED sees 57,000 presentations a year! (FACEM, QLD) Wellness initiative consisting of weekly emails/links to relevant talks (FACEM, WA)		
Improved conditions (n=41)	We have medical scribes so I can focus on medicine, teaching, doing procedures, and run the department. It is so liberating and enjoyable to outsource my time at the computer grappling with IT stuff (FACEM, QLD) Everyone pitches in in times of roster stress, personal or family illness or to meet other needs (FACEM, VIC)		
Leave entitlements (n=35)	Access to leave is pretty good in my hospital (FACEM, VIC) Granting requested leave (EM trainee, NZ)		
Professional development (n=34)	Employe[r] pays for [Medical Protection Society] membership – they offer short courses (FACEM, NZ) Workplace harmony training (FACEM, NSW)		
Debriefing (n=17)	Individual and group hot and cold debriefs. EPs are usually happy to discuss cases and shifts if they have the time (EM trainee, VIC) Yes to debriefing, psychological first aid etc. No to forced critical incident stress debrief (FACEM, QLD)		
Free food/ coffee (n=10)	Free coffee machine (FACEM, NSW) Free pizza (FACEM, VIC)		

Table 9 Methods used by the primary workplace to help with stress, themes and quotes

Note: Where applicable, respondent quotes were coded across more than one theme

4.7 WORK-RELATED SUPPORT NETWORKS

Respondents rated their agreement with five statements pertaining to support in the workplace, as presented in Table 10. Respondents rated their satisfaction for each statement out of five points (1=strongly disagree, 2=disagree, 3=neither, 4=agree and 5=strongly agree) and a mean score was derived, with higher mean scores implying stronger agreement. There were differences in the mean agreement scores between FACEMs and EM trainees on all but one measure, with FACEMs showing stronger agreement than EM trainees (Table 10).

	FACEM	EM trainee	All
	Mean (SD)	Mean (SD)	Mean (SD)
I have a support network of other work colleagues (n=1152) ^a	3.9 (1.0)	3.7 (1.1)	3.8 (1.0)
I have colleagues I can confide in (n=1153) $^{\rm b}$	4.1 (1.0)	3.9 (1.0)	4.0 (1.0)
I can rely on colleagues to help if I ask (n=1152) $^{\circ}$	4.1 (0.9)	3.9 (0.9)	4.0 (0.9)
I can talk to director or line manager if I have a problem (n=1153) $^{\rm d}$	3.8 (1.2)	3.8 (1.1)	3.8 (1.2)
I have opportunities to explore the subspecialty of my choice (n=1094) $^{\rm e}$	3.4 (1.2)	3.2 (1.1)	3.3 (1.2)

Table 10 Mean support network agreement levels, stratified by ACEM role

Note: Mean scores have been rounded to one decimal point

^a U = 142308, p < 0.01, r = .10

^b U = 142686, p < 0.01, r = .10

 $^{\circ}$ U = 140581, p < 0.001, r = .11

^d U = 155036, n.s., r = .03

^e *U* = 124179, *p* < 0.001. *r* = .12

Thirty-seven per cent of respondents (n=1153) indicated they had used networks within EM to support their careers (e.g. mentor or peer group). Respondents were also asked to comment on the networks they would like to have in place to support them in their careers: 328 provided a response. From these responses five general themes emerged: 'peer support programs and networks', 'mentor programs and networks', 'wellbeing network', 'crisis debrief/counselling network' and 'science and research network'. Themes are presented from highest to lowest frequency in the left column of Table 11 and example quotes are highlighted in the right column of the table to contextualise the themes. Subthemes were identified for the two most common themes 'peer support programs and networks' and 'mentor programs and networks' and are also presented in Table 11.

Theme	Subthemes	Example qualitative comments (n=328)		
	EM trainee, 18%	Cohort networking events to support each other as we go through (EM trainee, QLD)		
	Academic &	Special interest groups, e.g. medical education, paediatrics (FACEM, VIC)		
	professional,	Working group/lobby group for the improvement of staffing levels (FACEM, NSW)		
	Women & diverse	Women in EM network, parents in EM network, regional EM network, young/new FACEM support group (FACEM, QLD)		
programs &	groups, 17%	Multicultural peer group who have a say in the department rather than a select few (EM trainee, SA)		
networks (n=175)	FACEM,	ED Director's network (FACEM, QLD)		
(director, 13%	Peer support – successful EM specialists who are in their 60s and still practising (there are very few still practising) (FACEM, NSW)		
	Informal, social, 13%	. Informal professional networks have been more rewarding and beneficial than I would expect any rganised network to be (FACEM, VIC)		
	Formal, 6%	More time for social gatherings at work to make more ED friends (EM trainee, VIC)		
	(Not specified, 15%)	Executives that understand and invest in support network[s] (FACEM, QLD)		
	Alternative	Mentor relationships with trainees. But only with mentors who wish to do it. Opportunities for mentors to select trainees they wish to mentor rather than the other way round (EM trainee, VIC)		
	mentoring models, 20%	Mentor in general is a good idea. However, [it's] not working if somebody just allocate[s] you to		
	Formal, 21%	colleagues before you find your mentor (EM trainee, NSW)		
Mentor	FACEM, consultant,	Stronger mentoring system in my workplace, subgroups e.g. international graduates, minority groups (EM trainee, SA)		
networks	director, 12%	Mandated mentoring for registrars once a term, not just 'feedback sessions' (EM trainee, NSW)		
(n=158)	Special interest, 11%	Retired FACEMs could provide mentoring to current FACEMs if a network was established – this could be very supportive (FACEM, WA)		
	Leadership, 4%	Mentor would be great especially for specialist interests such as research or teaching or ultrasound (EM trainee, NZ)		
	(Not specified, 32%)	Senior EM physician/director level mentor network (FACEM, WA)		
	5270)	Research mentor networks Senior female leader mentor networks (FACEM, VIC)		
Wellbeing	Kindness netwo service Wellbei	ork: A support group/community of doctors who value being kind to one another, in teaching and ng network: support for wellbeing champions at all levels of hierarchy (EM trainee, NSW)		
(n=21)	Networks focused on emotional quotient, building healthy working relationships between specialities (FACEM, WA)			
	Wellness program formally addressing and assisting with ensuring a good work-life balance (FACEM, QLD)			
Crisis, debrief	Impartial service within the hospital which can provide remediation if conflict arising with your supervisor … perhaps a counselling service for staff (EM trainee, QLD)			
counselling	Mentor, debriefing, trauma counselling, effective management team, supportive colleagues (FACEM, SA)			
(n=20)	Networks would be good, if we had time to access them. Debriefs are only useful to me at the time it happens, but often the department is too busy to manage We just do not have enough staff (FACEM, NZ)			
0	A decent ACEM supported scientific/research network (FACEM, TAS)			
research network (n=13)	We desperately need a proper research network clinical trials done by ambulance services/paramedics are far superior to any that have ever been done in Australian EDs. Until we become an academic specialty and EDs attached to teaching hospitals have research embedded we will continue to be a comparative joke of a specialty (FACEM, WA)			
	Planned career progression, managerial advice, how to get involved in research advice (FACEM, VIC)			

