Annexure

IMPROVING PEOPLE MANAGEMENT IN EMERGENCY SERVICES

SUMMARY REPORT

A PROJECT REPORT PREPARED BY THE CENTRE FOR WORK, ORGANISATION & WELLBEING

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Improving People Management in Emergency Services

A Summary Report prepared by Griffith University for United Voice Queensland, the Ambulance Employees' Association of South Australia, and United Voice Northern Territory

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Executive Summary

Previous research suggests that ambulance work is often characterised by employee burnout, high stress, work intensification, and exhaustion – physical, mental and emotional. A major contributing factor is that exposure to trauma is an unavoidable feature of the role, and can increase the prevalence of a number of mental health conditions such as depression, anxiety, and post-traumatic stress disorder.

There is a significant cost (financial, social and emotional) of mental health conditions to emergency services providers. For emergency services organisations, mental health problems are associated with increased sick leave (Brattberg, 2006), deteriorated health and well-being (Berger et al., 2007) and increased employee turnover (Patterson, Jones, et al., 2010). This study has aimed to better understand the organisational factors that affect paramedic and support staff experiences of work and employment, and the impact of these factors on a range of individual outcomes, particularly associated with psychological health and wellbeing.

To achieve the aims of this project, we conducted 1216 surveys and 72 interviews with emergency services employees across Queensland, South Australia and the Northern Territory. Data analysis has directed attention to some key findings, which are expanded upon in this **Summary Report**, and supported by detailed statistical analysis in the **Companion Report**. The key findings are summarised as follows:

- **A provisional PTSD diagnosis can be made for 10% of Queensland and 8.5% of South Australian staff**. An additional 6.6% and 4% of respondents in each state respectively were found to be close to a provisional diagnosis. Recent changes in the measurement instrument for PTSD has meant that many people who would previously had a provisional diagnosis are now excluded (see Appendix A for discussion).

- **More symptoms of PTSD are reported by employees with longer tenure of employment.** Those with more symptoms have higher intention to quit and poorer ability to do their work.

- **Social support is a key factor** in these findings, with those reporting greater support also less likely to have symptoms of PTSD.

- **Anxiety is at very high levels** among the workforce. Those with severe and extremely severe anxiety comprise around 40% of the sample in all jurisdictions.

- **Fatigue remains a major problem** for more than half of all staff in each jurisdiction, even when controlling for variables such as age, gender, dependents, tenure, work hours and shift length. Interviewees report persistent high fatigue across all geographical areas, affecting their ability to perform and desire to stay in the service for the long term.

- Around **one in every five employees are seriously looking for another job**. Employees' intention to quit is higher when they view the human resource management (HRM) system as weak, and when they are regularly exposed to natural disasters and physical assault. This finding highlights the importance of **building a strong HRM system** where employees are clear about the behaviours that are expected – and rewarded – by the organisation. This point is reinforced by a significant relationship between HRM system strength and employee fatigue.

- **The employee support systems** in place in these organisations provide vital social and organisational support for employees.

A lot of paramedics live, eat, sleep and breathe the job. So their entire identity is wrapped up in being an ambo... I've been a paramedic for 25 or 26 years. I couldn't conceive of not being a paramedic.

[Interview 5]

Project Overview

The two key aims of this research project was to better understand how paramedics and support staff perceived the human resource management system in their organisation and how the perception of these systems influence employees' individual outcomes, particularly psychological health and well-being (including Post Traumatic Stress Disorder or PTSD). With the knowledge gained from this project, guidance can be developed for practitioners and policy makers on optimal approaches towards human resource management (HRM) and support in emergency service organisations.

Data were collected primarily through two phone surveys and face-to-face interviews in Queensland, South Australia and the Northern Territory. Surveys were conducted over the phone by call centre employees engaged by the union during the second half of 2017. The first survey (Study 1) took on average 45 minutes to administer, and the second (Study 2) took approximately 20 minutes.

Study 1 asked questions about employees' experiences of work and Study 2 explored lifestyle and health factors. Survey questions were developed from validated scales relating to trauma exposure, support effectiveness, coping, modifiable lifestyles, resilience, future employment intentions, health status and human resource management systems. In total, 1216 usable surveys were obtained from the two studies. Data was analysed using generalized linear modelling. Questionnaires with more than half of the data missing were excluded from data analysis. The number of useable survey completions for each jurisdiction and each survey are in Table 1.

	Survey One	Survey Two	Matched cases
Queensland	373	308	281
South Australia	273	197	118
Northern Territory	40	25	23
Total	**686**	**530**	**492**

Table 1 Survey Completions

Semi-structured interviews, were conducted primarily in person and with a small number over the phone, for the purpose of better understanding the key issues and experiences of participants. Seventy-two interviews were conducted with participants who included emergency dispatch officers, patient transport officers, paramedics, frontline managers, middle management, upper management, and senior leadership. Data has been coded and analysed using a text analysis program, NVivo, and our findings are based on themes in the scholarly research.

This report is presented as follows. Section One presents findings on the health and wellbeing of paramedics, focusing predominantly on the data from the survey. Section Two considers the systems and support available for paramedics, and combines survey data with themes from interview analysis. Section Three focuses on six key areas where we provide more in-depth discussion of topics arising from the project, including: the 'high-reliability' management approach; resilience training; meal breaks; the changing workforce; paramedic career directions; and, considerations relating to communications centres. In sum, this report provides a current snapshot of the health and wellbeing of the Australian emergency services workforce, and highlights key issues in the management of employees and the systems that are critical to their continuing support.

This Summary Report is to be read in conjunction with the Companion Report which includes descriptive statistics and detailed statistical modelling information.

SECTION 1 THE HEALTH AND WELLBEING OF PARAMEDICS

More than $9 billion is spent on mental health in Australia annually, a figure that continues to grow each year (Australian Institute of Health and Welfare, 2018) and presents growing concern for employers of individuals who work in stressful environments or are exposed to trauma in their workplace. The nature of work performed by emergency service personnel and in particular frontline paramedics, means they operate in a high stress environment, and are exposed to extreme and traumatic and extreme events on a regular basis.

Previous research demonstrates chronic exposure to traumatic events increases the risk of psychological ill health, and associated mental health problems including PTSD (Grant, Dutton, & Rosso, 2008; Huizink et al.,

2006). Studies of PTSD in emergency responders report that those suffering from associated symptoms is almost double the lifetime prevalence for the general population (Australian Institute of Health and Welfare, 2018; Skogstad et al., 2013). Given that exposure to traumatic events is unavoidable for emergency service workers, the consequences for not effectively controlling this hazard can be devastating on an individual level and have accumulative consequences for the employing organisation. In this section, we consider the health and wellbeing effects of trauma exposure on emergency services workers, including PTSD, stress, anxiety, depression, general mental health, physical health, fatigue, work ability and intention to quit.

1.1. POST-TRAUMATIC STRESS DISORDER

It is difficult to obtain accurate costs about mental health in general, and particularly PTSD, as many of the estimates are either more than a decade old, or from military organisations. Estimates range from US$4,000 to US$20,000 per person per year (Ferry et al., 2015; Ivanova et al., 2011). Much of this cost (an estimated 80%) comes in the form of lost productivity and 'presenteeism' in the workplace, with the remainder comprised of medical expenses associated with immediate and ongoing physical and mental health requirements (Ferry et al., 2015). There is a long history of research demonstrating a spill-over effect from work into non-work life and although research on the spill-over on the paramedic profession is limited, it is likely that families are affected by a paramedic's work experiences (Hill, 2014). Hence, aside from the human suffering, there is also an important financial and social burden for individuals, organisations and society.

We measured levels of PTSD using the PCL-5 measure, which was developed based on the DSM-5 criteria for PTSD (for further discussion of this measure see Appendix A). Using this measure, participants were asked to keep the most stressful experience in mind, and rate (on a scale 0 to 4) the extent to which she/he has been bothered by that specific experience in the past month. A sum of all items provides possible total scores of 0-80. A provisional PTSD diagnosis can be made when the total score of PCL-5 is 33 and above (Bovin et al., 2016).

Our results indicate a provisional PTSD diagnosis can be made for 10% of Queensland and 8.5% of South Australian staff[1]. In raw numbers this extrapolates (approximately) in the full population to 350 and 90 individuals in

[1] **We were unable to determine a number from the Northern Territory sample due to small sample size.**

PREDICTORS OF PTSD

each state respectively. An additional 6.6% and 4% in each state had a PLC-5 score of 25-32, which means around 250 additional participants in Queensland sample and 40 additional participants from South Australia sample are close to the cut-off scores for a provisional PTSD diagnosis and as such are in danger of developing PTSD.

