



PARTNERS IN PREVENTION:

**UNDERSTANDING AND
ENHANCING FIRST
RESPONSES TO
SUICIDE CRISIS
SITUATIONS**

OPTIMAL CARE
PATHWAYS

ACKNOWLEDGEMENTS

We would like to acknowledge the Traditional Custodians of the land on which our services are located. We pay our respects to the Elders both past and present and acknowledge Aboriginal and Torres Strait Islander peoples across the State. We continue to recognise that to Close the Gap we need to work together with Aboriginal and Torres Strait Islander people, communities, staff and stakeholders to ensure that we are meeting the needs of the community.

We acknowledge those who experience suicidality and those lost to suicide, and their families, friends, loved ones, and others who are affected by suicide.

Disclaimers

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Queensland Police Service

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Roses in the Ocean

The views expressed by people with a lived experience of suicide engaged in consultation throughout this project and publication are their own specific perspectives and do not endeavour to represent all lived experience perspectives. We acknowledge that all lived experience insights are valuable and important.

Queensland Alliance for Mental Health (QAMH)

Queensland Alliance for Mental Health (QAMH) is the peak body for the community mental health sector in Queensland.

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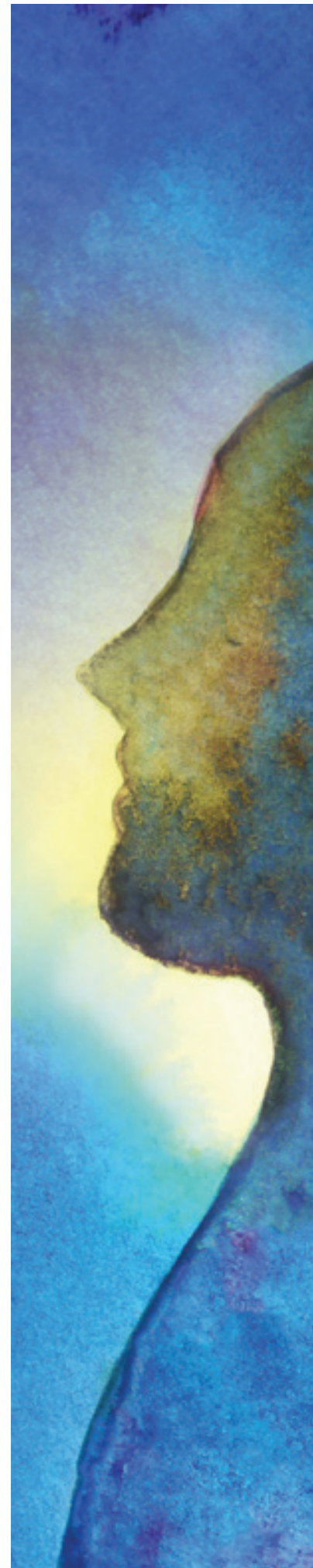
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OVERVIEW

Individuals who experience a suicide crisis often come into contact with police or paramedics. Those who have experienced a suicide crisis report deficiencies with the existing system, and police and paramedics report that responding to these events is one of the most challenging aspects of their role. However, little is known about the nature, extent, precipitating factors, pathways and outcomes of a suicide related call-out, and what responses will most effectively and compassionately meet the needs of those in crisis. *Partners in Prevention: Understanding and Enhancing First Responses to Suicide Crisis Situations*, funded by the Queensland Health Suicide Prevention Health Taskforce, was established in 2017 to address these knowledge gaps and inform systems enhancements.

Project overview

The Partners in Prevention project encompassed five major initiatives:



DATA LINKAGE

A linked data study about individuals who came into contact with Queensland Police Service or Queensland Ambulance Service between 2014 and 2017, and their health services use and outcomes between 2013 and 2018.



SERVICE MAPPING

An integrated service mapping of collaborative services involving police, ambulance and mental health services up to January, 2018.



PERSPECTIVES FROM LIVED EXPERIENCE

A workshop to gather lived experience perspectives on optimal first responses to suicide crisis situations, and situations involving a recent bereavement due to suicide.



LITERATURE REVIEWS

Reviews of literature on: optimal care pathways following a suicide-related call to emergency services; evaluation frameworks for collaborative suicide crisis interventions; and data linkage studies in suicidology.



KNOWLEDGE, SKILLS, ATTITUDES AND CONFIDENCE OF POLICE

A mixed methods study of knowledge, skills, attitudes and confidence of police in responding to suicide crisis situations.