Table 11 Desired EM career based support networks, themes and quotes

Note: Where applicable, quotes were coded across more than one general theme, but only once in each subtheme

Eighty-five per cent of respondents indicated a previous concern for the health or welfare of a work colleague and 75% indicated capability of taking action within the workplace to help colleagues for whom they felt concern. Figure 14 shows the differences between FACEM and EM trainee responses for each variable. A higher percentage of FACEMs than EM trainees indicated a previous concern for the health or welfare of a work colleague, $\chi^2(1, N=1168) = 47.12$, p < 0.001, and a higher percentage of FACEMs than EM trainees felt capable of taking action, $\chi^2(1, N=1005) = 24.12$, p < 0.001 (Figure 14).



Figure 14 Concern for colleagues, stratified by ACEM role

Respondents indicated their awareness of four available support services⁵ for doctors in the workforce, as shown in Table 12. Awareness of generic workplace EAPs was most common, followed by the Doctors' Health Advisory Service (DHAS) and the Australian Medical Association (AMA) peer support service. Few respondents indicated awareness of remote and rural services. With the exception of remote and rural services, higher percentages of FACEMs than EM trainees showed awareness of all medical workforce support services (Table 12).

Table 12 Awareness of workforce support services, stratified by ACEM role

	FACEM	EM trainee	All
	%	%	%
Aware of workplace EAP ^a	66.0	47.9	58.6
Aware of DHAS ^b	43.8	27.9	37.3
Aware of AMA peer support service ^c	24.8	19.2	22.5
Aware of remote and rural services (e.g. Bush Support Services) $^{\rm d}$	1.1	1.7	1.3

^a $\chi^2(1, N=1187) = 38.59, p < 0.001$

^b χ^2 (1, N=1187) = 31.06, *p* < 0.001

^c χ²(1, N=1187) = 5.04, *p* < 0.05

^d n.s.

⁵ In the survey, respondents were asked to indicate their awareness of five available support services. However, for the purpose of this report, responses for the DHAS in Australian jurisdictions were combined with those for the DHAS in New Zealand and awareness of four available support services is presented.

4.8 PERSONAL HEALTH AND WELLBEING INDICATORS

Respondents rated their general health on a five-point scale (from poor to excellent), as shown in Figure 15. Overall, the majority of respondents rated their personal health as very good (39%), good (28%) and excellent (20%). The differences between the two groups were significant, $\chi^2(4, N=1148) = 18.42$, p < 0.01. A higher percentage of FACEMs than EM trainees rated their health as excellent, whereas higher percentages of EM trainees than FACEMs rated their health as good, fair and poor (Figure 15).



Figure 15 Self-rated general health, stratified by ACEM role

Table 13 shows the number of days leave respondents took due to illness in the past 12 months, as well as the number of days respondents worked unwell. Significant differences were found between FACEMs and EM trainees for days of sick leave, $\chi^2(5, N=1147) = 51.07$, p < 0.001, and days worked unwell, $\chi^2(5, N=1146) = 34.23$, p < 0.001. For instance, a higher percentage of FACEMs than EM trainees reported no sick leave in the past 12 months. Higher percentages of EM trainees than FACEMs reported working six to eight days, nine to 10 days and more than 10 days while unwell in the past 12 months (Table 13).

	FACEM	EM trainee	All
	%	%	%
Sick leave in past 12 months (n=1147)			
0 days	35.1	19.7	28.9
1-2 days	40.2	42.1	41.0
3-5 days	14.2	25.3	18.7
6-8 days	4.1	8.2	5.8
9-10 days	1.3	1.3	1.3
More than 10 days	5.1	3.5	4.4
Days worked unwell in past 12 months (n=1146)			
0 days	7.6	3.5	5.9
1-2 days	28.2	18.0	24.1
3-5 days	32.6	33.5	33.0
6-8 days	14.9	19.5	16.8
9-10 days	6.6	10.2	8.0
More than 10 days	10.1	15.4	12.2

Table 13 Sick leave and days worked unwell in past 12 months, stratified by ACEM role

Respondents were also able to provide examples of barriers to personal health. From 840 respondent comments, eight general themes were identified: 'work conditions', 'fatigue', 'general time constraints', 'ED demand and related stress', 'family and social life', 'training and study', 'personal factors', and 'ED culture'. Themes are presented from highest to lowest frequency in the left column of Table 14 and example quotes are provided in the right column to contextualise the themes. The most commonly cited thematic barrier to personal health was 'work conditions': 248 respondent comments were classified in this theme, which included responses relating to the subthemes of 'rostering, shift work and on call', 'lack of facilities' and 'lack of staff' (Table 14).