These figures are low compared with findings from previous studies of emergency or workers or paramedics (Bennett et al., 2005; Clohessy & Ehlers, 1999) and indeed from our pilot study. However, it should be noted that the standard criteria used by professionals for PTSD changed considerably between the pilot survey of this research program and Study 1 with the newest edition of the American Psychiatric Association's (APA) *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*) coming into use (for discussion of this point and how it is likely to have affected this study and the ambulance context more broadly, see Appendix A).

Respondents with 16-25 years' experience reported more symptoms of PTSD

A number of variables significantly predict the frequency of experiencing PTSD symptoms. For example, length of tenure was associated with frequency of experiencing PTSD symptoms. Respondents with 16-25 years' experience in the service reported experiencing more symptoms of PTSD than all others. It is likely this relationship is influenced by the increased instances of exposure to traumatic incidents. The survey found higher rates of trauma exposure, and increased types of trauma exposure (e.g. natural disasters, motor vehicle accidents) were also associated with higher incidence of PTSD symptoms. Further, individuals frequently exposed to toxic substances; those frequently exposed to combat; and those who feel they have caused harm to others; were also more likely to experience symptoms of PTSD. From our data, fatigue is the strongest predictor of individuals experiencing PTSD symptoms and other negative employee outcomes, and is explored further in section 1.4 Fatigue).

Fatigue is perhaps the strongest predictor of PTSD

Social support of colleagues, friends, family and the immediate manager was found to have a negative relationship to the frequency individuals experience PTSD symptoms. This means that those who had more social support were less likely to have a provisional PTSD diagnosis and fewer PTSD symptoms. Participants who report feeling 'somewhat' to 'very much' supported by supervisors were least likely to have a provisional diagnosis of PTSD. This finding highlights the importance of social support in general, and that colleague support and support from family

Those with more social support were less likely to have PTSD symptoms

and friends can be important to psychological ill health and minimising the prevalence of PTSD in emergency services (for further discussion of these points see section 2.2 Employee Support).

The direction of these relationships is not determinable from the data, however the importance of support both at work and at home cannot be overstated. Given that exposure to potential trauma is largely unavoidable for most paramedics, reducing fatigue and ensuring high levels of supervisor and colleague support can be valuable to minimise the likelihood of individuals suffering from the debilitating effects of PTSD.

Although frequency with which an individual experiences PTSD symptoms are of concern, scores on this scale also predicted organisational factors. For example, employees reporting more frequency of experiencing PTSD symptoms also reported higher levels of intention to quit and lower work ability. These outcomes impact the capacity for employees to continue their career in the medium and longer term. More detailed information (such as the statistical relationships) about the predictive modelling for PTSD, is provided in the Companion Report.

1.2. STRESS, ANXIETY, DEPRESSION AND GENERAL MENTAL HEALTH

To examine depression, anxiety, and stress, the Depression, Anxiety and Stress Scale (DASS) (Henry & Crawford, 2005) was used. This scale has 21 self-report Likert scale items with three subscales (depression, anxiety and stress). For depression, total scores of 0-4 indicate normal, 4-6 for mild depression, 7-10 for moderate depression, 11-13 for severe depression, and 14 or more for extremely severe depression. For anxiety, total scores of 0-3 indicate normal, 4-5 for mild, 6-7 for moderate, 8-9 for severe, and 10 or more for extremely severe. For stress, total scores of 0-7 indicate normal, 8-9 for mild, 10-12 for moderate, 13-16 for severe, and 17 or more for extremely severe.

Around 17% of Queensland and South Australian participants returned surveys that indicated severe or extremely severe depression, while Northern Territory participants reported 12% at the severe and extremely severe levels. However, for Northern Territory almost 40% of the sample reported moderate depression, compared with only around 20% in Queensland and South Australia.

Our sample also included evidence of severe and extremely severe anxiety reaching almost 40% in all three jurisdictions. When we include moderate levels of anxiety, the South Australian and Northern Territory sample results balloon out to 55% and 64% respectively, with Queensland slightly lower at around 50%. Interestingly though, while depression and anxiety are high, we found reported stress levels in the moderate to extreme range only reached 10% in all three jurisdictions.

"OUR SAMPLE ALSO INCLUDED EVIDENCE OF SEVERE AND EXTREMELY SEVERE ANXIETY REACHING ALMOST 40% IN ALL THREE JURISDICTIONS. WHEN WE INCLUDE MODERATE LEVELS OF ANXIETY, THE SOUTH AUSTRALIAN AND NORTHERN TERRITORY SAMPLE RESULTS BALLOON OUT TO 55% AND 64% RESPECTIVELY, WITH QUEENSLAND SLIGHTLY LOWER AT AROUND 50%."

This disconnection can be explained by identifying stress as a cognitive response to a current threat that will no longer exist when the threat has gone. This contrasts with anxiety which is a psychological stress response that remains for a long period. This response may not fade even when distanced from the stressor. Given that the survey was not administered at or immediately following a stressful work situation this can explain why stress was not high, although elevated levels of anxiety remained as a prolonged psychological consequence of past stressors.

A relationship between shift length and depression was evident in the results with participants working longer shifts more likely to report depressive symptoms. As would be expected, employees who reported alcohol abuse or other drug abuse also reported higher levels of depression and anxiety. Again, while the direction of this relationship cannot be determined with our data, other research has shown those using maladaptive coping strategies were more likely to develop PTSD and depression (see for discussion, Skeffington, Rees, & Mazzucchelli, 2017).

Mental health was also examined as one component of the Short Form 12 (also used to measure physical health, described in the following section), which produces a score from 1-100 (low to high). The mental health component examines items such as social functioning and role limitation due to mental health issues. Across the sample, the mental health score for all states was around 50, even when controlling for differences between samples, and this score is consistent with the average for the general population (Ware, Kosinski, Turner-Bowker, & Gandeck, 2002).

Findings reveal factors likely to improve an individual's mental health score. For instance, individuals who report more resilience also report higher mental health. Similar to anxiety and depression, individuals who reported hazardous alcohol drinking and other types of maladaptive coping, also reported lower mental health scores.

1.3. PHYSICAL HEALTH

Maintenance of optimum physical health over the course of a career is necessary for ambulance employees to provide the level of service required. To measure employees' physical health, the physical component of the Short Form 12 was used, producing a score of 1 - 100. This component considers items including physical functioning, health problems, bodily pain and vitality.

Using this scale, the study found general physical health was very similar between participants with mean scores in each jurisdiction at 50 out of 100, consistent with the average level for the general population (Ware et al., 2002). Survey results indicate increased fatigue and higher incidence of trauma exposure (both frequency and quantity) would decrease physical health amongst the workforce.

1.4. FATIGUE

Fatigue is a common area of concern among emergency service workers. One study conducted among emergency medical services workers found that 55% experienced fatigue (Patterson, Suffoletto, Kupas, Weaver, & Hostler, 2010). Similarly, a study conducted on rural and regional ambulance personnel in Australia found more than one third of participants experienced severe fatigue at work and another one fifth reported mild fatigue (Pyper & Paterson, 2016).

When examining research that relates to outcomes of fatigue on the health, wellbeing and performance of paramedics, almost nine out of ten emergency service workers believed fatigue affected their work performance (Sofianopoulos, Williams, Archer, & Thompson, 2011). Pyper and Paterson (2016) found paramedics believed fatigue increased their likelihood of making medication errors, have driving accidents, or 'nearly crash' due to falling asleep while driving. Equally, reduced reaction speed, reduced decision making ability, and concentration were all the result of fatigue. Longitudinal research shows an increase in fatigue over time among ambulance personnel increases sick leave and places them at risk of disability (van der Ploeg & Kleber, 2003).

Findings on fatigue

Fatigue remains a problem for more than half of staff in each jurisdiction.

Fatigue is most apparent in people up to the age of 40.

When employees perceive the HRM systems to be strong and have high levels of social support, their fatigue scores are lower.

In this project we used the Fatigue Assessment Scale (de Vries, Michielsen, Van Heck, & Drent, 2004) to measure fatigue. This scale has 10 self-report items asking about participants' fatigue levels. Total scores range from 10 to 50 with a higher score indicating greater fatigue. It is no surprise shift workers performing long hours and emotionally draining work will feel fatigued. Our figures indicate fatigue remains a problem for more than half of staff in each jurisdiction. The findings are consistent even when controlling for differences in age, gender, dependents, nightshifts worked, work location, working hours, shift length and length of tenure.