Our partners



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SUMMARY

Why we did this

Tailored, effective interventions, that can be delivered during or immediately following the first response to someone in a suicidal crisis, are vital in order to support a person out of a crisis and prevent future suicide attempts. The predominant health pathway used by first responders in Australia is transportation to a hospital emergency department. Recent reports have highlighted significant barriers to care that await those presenting to emergency departments with mental health problems, including suicidal crises. Individuals with lived experience of suicide are increasingly vocalising the view that emergency departments are often inappropriate therapeutic environments.

What we did

We undertook a literature review with the following two aims:

1. To examine the existing evidence-base on optimal models of care relevant following a suicidal crisis, for those who interact with police or paramedics, including models that are relevant for specific populations (e.g., those identifying as Aboriginal or Torres Strait Islander, veterans); and
2. To synthesize literature and highlight approaches to high quality care that could be established in Queensland.

A comprehensive search of peer reviewed literature, as well as grey literature and articles provided by experts, was undertaken.

What we found

The following six types of models of care were identified:

1. Co-responder models
2. Brief contact interventions
3. Short stay safe havens
4. Blended models
5. Culturally appropriate crisis responses
6. Aftercare services

The review found a number of different models that have been trialled nationally and internationally. However, varied intake criteria, staffing composition, and evaluation methods make it difficult to compare and contrast services. Many articles did not elaborate on how services were delivered in a way that would allow replication. Evaluations often did not provide or investigate outcomes for consumers both short and longer term nor have a comprehensive system of evaluation in place.

Conclusions

Several models of care that may meet the needs of individuals who experience suicidal crisis were identified. While these services show great promise, there are gaps in the evidence-base relating to these services. Implementation of these services should be supported by the establishment of comprehensive evaluation frameworks. Further gaps that were identified include limited tailoring to vulnerable sub-groups and those under the age of 18.

INTRODUCTION

Recent figures highlight the tragedy of suicide in Australia, with suicide deaths in 2017 sitting at a ten-year maximum of 12.6 deaths per 100,000 persons (Australian Bureau of Statistics, 2018). Suicide is often preceded by a suicidal crisis or crises.

Approximately three out of every 100 Australian adults will attempt suicide during their lifetime and more than four out of every 1000 Australian adults will make an attempt in any one year (Johnston, Pirkis, & Burgess, 2009).

First responders play a crucial role in helping people through suicidal crises and facilitating appropriate intervention and follow up. The World Health Organization acknowledges that: “first responders are in a unique position to determine the course and outcome of suicidal crises” (World Health Organization, 2009). Tailored, effective interventions that can be delivered during or immediately following the first response are vital in order to support a person out of a crisis and prevent future suicide attempts. The first response to a suicidal crisis represents an opportunity to save a life, but also for first responders to de-stigmatise talking about suicide, build rapport with the person in crisis, gain trust, and foster positive public perceptions of their professions.

In the Pathways to Care report (McPhedran & De Leo, 2013), it was identified that the predominant pathway used by first responders for persons who are in, or at high risk of, a suicidal crisis is transportation to a hospital emergency department (McPhedran & De Leo, 2013). The World Health Organization recommends this approach when a person is considered a high or imminent risk to themselves or others (World Health Organization, 2009). However, when safety can be met in other ways, it is recommended first responders ensure fast access to mental health treatment (World Health Organization, 2009). There is limited, if any, peer-reviewed evidence that transportation to hospital is an optimal response.

Recent reports published by the Australian Government Productivity Commission (2019) and Australasian College for Emergency Medicine (2018) have highlighted significant barriers to care that await those presenting to Australian emergency departments with mental health problems, including suicidal crises. At the same time, individuals with lived experience of suicide are increasingly vocalising the view that emergency departments are inappropriate therapeutic environments for many of those who are experiencing crisis (Meurk & Smith, 2020). People with mental health problems are less likely than those presenting with other types of problems to be seen in the emergency department within clinically recommended waiting times (Productivity Commission, 2019), and are disproportionately likely to experience access block (defined as waiting eight hours or

more for admission following assessment and treatment) (Australasian College for Emergency Medicine, 2018).

The World Health Organization advises that first responders attending to someone in suicidal crisis should ensure that significant others are present and accept responsibility for helping a person in suicidal crisis to gain help, rather than leaving the person alone (World Health Organization, 2009). Yet, there is no guidance for first responders on minimal or non-interventionist approaches that would empower and allow individuals in crisis to remain safely *in situ*. While the harms of over medicalising, institutionalising or depriving the liberty (through exercise of legislative powers) of those who experience mental health problems or suicidal crisis are well known, the use of legislative powers to involuntarily transport individuals in crisis to an emergency department are often viewed as the only available solution. At present, there are no national guidelines on optimal care pathways to facilitate the diversion of people in a suicidal crisis from presenting to an emergency department (Wilhelm et al., 2007).