Theme	Subthemes	Qualitative data examples (n=840)		
Work	Rostering, shift work &	Changing shift rosters, working an increased number of days (change from 4 x 10 hr shifts to 5 x 8 hr shifts) drastically changed my ability to unplug and unwind from work (EM trainee, NT)		
	on-call, 79% Lack of	Open plan office makes informal debriefing with colleagues impossible and increases work stress (FACEM, SA)		
(n=248)	facilities, 6%	Shift work is unfriendly to regular appointments. Need to be able to elect regular day off for personal appointments (FACEM, VIC)		
	Lack of staff, 5%	Inadequate consultant numbers employed to enable safe rostering and regular reliable leave (FACEM, QLD		
	The sleep distu	urbance from shift working constantly making me feel fatigued (EM trainee, NZ)		
Fatigue (n=215)	Exhaustion and shift work hours leading to difficulty getting motivation to do exercise (because I already feel tired) poor decisions about food because I'm just too hungry or too tired to make a healthy option sometimes feelings of social isolation because of not organising to see friends in advance (and they are also tired from shift work) (EM trainee, VIC)			
	For me, stress	and busy late shifts interfere with my sleep pattern (FACEM, WA)		
General time	ED work was much more sustainable before I had children. Now that home life is great but busy and draining, we don't cook proper meals for ourselves, we sleep poorly and patchily, and time for exercise is limited. I've lost my buffer and ability to absorb workplace stress, which perhaps I didn't recognise adequately until now (FACEM, WA)			
constraints (n=209)	Time is the main constraint, also chronic fatigue no energy to do things you used to do before getting into [EM] training (EM trainee, VIC)			
	Everyone else comes first – patients, family, juniors and then I get some time to look after my needs (F			
ED demand	Too many hours at work & insufficient time to complete tasks to the standard I would like (FACEM, QLD)			
& related stress	Work priorities placed first (FACEM, QLD)			
(n=183)	My mental health suffers most. I maintain my physical health, mainly because it is really important to me to do so and I feel like I NEED to, despite the pressures of the job (EM trainee, NSW)			
Family &	Working full time and running a family – personal choice to work full time and therefore I am sacrificing other things (EM trainee, NZ)			
social life (n=99)	Work and family consume you that at times you don't stop and look after yourself (FACEM, NT)			
	My life is too busy – full-time work and 3 young kids (EM trainee, NSW)			
Training &	Constant guilt	about not studying when not at work (EM trainee, NT)		
study (n=48)	Busy with study for exams on off days or too tired to do anything (EM trainee, QLD)			
(Trying to work and revise at the same time leaves little time for personal health (EM trainee, QLD)			
	Lack of motiva	ition, I want to spend time with my family (FACEM, VIC)		
Personal factors (n=64)	Laziness; it's difficult motivate myself to exercise outside when it's dark and cold. Lack of routine – can't attend a Thursday morning gym class with a friend every week because the roster doesn't allow it. Same problem for cooking and time with family (EM trainee, TAS)			
	Apathy, denial (FACEM, VIC)			
	Feel bad takin	g sick leave as [you] rely on colleagues to cover your shifts (FACEM, QLD)		
ED culture (n=35)	Director advis recognise men	ing registrars from taking 'mental health days' – implies that he doesn't value our health, nor does he tal illness as a health problem (EM trainee, VIC)		
	Expected to sh	ow up at work even if sick. People make comments about others who are sick (EM trainee, NT)		

Table 14 Barriers to looking after personal health, themes and quotes

Note: Where applicable, quotes were coded across more than one general theme, but only once in each subtheme

4.8.1 Indicators of stress

Respondents ranked the frequency with which they experienced anxiety in the workplace, as shown in Figure 16. Respondents most commonly reported experiencing workplace anxiety some of the time (41%), occasionally (33%) and most of the time (17%). Significant differences were found between FACEMs and EM trainees, χ^2 (4, N=1183) = 36.53, *p* < 0.001. A higher percentage of EM trainees than FACEMs reported feeling anxious at work some of the time, most of the time, and all of the time (Figure 16).



Figure 16 Respondent reports of feeling anxious at work, stratified by ACEM role

Respondents also ranked the frequency with which they experienced anxiety outside the workplace, as shown in Figure 17. Respondents most commonly reported experiencing anxiety outside work occasionally (48%), some of the time (27%), and never (20%). When stratified by ACEM role, there were no significant differences between FACEM and EM trainee responses.



Figure 17 Respondent reports of feeling anxious outside work, stratified by ACEM role

More than three-quarters of respondents reported having a general practitioner (GP) or GP clinic that they visited when they had their own health concerns, with no significant difference between FACEM and EM trainee responses (Table 15). A higher percentage of females than males reported having their own GP or GP clinic (89% vs. 67%), $\chi^2(1, N=1133) = 77.20$, p < 0.001. Respondents rated the ease with which they could talk to a GP about their personal health concerns as easy (46%), very easy (27%), difficult (21%) and very difficult (6%). When stratified by ACEM role, there were significant differences between the two groups, $\chi^2(3, N=1000) = 13.08$, p < 0.01. Higher percentages of FACEMs than EM trainees rated talking with a GP as easy (47% vs. 45%) and very easy (30% vs. 24%), while higher percentages of EM trainees than FACEMs rated it as difficult (23% vs. 20%) and very difficult (9% vs. 4%).

Respondents indicated whether they had sought help for stress, anxiety or depression from a health professional (e.g. GP, psychologist, counsellor, and psychiatrist) in the previous 12 months. A higher percentage of EM trainees than FACEMs reported seeking help, $\chi^2(1, N=1108) = 10.67$, p < 0.01 (Table 15). When stratified by gender, a higher percentage of female than male respondents reported seeking help (21% vs. 14%), $\chi^2(1, N=1099) = 10.30$, p < 0.01.

Respondents also indicated whether they worried about personal finances. As shown in Table 15, a higher percentage of EM trainees than FACEMs reported personal financial worry, $\chi^2(1, N=1152) = 34.76$, p < 0.001. When stratified by gender, there was no significant difference between male and female respondents (79% vs. 76%) in personal financial concern.

Table 15 Indicators of stress, stratified by ACEM role

	FACEM	EM trainee	All
	%	%	%
Has own GP/GP clinic (n=1142)	78.4	75.5	77.2
Help-seeking for stress, anxiety, depression in past year (n=1108)	14.4	22.0	17.4
Personal financial worry (n=1152)	71.7	86.4	77.6

4.8.2 Alcohol consumption

Ninety per cent of respondents reported alcohol use in the past year. A three-item alcohol screening tool was included in the WSS to identify risky patterns of drinking among respondents in the preceding 12 months. Questions assessed the frequency of alcohol consumption, number of standard drinks consumed in a day of drinking, and risky single occasion drinking. Responses from these three variables were scored out of a possible 12 points and aggregated into three categories of risk (0-3=low risk, 4-7=medium risk and 8-12=high risk).

Among respondents with complete data (n=859) and who reported alcohol consumption in the past year, 50% were classified in the medium risk category, 43% in the low risk category and 7% in the high risk category. Figure 18 shows the levels of alcohol-related risk among respondents, stratified by ACEM role. There were significant differences between the two groups, $\chi^2(2, N=859) = 14.04$, p < 0.01. As shown in the figure, higher percentages of FACEMs than EM trainees were classified in the medium and high risk categories, whereas as a higher percentage of EM trainees than FACEMs was classified in the low risk category (Figure 18). When stratified by gender, significant differences were also found $\chi^2(2, N=852) = 44.28$, p < 0.001. Higher percentages of males than females were classified in the medium (55% vs. 45%) and high (11% vs. 2%) risk categories and a higher percentage of females than males were classified in the low risk category (53% vs. 34%).