In our statistical modelling, fatigue is most apparent in people up to the age of 40 and more apparent in people who have frequent exposure to life threatening illness or injury. People who rank highly on PTSD scores are more likely to be fatigued. Conversely when employees perceive the HRM systems to be strong (see section 2.1 Human Resource Management System Strength) and have high levels of social support, their fatigue scores are lower. This is important to note given how relevant fatigue is as a predictor of negative employee outcomes.

To measure resilience, The Connor–Davidson Resilience Scale (CD-RISC) (Campbell-Sills & Stein, 2007) was used. This scale has 10 self-report items, asking the participant about the extent to which they are able to recover from, or adapt positively to, 'change, personal problems, illness, pressure, failure, and painful feelings' (Campbell & Stein, 2007, p. 1026). The sum of the scale provides a total score ranging from 0-40, with higher scores indicating greater levels of perceived resilience.

A key coping mechanism at the individual level is resilience (resilience appears as a predicting variable for four out of five health outcomes). What is clear from our modelling is that while adaptive coping mechanisms can assist with resilience, fatigue and maladaptive coping have a negative relationship with resilience. Equally, levels and experiences of insomnia will negatively predict an individual's resilience levels, that is, those with insomnia will have reduced resilience. Organisational and work related factors that relate to an individual's resilience include the number of hours one works (those working more than 36 hours had the lowest on resilience).

1.5. WORK ABILITY AND INTENTION TO QUIT

By understanding the capacity of employees to complete tasks, we can define actions that prevent deterioration and promote improvement of their ability to do their job well, and increase their desire to stay with their employer. Two measures were used in this research to better understand the likelihood that employees will remain in their employment with capacity to successfully complete tasks and responsibilities. These measures relate to work ability and intention to quit.

> **The average work ability score was 35, indicating moderate work ability. In this environment, a moderate level of work ability is lower than the employing organisations would be striving for as it is unlikely to result in individual longevity in the profession.**

'Work ability' is the balance between an employee's physical, mental health and social resources and their demands at work. The origins of the Work Ability Index (WAI) lie in research designed to assess how long employees are able to work and to what extent being able to work depends on the work content and job demands (Ilmarinen, 2007). An assessment of work ability is helpful to assist understanding of how to promote an individual's (and workforce's) capacity to continue working in the short, medium and long term. The possible range of scores of the WAI are from 7 to 49. A score less than 27 indicates poor work ability; from 28-36 is moderate; 37-43 is good; and 38 and above is excellent.

In this study, the average work ability score for participants was 35, indicating respondents perceived their work ability as moderate. In this environment, a moderate level of work ability is lower than the employing organisations would be striving for as it is unlikely to result in individual longevity in the profession. In Queensland, 51.9% of participants reported their work ability as poor or moderate. This is comparable with Northern Territory (50%), but not as high as South Australia (59%), suggesting a need for investigation to promote improved work ability.

Qualitative data provide a deeper understanding of work ability, with many paramedics suggesting the role would likely lead to burnout and is not sustainable over the long term:

> *For me, I want to get out of the ambulance service because just objectively, I don't see many 50, 60 year old ambos retiring who have healthy marriages, are a good weight, are genuinely happy people, and are still themselves. What I do see are these partly angry, overweight, somewhat unhappy… I want to get out because not many ambos run the gauntlet and come out unscathed [Interview 45].*

A number of key factors that influence work ability were highlighted in the analyses. Firstly, work ability was the lowest among those working less than 8 hours per shift. Research demonstrates working longer hours reduces work ability (Mokarami, Mortazavi, Asgari, Choobineh, & Stallones, 2017), hence, it is possible that respondents have self-selected to work shorter shifts where possible to individually eliminate exposure to longer shifts. In line with expectations, those exposed to physical assault and more instances of trauma exposure also had a lower work ability score. Fatigue and PTSD also had a negative effect on work ability among respondents.

"I don't see many 50, 60 year old ambos retiring who have healthy marriages, are a good weight, are genuinely happy people, and are still themselves."

Work ability is closely related to an individual's intention to quit but results indicated they are conceptually distinct and thus warrant separate attention. Intention to quit scores are of greatest concern within the Northern Territory sample, with 25% of participants indicating they are seriously looking for another job and will be unlikely to remain in that employment in 5 years from the time of the survey. In comparison, the Queensland sample showed 20% of staff with an intention to quit, and around 15% of the South Australian sample were actively seeking alternative employment.

Several factors predict an individual's intention to quit in the data. The more frequently one is exposed to natural disasters and physical assaults, the greater the employee's intention to quit. Employees in full time employment are significantly less likely to quit than those in part time or casual employment working fewer than 20 hours per week. Some interviewees explained that employees working part time hours were doing so while they were developing themselves in preparation for a new career outside the service:

> *There's a different philosophy now than when we started 20, 30 odd years ago… Now people are coming in and seeing that it's a completely different environment. It's super-fatiguing, it's super-busy, it's super-confronting and it's not something that this current generation are seeing as their life-long career. They're seeing it as a 10 to 15 year career. I reckon nearly all of the part-timers in my region or on the fringe country region are doing job share because they're forging out or have another career [Interview 55].*

Intention to quit is also influenced by the HRM system – when it is viewed as weak it increases the likelihood of employees leaving their organisation (Li, Frenkel, & Sanders, 2011). Accordingly, our results suggest employees who perceive the HRM system as strong also report lower intention to quit in the next five years. Importantly, a strong HRM system is associated with a reduced intention to quit

particularly for those frequently exposed to physical assaults. It also appears that when the social support an individual receives is low, their intention to leave increases. These findings again reiterate the critical nature of social and formal support systems in the ambulance service, which we discuss in detail in section 2.2 Employee Support.

SECTION 2 SYSTEMS AND SUPPORT FOR PARAMEDICS

2.1 HUMAN RESOURCE MANAGEMENT SYSTEM STRENGTH

The HRM system refers to the practices, processes, philosophies and strategy that assist the organisation to achieve goals via management of its human resources. The perceived strength of this system is important, as a strong system communicates unambiguous messages to employees about behaviours that are expected, valued and rewarded by the organisation (Ostroff & Bowen, 2016).

Bowen & Ostroff (2004) define a 'strong' HRM system as one, which has: (1) distinctiveness of HR practices (i.e. they are visible, understandable, legitimate and relevant to employees' goals); (2) consistency of HR practices (i.e. their purpose is presented in the same way and are internally aligned); and, (3) consensus about the practices (i.e. there is agreement among policy makers about the need for and purpose of the practices). When employees perceive the system to be strong, this facilitates a

supporting climate whereby employees understand and enact expected behaviours that align with the organisations goals (Bowen & Ostroff, 2004) which thereby improves performance (Cunha & Cunha, 2009). Research has also pointed to relationships between strong HRM and employee level outcomes, such affective commitment (Sanders, Dorenbosch, & de Reuver, 2008), employee work satisfaction and intention to quit (Li et al., 2011).

In this study, perceived HRM system strength was identified using the measure developed by Delmotte, De Winne, and Sels (2012), which assigns a score in a possible range of 31-155. Based on previous research (see for instance, Cafferkey, Heffernan, Harney, Dundon, & Townsend, 2018; Delmotte et al., 2012; Sanders & Yang, 2016), scores of 62 and less are indicative of employee perceptions of a weak HR system. Scores of 93 and over suggest employees perceive a strong HR system. In Queensland less than a quarter of respondents ranked the system as strong (23% scored the system higher than 93), compared with 16% in South Australia and 10% in the Northern Territory.

One probable explanation for these differences is organisational size; larger organisations have greater access to resources, and employ more HR professionals thus increasing the capacity to develop and implement policy and communicate with staff. As noted, with increased HRM strength, intention to quit decreased. But perhaps more importantly for the safety and wellbeing of employees, strong HRM reduced fatigue significantly. Given the evidence is clear regarding the importance of fatigue on a range of outcomes for employees, this relationship needs further understanding and investigation.

STRONG HRM SYSTEMS

A 'strong' HRM system has:

(1) Distinctiveness of HR practices - they are visible, understandable, legitimate and relevant to employees' goals

(2) Consistency of HR practices - their purpose is presented in the same way and are internally aligned

(3) Consensus about the practices - there is agreement among policy makers about the need for and purpose of the practices

2.2 EMPLOYEE SUPPORT

2.2.1 Formal systems of support

Across the states and territory, significant consideration is directed toward developing robust formalised organisational support systems that build employee resilience and assist coping. These services include telephone and face-to-face counselling services, debriefing, education and training, and the peer support program. Responses from interviewees indicated an overall positive perception of the support programs in Queensland and South Australia.

There was clear consensus that the components of the program were effective individually and fitted together well as a cohesive system. The following interviewee captures the process that followed a critical incident in South Australia:

> *Once an incident has reached a certain point, there's an automatic [process], you have - managers are coming down to do a debrief, the crew's stood down, they all go back to station and they have that debrief… I didn't feel completely ready to download to this manager that I'm going to have to sit in front of in future interviews… So the next thing that happened for us was we got a phone call from one of - we have three psychologists in the city that we can access four times a year. So one of those gave us a call that night and that was quite helpful… So boom, boom, boom! That's quite a good foundation…. But then we got follow up from our team leader. 'How's it going? Everything all right?' Just softly, softly [Interview 35].*

However, when considering aspects of the work operation more broadly, there was a general sense that aspects outside the formalised organisational support systems inhibit employees' capacity or willingness to access this system in relation to some areas of concern for them or at certain times.

For example, the previous quote suggests some employees believe the debrief with their manager cannot be sequestered from later interactions. In each jurisdiction there was also some reticence expressed to engaging in honest conversations about psychological health for fear of it possibly impacting an individual's career progression. These concerns are prohibiting some individuals from seeking support within the system. Some employees indicated they sought psychological support at their own expense, outside of the organisation, to avoid this concern. This is a key finding relating to the counselling element of the formal support system.

I feel like we spend a lot of money on our staff welfare through the peer support program and our EAP, the psychologist who we have available to us. But it seems very closed… there's … psychologists that we're allowed to go and see. Now, if you're someone who is thinking I also am applying for this position at the moment and I think this person might be on this panel, I think I just won't go. We're not really given other options [Interview 53].

Another core component of the support system is education and training. This training is conducted to varying degrees each jurisdiction for individuals and to improve managerial skills to improve employee resilience and coping. As formal tertiary qualifications are needed for all employment as a paramedic across all jurisdictions in Australia now it seems reasonable to expect some aspects of this training would also be directed towards mental health and well-being.

Only one university explicitly advertised a unit with some content on understanding the paramedic's own mental health in the context of the work environment.

However, our review of the course topics for ten universities across Queensland, South Australia and the Northern Territory offering the Bachelor of Paramedic Science degree, found only one university explicitly advertised a unit with some content on understanding the paramedic's own mental health in the context of the work environment. Within this course only one lecture is dedicated to exploring 'our own mental health and care of the self, mental health continuum'. As the Executive Manager of Priority One in Queensland states:

Some of the universities do a lot [for students] around mental health. Some of them do very little. So it's very inconsistent across Australia what universities offer in that space. This is concerning given that the majority of new paramedics do not have the level of life experience once common among ambulance officers in decades past.

Pressure is therefore placed on the individual and the ambulance services to build resilience and coping skills in-house on an ongoing basis. Some resilience training is incorporated into the induction programs. In South Australia and Queensland, a half day program is provided but the structure of these may not be identical. In South Australia, the program is described by a paramedic:

Pre-education, I think, is a big thing within the organisation and we run about a four and a half hour session with all new employees. Managing personal stresses in the workplace is the subject. It's actually a unit of competency under the health training package. We've developed our own package. We deliver it. So we talk about things like shift work, the ambulance service, cumulative stress, acute stress, those type of stuff within that. We also talk about our peer support program [Interview 32].

There is some suggestion, however, from South Australian interviewees that a more comprehensive approach would be of benefit in the induction process and also ongoing over the course of a career:

> *When I did my internship only four and a half years ago, [the lead psychologist] did come in and basically gave us a bit of a chat. But it was nothing like super in depth. It was really just like these are some signs [of stress] and if you have an issue call us [Interview 41].*

This extends to managers as well:

> *One of the things I've often thought or wished for was as a team leader that we get some basic training on trauma counselling… When we get training it's - training time is so limited, the focus is inevitably on clinical things… [Interview 24].*

While clinical training in South Australia is sophisticated and generally well resourced, feedback such as this from interviewees indicates a gap exists in the provision of initial and ongoing training in the format or depth desired by employees. Paramedics report regular clinical training at a station level and express desire to also include training for resilience and mental health of the employees.

In Queensland, the 'Finding the Silver Lining' Program has been introduced as part of the induction process, with some positive feedback from employees. This is a four-and-a-half-hour program where participants are provided with online and print resources and material to complete over the first 12-24 weeks on the road, and a reflective journal. As one interviewee explains:

> *The Silver Linings workbook is a series of activities that are largely self-reflective. It talks about sleep patterns, work/life balance, coping mechanisms, how to recognise stressors and reaction to the stress… It's purely a self-reflective activity book. But that then needs to be followed up with a mandatory appointment with our Priority One psychologist… at the end of the activity, and especially after the appointment with the psychologist, most of the comments are very positive. It sort of seems to make sense once that loop is closed with the psychologist appointment [Interview 62].*

Queensland also conduct a one day mandatory training program for managers, supervisors and acting supervisors which focuses on Trauma and Resilience in the Workplace. The program covers legal responsibility for psychological wellbeing, and other topics such as critical incidents, PTSD, anxiety, depression and suicide. Over a period of almost ten years the program appears to have positively influenced the way managers and supervisors interact with employees around psychological wellness. This is reflected in the following comment from a Priority One leader describing an exercise they have conducted in the managerial program since its inception.

> *We say to them, what's all the worst things you could say when [paramedics] get back or when they come back to the station? It used to be that there was lots of energy in the room. People would be recounting what had been said to them in the past. There would be a whole heap of things that people would come up with. Interestingly, I really saw a contrast last year. The same scenarios. When you ask them what's all the things that would be helpful, the room would go quiet and you wouldn't hear anything. But last year it was the opposite way around. It struck me because it was the biggest contrast I've seen around a group of managers. All the 'worst things', they*

> *were actually - the room went quiet. They were having trouble trying to think of things! And 'what are all the helpful things?' The room got active and they were - they came up with loads of things [Interview 65].*

As the quote demonstrates, there is an emphasis on delivering practical skills to help managers conduct positive interactions about mental health and wellness with their employees. Development of similar skills among employees would enable them to provide better support to their peers who our research suggests are a primary source of informal support. Some managers also felt that the training for managers, while worthwhile, needed to be extended:

> *Since we've been doing the training we now get lots of managers that ring us up and go look, I'm not sure what to do with this, or the crew's just been to this terrible job. A lot of the time we'll be saying, have you rung the crew and seen how they're going? Sometimes it's about talking them through that because they're wanting to do the right thing and wanting to get us involved [Interview 65].*

2.2.2 Peer support program

The peer support program is well established across Queensland and South Australia, and to a lesser degree the Northern Territory. Our research shows this program is generally well received by employees although there are operational pressures that mean people are sometimes unable to access the program in a timely manner. Specifically, feedback relates to the timeframe in which individuals are contacted and the means of communication.

Firstly, some paramedics would like more control over when and how they are contacted. For example the period of time between an incident occurring and contact from a PSO was a topic of mixed feelings. While some interviewees prefer time to process trauma before speaking about it with a PSO, others are critical of the current approach as they would like contact sooner. The following quotes summarise these perspectives from both the paramedic and emergency dispatch perspectives:

PEER SUPPORT

"Over 24 hours later you get a phone call when I'm sitting on the couch eating dinner. I couldn't hang up quick enough."

"The purpose… it's to be able to catch people in the moment, like just after they've taken a triple 0 call, not 10 to 12 hours later."

I've had a call once over a day later - you know, you do a job in the morning, the following night at home sitting on the couch the phone's going. Oh, it's such and such from peer support. I'm like, 'what are you calling me for?' Oh, in regard to - I'm like are you frigging kidding me? It was like - it was a slap in the face because it was a significant job the day before in the morning but over 24 hours later you get a phone call when I'm sitting on the couch eating dinner. I couldn't hang up quick enough [Interview 43].

I would do peer support for people on a different team. So, I'd be on a day off and get a phone call saying, "yep this person's on day shift. They've just taken a bad triple 0 call. Can you speak to them?" I would have to wait until they had finished work at 7:00pm and then call them, or I would finish a 12-hour shift and then have to go home and spend an hour or two on the phone to someone afterwards. So I don't feel like – the purpose of what that programme is meant for, it's to be able to catch people in the moment, like just after they've taken a triple 0 call, not 10 to 12 hours later [Interview 30].