Figure 18 Alcohol-related risk in the past year, stratified by ACEM role

4.8.3 Prescription medication use

Figure 19 shows the self-reported use of wake- and sleep-promoting medications in the year preceding the WSS, stratified by ACEM role. The survey provided respondents with specific examples of both drug types, namely the wakefulness-promoting medications modafinil, armodafinil and adrafinil (the latter discontinued since 2012), and various sleep-promoting medications such as benzodiazepines (anxiolytics), as well as melatonin (hormone), promethazine (antihistamine), zolpidem and zopiclone (hypnotics). In the past year, 97% reported no use of wake-promoting medications and 71% reported no use of sleep-promoting medications. As shown by Figure 19, higher percentages of EM trainees than FACEMs reported any use of wakefulness- and sleep-promoting medications in the year prior to the survey: wakefulness-promoting, $\chi^2(1, N=1132) = 22.43$, p < 0.001; sleep-promoting, $\chi^2(1, N=1140) = 28.11$, p < 0.001.



Figure 19 Self-reported medication use in the past 12 months, stratified by ACEM role

4.8.4 Exercise

Respondents ranked the personal importance of at least 30 minutes physical exercise external to the workplace on a four-point scale. Fifty per cent ranked exercise as very important, 34% as important, 14% as not so important and 3% as not important. There were no differences between FACEM and EM trainee responses when stratified by ACEM role. The reported number of days per week of exercise is shown in Figure 20, stratified by ACEM role. There were significant differences between the two groups, $\chi^2(3, N=1142) = 22.59$, p < 0.001. Higher percentages of EM trainees than FACEMs reported no weekly exercise and exercise on one or two days per week and higher percentages of FACEMs than EM trainees reported exercising on three to five days per week and on six to seven days per week (Figure 20).



Figure 20 Number of days per week of 30 minutes exercise outside work, stratified by ACEM role

Respondents were asked the question 'how do you unwind from work stress?' From 826 respondent comments, 10 general themes were identified: 'exercise, sports, clubs', 'time with family/friends', 'time in nature/outdoors', 'hobbies and cultural interests', 'relax at home', 'alcohol use', 'screen time', 'having a holiday/break', 'reading' and 'mindfulness and prayer'. Themes are presented from highest to lowest frequency in the left column of Table 16 and example quotes are provided in the right column to contextualise the themes. The most common method to unwind from work-related stress was 'exercise, sports, clubs': 579 respondent comments were classified in this theme (Table 16).

Theme	Qualitative data examples (n=826)
Exercise,	Archery, exercise, walking (FACEM, NZ)
sports, clubs (n=579)	Go to Gym. Chop firewood (FACEM, NSW)
	Going for a walk/to a Pilates class to clear my head (EM trainee, NSW)
Time with	Family time/home commitments (FACEM, NZ)
friends	Family and friends Spending time with my dog (EM trainee, NSW)
(n=555)	Family and recreational activities (FACEM, VIC)
Time in	Lifestyle block [hobby farm] maintenance (FACEM, NZ)
nature/ outdoors	Outdoor sports like mountain biking and hiking, spending time with friends and family (EM trainee, VIC)
(n=222)	Walking on the beach with the dog and my partner (FACEM, VIC)
Hobbies &	I sit down with a cup of tea and play the piano or do some creative writing (FACEM, NZ)
interests	Vipassana, baking, gardening, beekeeping (FACEM, VIC)
(n=202)	Classical music (FACEM, SA)
Relax at	Bath/long hot shower (FACEM, QLD)
home (n=196)	Days off – I have very quiet restful days off. Don't work too much, I have Mons and Weds off (FACEM, NZ)
(1-190)	Do nothing (FACEM, QLD)
Alcohol use	Drink far more alcohol than is recommended. Go out for drinks with fellow registrars to jointly complain and support each other (EM trainee, VIC)
(n=192)	Alcohol drugs and sex (FACEM, QLD)
	Wine in the spa (FACEM, WA)
Cancon time	Computer games (FACEM, TAS)
(n=143)	Late night games on an Xbox console (FACEM, SA)
	Ensuring that I get enough rest. Watching MasterChef (EM trainee, VIC)
Having a	Travel (still have parents in UK so go over most years) (FACEM, QLD)
break	Plenty of time away i.e. 10 weeks holidays per year, so I do not mind longer working weeks (FACEM, VIC)
(n=86)	Plan leave along the year, avoid working for many months without a leave (FACEM, VIC)
Reading (n=76)	Read (novels; and cosmology / particle physics 'popular science' books including Quantum Theory that fascinates me) (FACEM, QLD)
	Reading clinical journals! (FACEM, QLD)
	Simple pleasures such as reading (FACEM, NSW)
Mindfulness	Attend to my spiritual needs by prayer, meditation, practising Christianity (FACEM, NSW)
& prayer (n=72)	Meditation/mindfulness (FACEM, VIC)
	Yoga/meditation (FACEM, SA)

Table 16 Unwinding from work stress, themes and quotes

Note: Where applicable, quotes were coded across more than one general theme

4.9 RESPONDENT 10-YEAR CAREER PLANS

Respondents considered their careers in the next 10 years and indicated whether they planned to reduce their hours of clinical practice, leave clinical practice, and leave the specialist EM workforce. On a five-point scale, respondents rated the likelihood of reducing their hours of clinical practice in the next 10 years, which is shown in Figure 21 stratified by ACEM role. Thirty-nine per cent reported they were very likely to reduce their hours of clinical practice; 26% reported they were likely, 18% reported they were unlikely and 7% reported they were very unlikely. As shown in Figure 21, differences were observed between the two groups, $\chi^2(4, N=1172) = 26.16$, p < 0.001. For instance, a higher percentage of EM trainees than FACEMs reported that they were likely to reduce their hours of clinical practice in the next decade (Figure 21).





Respondents rated their likelihood of leaving clinical practice in the next 10 years. Thirty-two per cent reported they were unlikely to leave clinical practice and 30% reported they were very unlikely; 12% reported they were very likely to leave clinical practice and 10% reported they were likely. Responses are shown in Figure 22 stratified by ACEM role, with significant differences between the two groups, $\chi^2(4, N=1172) = 59.03$, p < 0.001. Higher percentages of FACEMs than EM trainees reported being likely or very likely to leave clinical practice in the next decade. Conversely, higher percentages of EM trainees than FACEMs reported being very unlikely or unlikely to leave clinical practice in the next decade.