There is considerable research on the timing of contact post-trauma; this research is inconsistent and rarely straightforward with many differences based on individual preferences. It may be helpful to ensure individuals are notified immediately when they are tagged as having attended a difficult job, to acknowledge the employee might be in a vulnerable state. This allows the organisation to respond or interact in a way that best suits the individual's preferences for support, thus allowing them more flexibility to tailor the support mechanism to meet their preferences for contact type and timing. The following interviewee provides a detailed suggestion:

I think we need to empower people to use the program and not necessarily enforce the program on people. "Hi, this is Doug doing a peer support call." "I'm fine, thanks. Thanks for the phone call. Appreciate it. See you later." Is that the right way? I think we need to actually now start talking to our staff and saying, what type of peer support do you want? I think that's where we could use technology to our advantage. So, you could generate an automatic message going out. So as soon as peer support is activated, bang, "hey, Doug, peer support's been activated. Do you need to speak to somebody now? (a) No? (b) Yes." Bang, it fires back to the person who's doing the peer support activation. Peer support required now, or whatever terminology you want to use, for a case. We ring in, we get the details. Hey, they need contact now. Peer support required for a job. Ring in [Interview 32].

Some suggest an auto-generated or personalised text message very soon after a critical incident occurs would suit them better. Such an approach caters to a subset of employees who indicated they do not engage with PSOs, but the contact is still important. For this subset of employees, it is not always two-way communication that is key, but acknowledgement of the difficult job they have attended:

> **I generally wouldn't [engage with a PSO], I very rarely engage with them beyond, "I'm fine, thanks very much for the call, I appreciate the call and I'll get back to you if I'm having any trouble." But I know I feel better that somebody cares, that Comms recognised that I had to do something difficult, I kind of feel glad that somebody has acknowledged that [Interview 7].**

While for some employees it is the timing of initial contact that is a critical feature of the peer support service, for others it is the recognition inherent in that contact that is more important. Hence, for some (but not all) people, PSO contact may have the same effectiveness in a different format such as an initial text message which gives the employee the control of whether and how they choose to respond to support. The use of text message – although it can be viewed as impersonal – does give the employee more discretion to make contact at a time that they can ensure they are able to talk privately and when they are ready. The following paramedic discusses this technique as applied by a PSO:

> *She'll send you a very gentle text and she'll follow it up in a week's time… If someone rings me and wants to talk about a particular thing and I'm not ready, I won't answer the phone or I won't talk about. It's like you know, I'd rather have a face to face. But I just like the way [a PSO] uses social media rather than the normal process of peer support which is a phone call… You're kind of put on the spot. Your partner is sitting there. It's very cold. It's almost clinical… So what I like about the texts is she's using social media to just go here if you need me, if you want to - and sometimes - that's the only time I've actually reacted to a PSO and texted back, you know, actually it was an awful job [Interview 45].*

2.2.3 Colleagues and family

According to the survey data, work colleagues and family are two main sources of social support for emergency service workers. Around 80% of employees in Queensland and South Australia reported feeling 'very much' supported by their family and non-work friends. Conversely, less than five percent of employees in both states reported feeling 'not at all' or 'a little bit' supported by family and friends, compared to around one in five reporting the same about their frontline manager. Perceived social support from colleagues was similarly high in Queensland (62% feel 'very much' support) and South Australia (70%) and our qualitative research is complementary to these survey findings. Interviews indicate for many participants, colleagues, family and friends are the main and often only support available. Given the centrality of these groups as providers of the majority of social support in all cases, it is of interest to explore how best to facilitate and improve this support relationship.

"YOU'RE LIKE, I TOLD YOU THIS BECAUSE I WANTED TO UNLOAD AND NOW I'M MINDING YOU. SO YOU JUST DON'T END UP TELLING PEOPLE."

As the following interviewee suggests, a 'well-educated workforce' is necessary, and the overwhelming feedback from interviewees was that further training and development on resilience, coping and social support would be of great value.

> *[Peer support] seems to be as effective, if not more effective, than all the other interventions. I mean the whole suite of them should be available, but a well-educated workforce, who know how to debrief each other without being invasive or nosey or judgmental, would probably help a great deal… how to recognise the signs, and actually if they're taught about the signs and symptoms in themselves, they'll know how to recognise it in somebody else anyway, just by default. So, destigmatising, encouraging people to put their hand up if they feel unwell or not dealing with something, and workmates who spot where someone might be struggling. And go back to the family, because the family observe someone first hand too [Interview 58].*

Colleague support is fundamental for assisting coping in employees exposed to critical incident stress (Oginska-Bulik, 2015). While the current scope of training centres on self-care, caring for others is another clear pathway to offer developed training programs. Identification of signs and symptoms of stress-related mental illness in one's colleagues, and how to respond and provide support to those suffering would be beneficial in the workplace. Extending the current training programs to include sessions available for family members, or simply offering educational materials to the families of employees that may guide them in providing effective support, is likely to be beneficial.

As previously mentioned, these two support groups – family and colleagues – provide different forms of support according to the employees interviewed. Colleagues are considered instrumental for replaying a case and considering the technical aspects of what occurred.

> *You might do a very high stressful job, okay you might do a case that's very challenging, you know, the guy in the car burnt, and you spend quite a few hours doing that case… All you really want to do is speak to your peers, speak to someone and go well we did this job. It's not so much a case all the time of oh I feel stressed or I don't think I'm emotionally I'm challenged with it. It's more of… the clinical pathway I went down. You try to talk it over with someone to go over how you went professionally [Interview 34].*

Family play a different role and are not always seen as a suitable sounding board to discuss difficult cases; colleagues are generally seen as critical for this aspect of support:

> *You can't go home and tell people, I had a baby die today. You just can't tell that to most people, they'd be devastated. Then they become needy, then they need attention and they're upset and they want to know what happened, and what happens to the parents, what's going to happen next? You're like, I told you this*

> *because I wanted to unload and now I'm minding you. So you just don't end up telling people [Interview 8].*

This paramedic continues to explain:

> *Usually if I go home in a bad mood or I'm irritable over something or upset over something, it's usually not the patient care kind of side of it anymore. It's usually a problem with management… You know, something else, which is easy to go home and rant about, and you can rant to anybody about that, you can tell the girl in the shop and they're on your side. But going home, you can't go home and tell people, I had a baby die today, you just can't tell that to most people, they'd be devastated. Then they become needy, then they need attention and they're upset and they want to know what happened, and what happens to the parents, what's going to happen next? You're like, I told you this because I wanted to unload and now I'm minding you. So you just don't end up telling people… When I was new in the job, I was very dependent on the colleagues that I had trained with and the people I was working closely with. We had a very strong network, we were nearly all in our 20s, we socialised together a lot, and we did a lot of work-related debriefing and drinking and socialising together. That was really important at the time. I don't know that I know what I would have done otherwise [Interview 8].*

The difficulty associated with colleague support however is that the high workload experienced by many employees, particularly in the metro areas, does not provide the environment for the required interactions. There is very limited down time between cases, and can be a great deal of inconsistency between the peers rostered on in the same vehicle. In larger stations, this can lead to difficulty in forming lasting relationships between colleagues.

> *There's no chance to defuse after a job because they're bouncing you from job to job, you never get the chance to process what just happened because you're now onto the next event. That never happened years ago, we were a very different service [Interview 11].*

2.2.4 Frontline managers

Although FLMs can provide a great resource for employees, poorly skilled FLMs can create great problems in the workplace. We measured supervisor support as one element of overall 'social support' (these findings are discussed in more detail in the Companion Report). To measure social support, the Social Support Scale was used (Caplan, 1975). This scale has 12 self-report items dividing into 3 major subscales (support from supervisor, support from co-workers, and support from family and friends). The scale asks participants to rate the extent to which she/he has support from these three sources of support. Higher scores are related to the employee feeling more supported.

	Employees' response	Queensland	South Australia	Northern Territory
Supervisors' support	Not at all/ a little bit	21%	17%	20%
	Somewhat	29%	26%	40%
	Very much	50%	57%	40%

Table 2 Supervisor Support for Employees

As Table 2 demonstrates, around half of employees perceive a high degree of social support from their FLM, and the remainder feel only somewhat or not at all supported. Compared to peer and family support (explored further in the Companion Report), FLM support was perceived by employees to be lower overall. These findings are in line with other authors who suggest employees perceive 'support from co-workers, compared to support from supervisors, has greater importance' (Oginska-Bulik, 2015). While peer support has been found to aid the post-trauma recovery process, some research has indicated FLM support is comparatively non-significant (Somville, De Gucht, & Maes, 2016). In our study, however, there were positive outcomes associated with supervisor support; participants who reported moderate to high support from their supervisors were significantly less likely to have a provisional diagnosis of PTSD than those that received no or little support from their supervisors.

Analysis indicates a range of barriers prevent FLMs from providing the high quality and effective support to employees they want to provide and are asked to provide by the people who report to them. As one manager describes:

> *The intent may never be for team leaders to be the first point of call for that trauma counselling, they just are. That's who people go to [Interview 24].*

Interviewees indicate there are factors specific to the workplace and work environment that inhibit employees and FLMs from fostering a good support relationship. In all cases – but especially in the larger state of Queensland (both geographically and number of employees), employees indicated physical proximity, time restrictions, and workload restraints were the three major obstacles to effective supervisor support in the work environment. There are complexities experienced by FLMs in different geographical areas, particularly associated with the physical proximity between manager and employee. Despite the differences between rural and metropolitan stations, lack of staff contact was still a common theme:

> *I've relieved as supervisors in various roles but I think the frustration they have is access to the staff… So there's frustrations from both sides because we get no guidance… So you're not getting the constant interaction with your supervisor to*

chew the fat and resolve issues until they get bigger. It's an access thing [Interview 2].

Alongside this factor, there were some inhibitions about the privacy of conversations where support was sought from FLMs. As one paramedic stated, "There's no trust that you will get understanding, compassion, support or confidentiality. None of those is guaranteed." It may well be that this is a historical perception among some employees based on past incidents. Interviewees indicated "not every manager, but definitely some managers, will turn on you if they know you are having trouble." Hence, the preference to seek support from peers or family was deemed a safer and more confidential source for many individuals.

"There's no trust that you will get understanding, compassion, support or confidentiality. None of those is guaranteed."

"Not every manager, but definitely some managers, will turn on you if they know you are having trouble."

There was strong qualitative evidence in the data that the major obstacle to quality support relationships between employees and FLMs across the three cases was a lack of managerial training, particularly related to managing critical incidents and employee psychological wellbeing. When FLMs are not equipped with sufficient skills to support their employees or identify when they are suffering from mental health difficulties, this places additional pressure on other informal support persons and the formal system of support. The following quotes illustrates these views:

I went through a stage where we had a lot of very aggressive patients who were just incredibly abusive. When I mentioned that to my [FLM], her response simply was, 'well it must be you, you're the only one having these problems' - and she walked away. There was nothing about, 'okay what's happening - why is this happening - let's have a look at it - let's sort of work through if there are better ways of approaching this'. None of that. Then what I found subsequent to our conversation was that most of my colleagues were having similar issues with their patients. They just weren't telling her about it. They were talking about it among themselves [Interview 21].

We have this reliance on managers to identify problems. When you've got PTSD or any other stress indicators you are inherently trying to discredit the symptoms yourself. You mask them and you actively go to hide them. When your manager has been in the job almost 40 years and sometimes I'm trying to see - if everyone's got shit coloured glasses on and you're all trying to look through the same lens… What happens is we all get into this rut of - you tell me if you've got problems and then I'll see if I can identify and I'll tell you. It's a system that's doomed for failure because (1) the employees tries to hide it and (2) the employer generally your manager, is that tainted as well by the job. They've got probably an underlying degree of PTSD and they can't see it in themselves either [Interview 29].

2.3 EMPLOYEE VOICE

Employee voice (the act of speaking up to seek improvements) can come through a range of avenues, formal and collective, for instance, through a union, or informal and individual with an employee raising a matter of concern with a manager. There is an extensive body of research demonstrating the importance of employee voice to the organisation (for example, business improvements, error reporting) and the employee (such as employee wellbeing, fair treatment at work) (see discussion see Wilkinson, Dundon, Donaghey, & Freeman, 2014).

Interviewed staff in all three jurisdictions stated the preference for the union to play a role as a 'backstop.' By this, staff meant they wanted to be able to call upon the union, but didn't require the union to be involved in all issues as staff might wish to speak up or interact with their managers in some circumstances. Thus the union from the staff view should not take on the role management is (or should) be performing. For example:

In some ways I kind of think that we're employed to do this job so our employer should be taking responsibility to make sure that our welfare is looked after. I think if the union does too much to help then in some ways our employer sort of says 'oh we don't have to worry so much about that because the union will look after that'. So I'd like to see first that our employer is doing everything that they should be, not just to say … 'we can't afford that so we just can't put it in'. No they should be providing services, better services, more accessible - they should be trying a lot harder to do that and I don't think that the union should be picking up the slack [Interview 38].

This backstop role for the union was seen as very important to the overall effectiveness of the support network:

I think one thing (the union) have done is touch base with us… actually initiated some proper background information to work out exactly what is needed. I don't believe

> *for one second that we would have actually got this from our management structure… to actually look at, explore what the potential issues are and look at strategies which can be put into place to minimise problems. I very much see the management too focused on productivity and performance indicators. Quite frankly there's a lot of people lined up for the job so if we are out for psychological or other reasons, that's all right, they can get another one in [Interview 47].*

Inferred from this is that unions play an important and valuable role but this is carried out on an episodic basis as the unions do not have the capacity for daily ongoing impact on the ground. To give staff the capacity to voice on the ground requires voice systems and management support. This is widely recognised by all the stakeholders within this research. Management therefore, need to ensure clear and well-functioning systems with clear pathways to raise (and escalate matters), and that employees have trust in the systems. This will facilitate employee voice, with the union as a backstop to ensure all major issues are identified somewhere within the system, be it by managers, employees or the union.

2.4 WORK PRESSURES

Emergency services organisations and the unions supporting employees are acutely aware paramedics and associated ambulance personnel need support to help them cope with exposure to traumatic events. This is why Employee Assistance Programs (EAPs) and formal support mechanisms are almost universally provided in these organisations. Our study identified, while mechanisms were in place, there are individual and organisational factors that impede employees' willingness, capacity or opportunity to access EAP mechanisms, for example, workload, the timing of contact, and individual relationships.

Findings also show access to informal support, such as that offered via peer-to-peer voice, has been restricted due to work organisation changes. Changes to work organisation in many cases, and shortages of skilled personnel at other times, has led to increasing demands and the organisational and operational stressors for the paramedics. This requires longer working hours, fewer breaks and less time spent at the station, along with the requirement to undertake more operational tasks, such as the completion of paperwork.

Furthermore, findings reveal consequences of changes in work organisation, such as reduced opportunity for 'down time' with their peers in the ambulance vehicle or at the station and that paramedics were less likely than previously to engage in peer-to-peer voice in order to debrief after

their exposure to traumatic events. Therefore, not only had their organisational and operational stressors increased, which would increase their risk of diminished psychological well-being and PTSD, but a major source of support for officers to cope with those stressors (i.e. peer-to-peer voice), had been limited.

Changes to work organisation in many cases, and shortages of skilled personnel at other times… requires longer working hours, fewer breaks and less time spent at the station

Our findings demonstrate changes in work organisation may impact paramedics' capacity to conserve resources, due to diminished opportunities to build social capital as a resource that could be accessed on a regular and ad-hoc basis. This has important implications for the employing organisations and the role they play in designing work organisation. Thus, it is important to be cognizant of ensuring HRM support practices are adopted that can increase employee resources to deal with the organisational and operational stressors, along with the traumatic exposure, to which paramedics are exposed. Equally, it is important to have mechanisms in place to identify and respond to the implications of work organisation changes and to ensure that opportunities for informal peer-to-peer voice are considered.

SECTION 3 ADDITIONAL CONSIDERATIONS

3.1 HIGH RELIABILITY MANAGEMENT

There is growing research and practitioner interest in 'reliability seeking organisations' (RSOs). Essentially, RSOs are focussed on reliability, safety and resilience over productivity, profits and performance, and therefore are structured and operate in a way that contrasts with most other organisational types. According to Weick, Sutcliffe, and Obstfeld (1999), RSOs are unique in that they are: committed to detecting and understanding failures; sensitive and mindful to hazards; comfortable with complexity and reluctant to simplify; resilient and able to respond and adapt to crises; and flexible, with a hierarchy that allows deference to subject experts.

Organisations are increasingly identifying as RSOs across broader industries, and in particular, in health care and emergency services. In emergency services organisations, safe, consistent and reliable care of patients is the primary objective. Hence, identification with the RSO approach is beneficial as it enables the organisation to consider whether its systems, processes, culture and philosophy are suitably aligned. The way people are managed in an RSO contrasts with a general high performance approach to HRM, and there are some practice areas that should be considered if an organisation is focussed first on safety and reliability before high performance objectives.