Figure 22 Likelihood of leaving clinical practice in next 10 years, stratified by ACEM role

Respondents also rated their likelihood of leaving the specialist EM workforce in the next 10 years. Twentynine per cent reported they were unlikely to leave the workforce and 28% reported they were very unlikely to leave the workforce; 13% reported being likely or very likely to leave the workforce, respectively. Figure 23 shows respondents' likelihood of leaving the specialist EM workforce in the next decade, stratified by ACEM role. There were significant differences in responses between the two groups, $\chi^2(4, N=1168) = 48.07, p < 0.001$. For instance, a higher percentage of FACEMs than EM trainees reported being very likely to leave the specialist EM workforce in the next 10 years (Figure 23).



Figure 23 Likelihood of leaving specialist EM workforce in next 10 years, stratified by ACEM role

4.10 WORK-RELATED RESOURCES FOR SUPPORT

Respondents were asked to indicate whether they would use support resources if these were available from ACEM. The survey provided eight resource examples for respondents to choose from, with multiple responses allowed. In order of frequency these were: podcasts dedicated to EP wellness (podcasts, 40%), online interactive resources on anxiety, resilience, substance use and disruptive behaviours (resilience resources, 36%), personal financial planning resources (financial planning, 32%), information and education resources for partners (partner resources, 32%), wellness weekends (31%), online links to resources from other organisations (online links, 27%), a confidential telephone support line within ACEM (phone line, 27%), and peer blog sites (23%).

To compare FACEM preferences with those of EM trainees, responses shown in Figure 24 are stratified by ACEM role. Higher percentages of EM trainees than FACEMs expressed a preference for financial planning resources ($\chi^2(1, N=1187) = 18.44, p < 0.001$), partner resources ($\chi^2(1, N=1187) = 10.06, p < 0.01$), wellness weekends ($\chi^2(1, N=1187) = 6.56, p < 0.05$), phone line ($\chi^2(1, N=1187) = 9.93, p < 0.01$), and peer blog sites ($\chi^2(1, N=1187) = 4.33, p < 0.05$). By contrast, a higher percentage of FACEMs than EM trainees expressed a preference for resilience resources ($\chi^2(1, N=1187) = 6.87, p < 0.01$). There were no significant differences between FACEM and EM trainee preferences for podcasts and online links (Figure 24).



Figure 24 Distribution of resource preferences, stratified by ACEM role

To assess whether any other resources were of interest, respondents were asked: 'are there any other resources that you think would be useful for ACEM to make available to members?' From 223 respondent comments, seven general themes were identified: 'no resources/outside question scope', 'professional supports', 'access to health-related resources', 'better access to educational resources', 'EM trainee health promotion', 'support with career planning', and 'health services for doctors'. Themes are presented from highest to lowest frequency in the left column of Table 17, with example quotes provided in the right column as context to the themes. The most common theme was 'no resources/outside question scope'; 91 respondent comments were classified in this theme (Table 17).

Theme	Qualitative data examples (n=223)		
No resources/ outside question scope (n=91)	More media publication regarding the positive impacts of EM to the community (FACEM, VIC)		
	Making sure that if you do offer resources it is about more than just 'mindfulness'. I'm fed up of being told that one (currently trendy, often badly presented) thing is the answer (FACEM, QLD)		
	The above resources are all outside the workplace and most are already available in other spheres. What I believe is required is a cultural change within the workplace, where personal wellbeing is made a priority at a departmental and institutional level (FACEM, WA)		
	Clinical director leadership and management resources. Suggest close relationship with RACMA (FACEM, NZ)		
Professional supports (n=49)	Assistance with negotiations with individual health services that refuse to finance and staff emergency departments and other hospital services safely and appropriately (FACEM, VIC)		
(Representation to health services to help in promotion of healthy rostering, healthy work structuring so that health services do not take advantage of FACEMs and promote burnout (FACEM, VIC)		
Access to health-	Discounted sports/music tickets. Discounted gym membership. Discounted fruit/health food home deliveries (FACEM, QLD)		
related resources (n=34)	I would like ACEM run mindfulness courses or similar. Have become a real believer in mindfulness to prepare for 'bad moments' and transitioning from work to home (FACEM, NZ)		
(11-3-1)	Subsidised access to good mindfulness applications such as Headspace (EM trainee, NZ)		
Better	Online journals and text books (FACEM, ACT)		
educational	A better website that can be negotiated more effectively (EM trainee, VIC)		
resources (n=23)	For provisional trainees, a more structured primary exam study program (along the lines of Delta Med that BPT candidates have) would be very helpful (EM trainee, VIC)		
EM trainee	A trainee module outlining longevity strategies (FACEM, QLD)		
health promotion (n=20)	Trainee wellness, particularly for those studying for exams (primary and fellowship). Support for families/partners of those studying (EM trainee, VIC)		
(Wellness incorporated into the annual meetings, and seen as important (not just 'ABCDE') (FACEM, QLD)		
Support with	Career planning for the older EM Physician when they want to continue working but are perhaps finding some aspects of the workload more challenging e.g. late finishes, on call, hours etc. (FACEM, WA)		
planning	Mechanisms to re-train/transition into other areas of medicine (FACEM, VIC)		
(n=17)	Time for trainees. As in just give [us] 4 hours a month paid to get help with developing a direction in ED. E.g. finding a niche, developing a resource etc (EM trainee, NSW)		
Health services for doctors (n=10)	A list of doctors who are willing and able to treat colleagues, we all need GPs, cardiologists, neurologists, psychiatrists, gastroenterologists and I'd prefer to be able to have a professional conversation with a treating specialist (FACEM, VIC)		
	Provision of critical care doctor-friendly (special training for GPs in treating doctors?) (FACEM, WA)		
	Psychology support specifically for physicians (EM trainee, VIC)		

Table 17 Other useful resources, themes and quotes

Note: Where applicable, quotes were coded across more than one general theme

4.11 THE ROLE OF ACEM

Of 1,141 responses, 74% indicated that ACEM had a role in addressing the health, wellbeing and sustainability of the specialist EM workforce. These respondents were asked to comment on the role that ACEM should have and 685 provided a response. From these, seven general themes emerged: 'stronger advocacy', 'member health, wellbeing and support', 'ED accreditation and training', 'workforce planning', 'resources and program development', 'raise awareness about EM issues' and 'further professional development'. Themes are presented from highest to lowest frequency in the left column of Table 18 and example quotes are provided in the right column of the table to contextualise the themes. Subthemes were identified for the first and third most common themes, which are also presented in Table 18.

Theme	Subthemes Qualitative data examples (n=685)				
Stronger advocacy (n=364)	Workplace conditions, 62%	ACEM can advocate and [recommend] safe hours, safe rostering, standards for CME activities, etc., but the individual employer is ultimately responsible for their workforce. ACEM needs to be powerful enough to enforce these standards (EM trainee, VIC)			
	Lobbying, 16%	ACEM needs to advocate for patient services and initiatives which impact on [ED] presentations. EDs are a barometer for the health of the health system (FACEM, NSW)			
	Research & policy, 12%	Producing policy and guidelines which have a direct effect on workplaces it is notable that many health employers effectively 'gag' their employees, preventing them from speaking about deficiencies in healthcare – ACEM has a role in countering this (FACEM, SA)			
	Workforce, 11%	ACEM is the official advocate of EPs in Australasia (FACEM, WA)			
Member health,	Working with necessarily for trainee, TAS)	departments to ensure that they are looking out for the health of their FACEMs and trainees. Not mal tick-box requirements, but oversight or guidance about how staff should be treated (EM			
wellbeing & support	Liaison with lo Stanford Uni w	cal businesses to set up altruistic support service[s]. Meals etc., social events A good example is the rellness program for EPs (EM trainee, VIC)			
(11-355)	Take leadershi be weakness of	p on this. Make it part of the norm and not something weird or hippy or something that's perceived to r a failure. We have directors of education and depts., why not a wellbeing director? (FACEM, NSW)			
	Accreditation & standards,	Using the accreditation process to force better collaboration with administration for constructive problem solving Accreditation is a powerful tool to ensure the executive collaborate well to effect change not just solutions to tick the accreditation box (FACEM, NSW)			
ED accreditation	52% Training	ACEM should not be putting undue pressure on trainees. The unintended consequences will be absenteeism/lack of trainees (FACEM, NSW)			
accreditation & training (n=223)	program feedback, 36% Training and education	If the teaching, QA, marking exam practice papers etc. were actually recognised as essential by our exec to promote [a] good medical workforce [that] would help. The[se] are seen as non-desirable extra stuff that [can] be compromised Pushing back means we do it at home, non-paid (FACEM, NSW)			
	12%	Providing supports and administering a training program with trainee health and wellbeing in mind (EM trainee, QLD)			
Workforce	Ensuring balance of new FACEM's to demand – not training too ma[n]y [EPs] flooding the job market. Ensuring availability of various pathways into alternative employment post clinical medicine (FACEM, VIC)				
(n=199)	Developing strategies for continuing workforce development – very dependent on middle grade staff generally and if less end opportunities, may drop numbers and worsen workload/conditions and quality of care (FACEM, NSW)				
Resources and program	I think there sh trainee, NZ)	nould be an established best practice and list of resources to cope with stress in the workplace (EM			
development (n=197)	Courses. Discounts for gyms, massages etc. via Member Advantage. Corporate rates for R&R holidays (FACEM, VIC)				
	An 'How to live as an EP for dummies' [book], start with registrars (FACEM, NZ)				
Raise awareness about FM	Campaigning for better systems in ED – even the lack of utility of some pressures The media/public/executives/subspecialties only ever seem to criticise without having any appreciation for the real demands of the job (EM trainee, NSW)				
issues	Promoting awareness survey members and feedback concerns to relevant health departments (FACEM, ACT)				
(n=1/1)	Continuing to be involved in the conversation re the role of EM in the community (EM trainee, TAS)				
	Ongoing feedback, discussions, advocacy, peer support. ACEM conferences in cool places with good social activities all help (FACEM, QLD)				
Further professional development (n=112)	Promote good modelling. Recommended multiple options and models for good practice, including [psychological] supervision. Have prominent figures be honest about what works for them and when it hasn't worked. Allow space for telling the stories about our failures (FACEM, QLD)				
	Develop practi extended leave expected (bu	cal refresher programs specifically targeted at consultants returning from maternity or other that assists in improving confidence to return to the workplace, and outline the support that is uddy shifts/not put 'in charge' initially etc.) (FACEM, VIC)			

Table 18 The role of ACEM in addressing health, wellbeing and sustainability, themes and quotes

Note: Where applicable, quotes were coded across more than one general theme, but only once in each subtheme

5. DISCUSSION

5.1 **RESPONDENTS**

Over one-quarter of the ACEM membership participated in the WSS, a good response rate and potentially indicative of the survey topic's relevance and timeliness to those who participated. In general, despite self-recruitment, respondents' workforce characteristics were comparable to the broader ACEM membership population, although there was over-representation of FACEMs.

5.2 BURNOUT

Burnout has wide reaching implications for the professional performance, health and psychological wellbeing of doctors in the Australasian specialist EM workforce. Rather than absent or present, burnout is conceptualised as occurring on a continuum with feelings ranging from low to moderate to high degrees in intensity (Maslach, Jackson, & Leiter, 1996). For instance, a heightened degree of burnout is reflected in high scores on the emotional exhaustion and depersonalisation subscales and in low scores on the personal accomplishment subscale, while a moderate degree of burnout is reflected in average scores on the three subscales. A lesser degree of burnout is reflected in low scores on the emotional exhaustion and depersonalisation subscales and in high scores on the personal accomplishment subscale (Maslach, Jackson, & Leiter, 1996).

According to the MBI-HSS, the majority of respondents are experiencing a moderate to heightened degree of burnout and higher percentages of EM trainees than FACEMs appear affected. Overall, the majority of respondents had moderate to high emotional exhaustion (70%) and depersonalisation (62%) scores, with 54% having low to moderate personal accomplishment scores. These findings are comparable with those from the 2013 National Mental Health Survey of Doctors and Medical Students (NMHSDMS)⁶; among their subsample of EM doctors, a similar degree of burnout was observed (beyondblue, 2013). However, a larger percentage of respondents than NMHSDMS participants showed levels of high emotional exhaustion and low personal accomplishment. Maslach, Jackson & Leiter (1996) suggest that work environments characterised by high overload and role conflict aggravate emotional exhaustion, which in turn mediates depersonalisation. They suggest that these types of work environments often overlook participatory decision making and social support processes that work to facilitate and enhance personal accomplishment. Given the prevalence of burnout among respondents, steps to better understand and address its potential causes and consequences seem warranted. There is an opportunity for further research to explore predictors of burnout among the specialist EM workforce.