For example, in RSOs, agency and contract workers - who are unfamiliar with the organisations values and systems – can compromise reliability and are generally unsuitable. Performance management in RSOs permits zero tolerance of attitudes and behaviours that are inconsistent with the RSO philosophy. Learning and development activities are sophisticated, well-resourced and focussed on technical skills, mindfulness, and responding to emergency situations. Financial incentives in RSOs can motivate employees to prioritise performance targets over safety and reliability and are therefore generally unsuitable. RSOs require strict accountability processes to support error identification, and hierarchies that allow flexibility in emergencies. Additionally, there is a requirement for over-staffing and duplication in RSOs, to ensure reliability can be maintained in crisis circumstances.

Training programs currently in place are subject to a number of issues that compromise the reliability of outcomes. These include geographical restraints (i.e. remote and distant stations), accessibility to online content, and lack of sophisticated and technologically advanced training delivery resources.

There are some aspects of this RSO approach to managing people that may be of particular interest to the Australian cases involved in this research project. There is feedback indicating training programs currently in place are subject to a number of issues that compromise the reliability of outcomes. These include geographical restraints (i.e. remote and distant stations), accessibility to online content, and lack of sophisticated and technologically advanced training delivery resources. Another inconsistency identified is the lack of duplication or over-staffing of critical roles. This core issue is at odds with the RSO approach as it does not allow for flexibility and consistent response, and also leads to staff burnout and compromised reliable performance. Further investigation into the applicability of the high-reliability philosophy would be beneficial to achieve better alignment between the goals of the organisation and the management of employees and related systems.

3.2 TRAINING FOR IMPROVED RESILIENCE

A key finding from the interviews across the jurisdictions was that there is variation in the approaches to building resilience, and that some states have stronger programs than others. This offers an opportunity to learn and develop, with feedback provided on specific approaches to increasing the resilience of the workforce.

First, as noted in Section 2.2.1 Formal systems of support, there is very limited consideration given to pre-employment preparation for candidate's mental health and resilience. Given the intake of new graduates is generally very young, this places a great deal of responsibility on the employing entity. It may be preferable for the tertiary institution to begin preparing graduates mentally before they are placed in their first position and exposed to trauma and the stress of the paramedic role. Formation of a committee, including representatives of employers and unions, could begin to address this deficiency and make recommendations for pre-employment resilience training and discussion. As an organisational psychologist suggested:

> *It would be great to see, in a university somewhere in Australia... Where they do an introduction to managing clinical stress in the workplace. Second year they're introduced into research methods and mental health and understanding mental health. Year three is where they look at the actual practical, where there's no exam, but it's simply a lecture, every semester two or whatever, where they're actually being taught the techniques of de-escalation [Interview 60].*

Further to this point, data suggests that participants are seeking extended resilience training programs particularly in South Australia and Northern Territory. While this is explored in section 2.2, we reiterate here that participants indicated they would gain value from ongoing training in this area. Furthermore, interviewees noted training for support persons (peers, family and friends) would be beneficial for them. Finally, the training for FLMs and team leaders adopted by the Queensland service is a positive step to addressing the issues noted in Section 2.2.4 (Frontline managers). This program is worthy of consideration by other services not currently training managers in how to improve their ability to identify mental health issues, manage affected staff members, and facilitate a supportive work environment.

3.3 MEAL BREAKS AND RETURN TO BASE PROVISIONS

There are differences between states in the provisions that require employees to return to the station for their meal break during the shift. The requirement to return to base is important as it may be associated with fatigue, burnout, and could influence the mental health of employees. Returning to base has multiple perceived positive outcomes that appear to affect employees stress, anxiety and energy levels. In South Australia and the Northern Territory, the provision for paramedics to return to base between jobs for a meal break has been met with a positive response from paramedics.

> *You're going back to a familiar place. You're going back to your area. You're going back to your stuff, your food's in the fridge. It's more relaxing. If they would send us to a station that you don't know with a crew that you don't know, it's like going into someone else's house. It's not as comfortable [Interview 35].*

As this quote explains, the return to base provision is highly valued as employees can relax in a familiar environment, allowing them to defuse and destress during a shift. There is the addition of enabling employees to eat a pre-prepared (and likely healthier) meal among colleagues, in a more civilised manner, compared with the situation in "some of the other states, their meal break - they have it on the side of the road" [Interview 27]. Or, as another interviewee put it, "in other states, don't even think about getting a meal break, you better take it in the ambulance and eat it when you can!" [Interview 25].

Despite this provision, it still appears to be common for paramedics, particularly in metropolitan South Australia and Queensland stations to be experiencing such high workloads that meal breaks are restricted, delayed by several hours, or not occurring at all.

> *We've had so many cases – it happens every day where cars are hours and hours late for their crib [break], or hours past knock off, but there's no one else to send to the job… We've had some crews that have gone eight, nine, 10 hours before they get their first break. I reckon we've had cars that have done a full 12-hour shift without having any crib break [Interview 30].*

Restrictions to meal breaks of emergency services workers might be seen as unavoidable in the current climate of budgetary restrictions and lean staffing arrangements. While the provisions in Northern Territory are similar to South Australia, there are greater financial penalties. If paramedics cannot take a meal break after four hours, they receive pay at double-time until they are able to break. One participant explains how this change was perceived:

> *We're quite lucky here. Our union was brilliant one-year, negotiated meal breaks. When they first started, it was all a bit all over the shop. They would just send you anywhere. Now, they get you back to your home centre and you will have your meal break there. It is brilliant… You have to go back - if you've got a hot meal, you can go back to where your bag is. You can sit down there. That is your home station [Interview 25].*

"If you join the job now expecting to have a meal on shift or expecting to finish on time, you're in the wrong career"

The interviewee goes on to suggest the home base provides an 'anchor' to take a moment out from what might be a hectic day, in a secure and comfortable environment. The higher financial penalty is an attempt to lessen the employee dissatisfaction associated with delayed and missed meal breaks. Although the additional compensation is welcome, it does not address the fundamental matter of the associated physiological effects of delayed meals and rest in an intense and often traumatic role. As our survey finds, high fatigue is problematic for over half of staff in each jurisdiction. The return to base provision is essentially a useful tool to address fatigue. However, there are concerns particularly in the Northern Territory that the provision will not remain.

> *Fatigue's a big (issue)… if they don't get a break (in the Northern Territory), they go into overtime. St John have been trying to get rid of that for a very long time and … we know they're trying for it again. They try for it every time, but it just doesn't get up. Because our members don't trust for them to provide the break. That's why they have this penalty. That's why we brought it in. Because they actually had - were given two years on the agreement before it kicked in, to address fatigue and they never did. So now it's costing them a lot of money. But they don't address fatigue. They tried to remove the rest and recline clause in their agreement [Interview 18].*

This excerpt is important as it indicates that staff acknowledge the provision is to address fatigue, however they often still have issues returning to base in a reasonable time. Hence, they believe the financial penalties are at least a compensation for the fatigue they experience on a regular basis, and wish to retain it as they do not feel their fatigue issues are always addressed. The scenario is similar in Queensland, where work intensification continues to affect meal breaks and finish times, although there is not provision for return to base or associated financial penalties. Across the board, it is a fairly pervasive view that, "if you join the job now expecting to have a meal on shift or expecting to finish on time, you're in the wrong career" [Interview 5].

3.4 CHANGES TO WORKFORCE PROFILE

There are significant changes affecting the workforce profile of the paramedic profession. Newly qualified applicants are primarily very young and over half in South Australia and Queensland are female. There are some effects of these changes that are going to be experienced by the service on a national level over the coming years.

As young applicants begin to start families, the already strong desire for flexibility is going to increase. Flexible work arrangements have seen some improvement within the South Australia and Queensland services over the duration of the study but according to interviewees there is much scope for further development:

> *[There] is an ever-increasing wish for flexible work arrangements. Don't quote me on the numbers but when we did our Working for Queensland survey last year one of the questions was around flexibility in the workforce, and the stat that interested me the most was there was one question around if you want flexible work options and you haven't got it why. The overwhelming number in the 70 odd per cent was that, I thought if I asked for it I wouldn't be given it. Because at the moment there is very much a largely permanent full-time workforce so people are thinking I wonder if I can get half-time or either asking their colleague or just not seeing it anywhere else or they just think it's not available… More and more people are starting to say actually I wouldn't mind - if we're going to be busy all day I'd rather have a shorter shift, but again that polarises the workforce. So, for every person that wants an eight hour shift there's someone else that wants four days off and the two things don't go together unless you look at part-time work [Interview 64].*

Another conversation that ties into these points raised above is increasing casualisation of the workforce. An increased demand for casual work appears to be accompanying desire for greater flexibility as employees trade security for more control of their working hours and rosters. A shift in the types of work arrangements also coincides with employees taking time to be with family through parental leave.