5.3 HOURS OF WORK

A full-time equivalent workload for an Australasian EM specialist is 40 hours per seven-day week, inclusive of clinical support and teaching/training time (ACEM, 2015b). The majority of FACEMs (59%) and EM trainees (72%) who responded to the survey usually work more than 40 hours per week; half usually work 40 to 50 hours per week. A greater percentage of FACEMs than EM trainees report working part-time, which is expected given the specialist EM training program is generally a full-time course of work and study. Nonetheless, 41% expressed a desire to change their hours of work, with most respondents reporting a preference for a reduction in hours.

⁶ Note that the 2013 NMHSDMS used the Maslach Burnout Inventory-General Survey (MBI-GS) to assess burnout. The MBI-GS uses the subscales Cynicism instead of Depersonalisation and Personal Efficacy instead of Personal Accomplishment, thus findings are not directly comparable.

In Australia and New Zealand, the minimum annual leave entitlement for all workers is four weeks (20 days) of paid leave. Twenty days or more of annual leave per year has been shown to reduce work-related and other stress, enhancing productivity at work and individual health and wellbeing (Cairncross & Waller, 2004). Australian hospital shift workers (those regularly rostered to work evenings and on call at nights, or on weekends and public holidays) such as EM doctors may be entitled to additional weeks of annual leave (Fair Work Ombudsman, 2016a). Approximately half of EM trainees (52%) and one-third of FACEMs (34%) who responded to the WSS had not taken four weeks of annual leave in the preceding 12 months. Further, 28% of FACEMs and 41% of EM trainees reported difficulty arranging leave at their preferred time of year.

For each five to 12-hour shift, Australian workers are entitled to an unpaid meal break of between 30 and 60 minutes and one or two paid 10-minute rest breaks (Fair Work Ombudsman, 2016b). Over two-thirds of respondents (69%) found it difficult to break for a meal during a clinical shift, with a higher percentage of EM trainees than FACEMs reporting difficulty. From the qualitative data, a number of thematic barriers to taking breaks at work were identified. The strongest of these related to the demanding and unpredictable nature of the ED working environment, coupled with time constraints and performance indicators, and suboptimal workplace conditions and resource allocation. Short breaks have been shown to improve performance and decrease fatigue, yet the importance of scheduling timely breaks is not widely emphasised among, or appreciated by healthcare shift workers (Mitra, Cameron, Mele, & Archer, 2008).

5.4 WORK-LIFE BALANCE

A higher percentage of FACEMs (58%) than EM trainees (42%) reported positive work-life balance. Given that work-life balance is premised on the successful and simultaneous integration of professional and personal priorities and responsibilities, factors that constitute positive work-life balance will be different for each individual FACEM and EM trainee. Long hours combined with unpredictability and the demands of ED work have been shown to contribute to dissatisfaction with work-life balance (Shanafelt, et al., 2015). Organisational principles and programs that facilitate work-life integration may assist in improving FACEM and EM trainee wellness and satisfaction in this domain (Shanafelt, et al., 2015).

5.5 WORK SATISFACTION

The majority of FACEMs (71%) and EM trainees (66%) reported overall satisfaction with their EM career. Respondents reported the highest satisfaction levels with their immediate ED colleagues, their career progression, and their remuneration. The qualitative data showed that both FACEMs and EM trainees enjoy the breadth and diversity of EM practice, their specialist acute clinical skills, and caring for patients and the community. In the 2008 MABEL Survey, 86% of doctors reported moderate to high job satisfaction, with no differences between GPs, specialists and specialists-in-training. Factors associated with job satisfaction for doctors in this study were having a good support network, patients not having unrealistic expectations, and the ability to take time off work (Joyce, Schurer, Scott, Humphreys, & Guyonne, 2011).

The domains of daily practice with which respondents reported the least satisfaction were outside individual control and external to the practice of EM, and can only be addressed through long-term systemic change at the organisation (mezzo) and government (macro) levels. FACEM and EM trainee respondents reported low satisfaction levels with ED staffing levels, an overall lack of recognition for good work, and the time allocated to learning and/or maintenance of core clinical skills. Similar findings were evident in the qualitative data, in which respondents reported that the least enjoyable aspects of EM were related to their conditions of work (e.g. inadequate ED staffing levels, unpaid overtime), administrative performance indicators (and the ways in which these impact on aspects of clinical practice), and communication dynamics and conflict between staff of hospitals.

5.6 WORK-RELATED STRESSORS

Pressures external to the control of individual doctors were the most commonly identified day-to-day workrelated stressors in EDs. ED overcrowding, access block, conflicts with inpatient teams, and pressures from hospital administration and executives were the most frequently reported stressors by respondents. EM trainees reported different workplace stressors than FACEMs, with their most common stressors reported as ED overcrowding, conflicts with inpatient teams, and unrealistic patient expectations, which in part, may reflect less interaction by ED trainees with hospital administration and management systems.

Evidence supports the value of debriefing following a critical incident (Healy & Tyrrell, 2013). However, approximately one-quarter of respondents (26%) were not aware of debriefing processes in their workplace, despite almost all (90%) indicating that debriefing had value. In the qualitative data exploring workplace stress management methods, half (50%) were unable to articulate whether their employer provided resources to reduce stress among ED staff. While 59% reported they were aware of generic workplace EAPs and other counselling services (see Table 12), narrative responses suggested that these services were not particularly valued or effective, with access during business hours reportedly difficult for doctors. Most were not aware of the available doctor-specific supports such as the DHAS (37%) and the AMA peer support service (23%), and only 1% were aware of remote and rural services, even though 25% worked in regional, rural or remote locations. Importantly, doctor-specific services have been shown to be effective and are well regarded by the medical community that use them (Warhaft, 2004).

5.7 WORK-RELATED SUPPORT NETWORKS

Although communication and conflict within the workplace was identified as a significant work-related stressor, respondents tended to agree that they had the support of their immediate ED colleagues. In particular, respondents agreed that they had work colleagues in whom they could confide in and rely on for help and, albeit to a lesser extent, a support network of other ED colleagues. When asked to comment on networks to support their careers, FACEM and EM trainee respondents most commonly indicated a preference for further support from EM colleagues. This support was generally in the form of peer support programs and networks (formal and informal) targeted to particular career stages, interests or common identities, such as EM trainee networks, academic and professional networks, and women's networks. In addition to peer support, there were FACEMs who indicated a continuing demand for formalised mentoring well after the transition to Fellowship.

High levels of social support from colleagues, together with use of problem-focused coping strategies, have been linked to improved psychological health among ED staff (Yates, Benson, Harris, & Baron, 2011). In addition, good professional support is strongly associated with work satisfaction among doctors (Joyce, Schurer, Scott, Humphreys, & Guyonne, 2011). Embedding support such as in-house wellness champions and structured leadership and peer support programs within a workplace culture has also been shown to be effective for improving physician wellness (Schmitz, et al., 2012; Henning, Hawken, & Hill, 2009). As an example, the Australian and New Zealand College of Anaesthetists (ANZCA) recommends that hospital anaesthetic departments appoint an ANZCA Fellow as welfare advocate to promote welfare issues and provide advice (ANZCA, 2015). Including content in specialist medical training programs on ways in which the individual doctor can best be supported has also been suggested as another way to recognise and prevent burnout (Hassan, 2014).

5.8 PERSONAL HEALTH AND WELLBEING

Most respondents (87%) rated their general health positively (i.e. as good, very good, or excellent), which was comparable with the self-assessed health of the Australian general population (in which 85% rated their health as good, very good, or excellent) (ABS, 2013). Instances of sick leave taken by FACEM and EM trainee respondents were generally much less than the Australian entitlement of 10 days per annum, which includes provisions for stress and pregnancy-related illnesses (Fair Work Ombudsman, 2016c). More than two-thirds of respondents (70%) reported less than three days of sick leave in the preceding 12 months, more common among FACEMs (75%) than EM trainees (62%), and most (94%) reported working at least one day unwell.

Even though most reported good health, comments by respondents identified a number of work-related barriers to maintaining their personal health. Reported barriers primarily centred on work conditions such as rostering, shift work and on call responsibilities, and the fatigue and time constraints related to inconsistent working hours and ED demand. It is possible that these barriers account for some of the discrepancy between those respondents who indicated that physical exercise was of personal importance (84%), and the relatively lower percentages of FACEMs (50%) and EM trainees (38%) who reported exercising for at least 30 minutes for three or more days per week. For adults, at least 150 minutes of moderate-intensity aerobic physical activity, or 75 minutes of vigorous-intensity activity, is recommended each week to improve physical and mental health (World Health Organization, 2016).

Ninety per cent of respondents reported consuming alcohol in the past year and, based on their self-reported consumption levels, more than half (57%) were categorised as at medium to high risk of alcohol-related harm. For healthy adults, drinking no more than two standard drinks on a single occasion reduces the risk of lifetime harm from alcohol-related disease or injury and drinking no more than four in a session reduces the risk of single occasion harm (National Health and Medical Research Council, 2009). In the WSS, a higher percentage of FACEMs (60%) than EM trainees (53%) were classified as possible risky drinkers, with a higher percentage of risky drinkers being male (66%) rather than female (47%). At low levels of drinking there is little gender difference in alcohol-related harm. However, at higher levels the lifetime risk of alcohol-related disease increases more quickly for women and the lifetime risk of alcohol-related injury increases more quickly for men (National Health and Medical Research Council, 2009).

Few respondents reported use of sleep- and wake-promoting medications in the past year. Twenty-nine per cent reported use of medications like benzodiazepines, melatonin and anti-histamines to enhance sleep, while only 3% reported use of medications like modafinil to promote alertness. Self-reported medication use was more common among EM trainee than FACEM respondents.

5.9 10-YEAR CAREER PLANS

Nearly two-thirds of respondents (65%) indicated a likelihood of reducing their hours of clinical practice in the next 10 years. However, fewer respondents indicated a likelihood of leaving clinical practice (22%) and the EM workforce (13%) in the next decade. Of interest was the group of EM trainee respondents (18%) who reported being likely or very likely in the next decade to leave the specialist workforce entirely. There is opportunity for further exploratory research in this area to support and inform future specialist EM workforce forecasting.

5.10 WORK-RELATED RESOURCES FOR SUPPORT

One of the goals of the WSP was to determine whether support resources to promote individual FACEM and EM trainee health, wellbeing and retention in the workforce were of interest to the ACEM membership, with the potential for suggestions to be further explored. Forty per cent of respondents indicated interest in EP dedicated podcasts and 36% indicated interest in online interactive resources on resilience. Almost one-third

indicated interest in personal financial planning resources (32%), information/education resources for partners (32%) and/or wellness weekends (31%). Around one-quarter indicated interest in online links to resources from external organisations (27%), confidential telephone support line (27%) and peer blog sites (23%). In the qualitative data, a further 223 respondents commented that specific resources targeted to the individual were not necessarily required to improve the health and wellbeing of the workforce. Smaller groups of respondents commented on their interest in professional support resources for leadership and management roles and resources for individual EP health and wellbeing.

5.11 THE ROLE OF ACEM

Almost three-quarters of respondents (74%) commented that ACEM had a role in addressing the health, wellbeing, and sustainability of the EM workforce. The most common way in which respondents (n=364) suggested ACEM could support the membership was through stronger advocacy, particularly for better ED working conditions. Respondents also commented that ACEM's role was to provide leadership on member health, wellbeing and support, and to undertake ED accreditation and training of the specialist EM workforce. Some respondents proposed use of the ACEM ED accreditation process as a tool to improve ED working conditions. Significant numbers also suggested that ACEM had roles in workforce planning, resource provision and program development, raising awareness of issues specific to EM, and further professional development. Taken together, reports suggest that respondents see that ACEM's role is in addressing long-term, system-wide issues and working to improve and resolve factors that are particular to the practice of providing emergency medical care in Australia and New Zealand.

6. CONCLUSION

According to the WSS, the Australasian specialist EM workforce is showing signs of stress and burnout, along with intention to reduce their hours of clinical EM practice during the next decade. Nonetheless, approximately two-thirds of respondents reported professional satisfaction and the majority consider themselves to be in good personal health. Factors impeding the working lives of FACEM and EM trainee respondents appear to be related to external stressors beyond the individual doctor's control and include ED overcrowding, access block, meeting administrative performance indicators, and stressful working relationships with inpatient and other hospital teams. Responses suggested that FACEMs and EM trainees are having difficulty influencing change in these areas and identified a need for longer term strategies to improve ED conditions. This report and further data analysis will be used to inform a range of ACEM organisational activities that will strive to support the health, professional satisfaction and career longevity of the specialist EM workforce.

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