> *So we have - I think it's about 60 per cent of new graduates are female. So not all of them are going to get married and have kids but there's a good chance that a lot of them will. So we need to be prepared for that shift in our workforce. The casualisation - and not just the feminisation but the casualisation - where people do just want to have a different lifestyle and have flexible arrangements [Interview 68].*

As this interviewee noted, the increasing proportion of female recruits combined with the changing conceptualisation of job security and work life balance means the service will need to focus on their response to managing the workforce. There is pressure on the HRM department to ensure policies and strategy continue to focus on the changing environment and labour force demographics to ensure concurrent changing needs are addressed.

3.5 FUTURE AVENUES OF EMPLOYMENT FOR PARAMEDICS

A topic of conversation which our interviewees felt strongly about was the lack of career progression or development opportunities for paramedics. Outside of increased clinical skill development and managerial positions, interviewees expressed concern that there was great difficulty in moving into other related positions or professions without complete retraining.

There are a number of strategies being adopted by individuals and organisations, for example, some paramedics are working in part-time or casual roles while they study in a different field. Paramedics may study a dual bachelor's degree with the intention that a second career will be accessible when they have become burned out from the high intensity lifestyle. There are pathways to promotion, but as the following interviewee notes, there are far more potential candidates than positions. Given the growing workforce of intelligent, highly qualified and motivated employees coming from the tertiary education system, there are issues with the structure of the paramedic career and the limitations in future progression into management or specialised roles.

> *I think that it's very hard when you've done this job for a long time to think or consider what else you could do that could also sustain the lifestyle that you've learnt to lead, because we're well paid. I think you get stuck. Whether you want to be here or not, you can't leave… It becomes very hard to move, there's limited options for people to get into management roles. We would have a lot more people who are suited to management roles than we have management roles for them… The people who do leave maybe have nursing degrees before they came to SAAS, and might go back to nursing. Or maybe a very small top layer might go off and do medicine or something like that. You hear occasionally of someone who might go and work in another ambulance organisation because their family's had to move. Finally, maybe someone's gone and worked as a mine paramedic or something like that. But none of those options, if you think about it, are overly enticing really. So there aren't a whole lot of things for people to do if they don't be a paramedic. Once you're in, you're stuck [Interview 53].*

3.6 PARAMEDICS AND THE COMMUNICATIONS CENTRE

There are a range of stressors in the paramedic role, and one of these is the tension between paramedics and dispatchers in the communications rooms in each jurisdiction. The tensions are not always present, and appear most at times of high activity, for example, when there is an acute emergency and the address may not be accurate. As one paramedic explains:

> *Most ambos that I've worked with and know believe that they can control the ambulance service much better from the front seat of their ambulance than anyone else can… There's always that animosity there, but it's become I think worse. Not really worse, it's become different. Because of the detachment now, with the civilianisation of the comms room. So, there's still a few old dogs in there, but they're few and far between. So these new people have come in as call takers from some other environment, say from a taxi industry, say. No emergency services, no ethos around that really, or no understanding I guess of that operation environment. Then they progress through to become dispatchers and team leaders, even, up through the chain, and it's become siloed even more so. By virtue of that civilianisation, it's actually become worse, not better. So yeah, it is an interesting dynamic, those two things [Interview 44].*

Interviews indicated stressors of the job are compounded when there is poor communication or misunderstandings with dispatch staff. Organisational research points to improvements in communication and performance when organisational silos are removed and individuals understand the perspective of others within the organisation (Phillips, 2016).

It may alleviate these tensions with 'comms staff' by improving understanding and empathy between both groups of employees regarding the stressors and barriers involved in respective roles. For instance, having dispatch staff occasionally attend jobs with paramedics, and equally, paramedics spending some time in the communications centre. In fact, rotation of paramedics through the communication centre could additionally be beneficial if viewed as a short 'career break', addressing chronic stress, burnout, anxiety, and associated mental health conditions.

4 APPENDICES

4.1 APPENDIX A: SHIFT FROM DSM-IV TO DSM-5

The diagnostic criteria for PTSD were substantially modified from the *DSM-IV* to *DSM-5*, which influenced the conceptualisation of PTSD. The new criteria for trauma and exposure to it limit the types of events that qualify as trauma for consideration of this disorder and change qualifying exposure to trauma. The changes have clearly had an impact on findings on PTSD in the pilot phase of this project and Study 1 so they are worthy of consideration. A summary of the most relevant changes for the ambulance environment are as follows.

In the new criteria, PTSD still requires exposure to a traumatic event but the definition used was modified to restrict its inclusiveness. The *DSM-5* definition of trauma requires "actual or threatened death, serious injury, or sexual violence". Stressful events not involving an immediate threat to life or physical injury such as psychosocial stressors are no longer considered trauma in this definition.

The *DSM-5* has also narrowed the types of events that qualify as "traumatic". The previously used term "threat to physical integrity" was removed from the definition of trauma in the *DSM-5*. Medically based trauma is now limited to sudden catastrophe such as waking during surgery or anaphylactic shock. Non-immediate, non-catastrophic life-threatening illness no longer qualifies as trauma, regardless of how stressful or severe it is. The previously used phrase "confronted with", in reference to indirect exposure through close associates, has been completely removed from the definition of exposure to trauma in the DSM-5; the witnessing of trauma to others now has to be in person.

Medical incidents involving natural causes also no longer qualify (with one small exception about a person's own child). This revision of the definition of medically based trauma in particular has had a

substantial influence on PTSD findings. For example, **a *DSM-IV/DSM-5* comparison study found that 60% of PTSD cases that met *DSM-IV* but not proposed *DSM-5* PTSD criteria would be excluded from the *DSM-5*** because the traumatic events involved only nonviolent deaths (conducted by Kilpatrick et al., 2013).

4.2 APPENDIX B: FULL LIST OF INTERVIEWEES

1 Queensland, Frontline Manager
2 Queensland, Paramedic
3 Queensland, Emergency Dispatch
4 Queensland, Paramedic
5 Queensland, Paramedic
6 Queensland, Paramedic
7 Queensland, Paramedic
8 Queensland, Paramedic
9 South Australia, Paramedic
10 Queensland, Paramedic
11 Queensland, Clinical Educator
12 Queensland, Paramedic
13 Queensland, Emergency Dispatch
14 Queensland, Paramedic
15 Queensland, Paramedic
16 Queensland, Frontline Manager
17 Queensland, Frontline Manager
18 Northern Territory, Union Leader
19 Northern Territory, Paramedic
20 Northern Territory, Paramedic
21 Northern Territory, Paramedic
22 Northern Territory, Paramedic
23 Northern Territory, Paramedic
24 Northern Territory, Paramedic
25 Northern Territory, Paramedic
26 Northern Territory, Mgr. Operations
27 Northern Territory, Manager HR
28 South Australia, Paramedics
29 South Australia, Paramedic
30 South Australia, Emergency Dispatch
31 South Australia, Paramedic
32 South Australia, Paramedic
33 South Australia, Paramedic
34 South Australia, Paramedic
35 South Australia, Paramedic
36 South Australia, Paramedic
37 South Australia, CEO
38 South Australia, Paramedic
39 South Australia, Paramedic
40 South Australia, Paramedic
41 South Australia, Paramedic
42 South Australia, Paramedic
43 South Australia, Paramedic
44 South Australia, Paramedic
45 South Australia, Paramedic
46 South Australia, Paramedic
47 South Australia, Paramedic
48 South Australia, Paramedics
49 Queensland, Union Representative
50 Queensland, Union Representative
51 Queensland, Union Representative
52 Queensland, Union Leader
53 South Australia, Frontline Manager
54 South Australia, Director Operations
55 South Australia, Manager Operations
56 South Australia, Manager HR
57 South Australia, Manager Operations
58 South Australia, Union Leader
59 South Australia, Manager Operations
60 South Australia, Org. Psychologist
61 South Australia, Paramedic
62 Queensland, Manager Clinical Education
63 Queensland, Manager Clinical Education
64 Queensland, Director Operations
65 Queensland, Director Employee Support
66 Queensland, Director Finance
67 Queensland, Director Human Resources
68 Queensland, Manager Clinical Education
69 Queensland, Manager Clinical Education
70 Queensland, Executive Director
71 Queensland, Regional Manager
72 Queensland, Dir. Performance & Planning

*Note: Interview numbers above correspond to number following quotes within this report

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