Aims

This current review had two aims:

1. To examine the existing evidence-base on models of care following a suicidal crisis, for those who interact with police or paramedics, including models that are relevant for specific populations (e.g., those identifying as Aboriginal or Torres Strait Islander; young Australians; veterans; and older Australians); and
2. To synthesize literature and highlight approaches to high quality care that could be established in Queensland.

METHODS

For the purposes of this review, we defined a suicidal crisis as encompassing: suicidal ideation, threatened suicide, threatened intentional self-harm, intentional self-harm, suicidal behaviours, and suicide attempts. First responders, here, refer to police or paramedics.

Search strategy

The search comprised a database search of peer reviewed literature and grey literature, supplemented by consultation with known experts and snowballing from the original corpus of information.

Academic databases searched were: PubMed, PsycInfo, and The Griffith University Library Repository. A grey literature search was guided by clinical knowledge, and consultation with known experts to identify candidate care types that could comprise a relevant model of care. For each of the models identified, the lead author (Dr Katelyn Kerr) sought to identify peer reviewed or published evaluations, and made direct contact with service providers to uncover published or unpublished materials.

Inclusion criteria

Following initial scoping of the literature available, we took an iterative approach to identifying and including literature, based on an evolving conceptual framework of potential care pathways for individuals in suicidal crisis who come in contact with first responders. An initial conceptual framework was developed that focussed on identifying literature with respect to the seven domains of: 1. 'doing nothing'; 2. co-responder models; 3. alternatives to emergency department presentations; 4. involuntary or voluntary transportation to emergency departments; 5. safe-haven café's; 6. transportation to the watch-house; and 7. field based brief interventions. This framework was refined iteratively, through consultation between Dr Katelyn Kerr and Dr Carla Meurk, based on available literature. Care types were included in this review if they met the following criteria:

1. they had been developed explicitly for populations in suicidal or mental health crises who come in contact with first responders; OR
2. they were judged by the authors to share important similar features with models that met criteria 1; OR
3. they were judged by the authors to be a potential pathway for those who come in contact with first responders.

Due to the limited evidence-base, inclusion was based on relevance. No exclusion criteria were set in relation to study type or availability of a formal published evaluation. No quality appraisal of evidence was undertaken as a basis for inclusion or exclusion of models or literature presented.

Screening and data extraction

Documents were screened for inclusion/exclusion through title and abstract screening (title and executive summary screening for reports). For all documents included, the following information was extracted: Reference details; model description (including name, type and staffing); setting (location); consumer characteristics (age, gender, and characteristics of presentation); evaluation type (if conducted); period of evaluation; sample characteristics (number of cases/individuals); outcome measures collected; and key outcomes reported.

Analysis

Literature was categorised into care types. An initial grouping was undertaken by Dr Katelyn Kerr and Dr Carla Meurk, before being verified by all authors and then discussed among the Partners in Prevention Steering Group. Available information for each model was summarised individually.

RESULTS

Fourteen peer reviewed and grey literature articles, spanning the following six categories of care type, met the criteria for inclusion:

1. Co-responder model
2. Brief contact interventions
3. Short stay safe havens
4. Blended models
5. Culturally appropriate crisis responses
6. Aftercare services

Table 1 provides a summary of models of care and literature included in this review, in terms of models of care type, study characteristics, and population of interest. Table 2 provides a summary of models of care and literature in relation to clinical outcomes measured, case characteristics and outcomes.

Table 1 Summary of literature, describing models of care, study characteristics and population of interest.

Model name; description	Author & Year	Staffing	Evaluation Type/ Design	Sample characteristics/ inclusion criteria	Setting	Study period	Gender	Age
1. Co-responder – mental health clinician co-responds with police or paramedics. May provide advice, conduct mobile assessments, and/or take over the care of a person in suicidal crisis								
Review of co-responder models; various	Puntis et al. (2018)	Various	Systematic review of descriptive and qualitative studies.	Various	Various	Various	Various	Various
Psychiatric Emergency Response Team (PAM); mental health professionals attend emergency calls with paramedics, involving members of the community with severe mental illness or acute suicide risk.	Bouveng, Bengtsson, & Carlborg (2017)	Paramedics and mental health professionals	Descriptive study	N=1,580 requests for service, data reported on N=1,036 individuals with severe mental illness or in suicidal crisis.	Stockholm, Sweden	2015-2016, 12 months	56% Female.	No age restrictions. Age range of cohort seen 5-100 years.
Police Ambulance Clinical Early Response (PACER); secondary units engaged by police or paramedic first responders via police communications centre, local Crisis Assessment and Treatment Teams, or the police Officer in Charge.	The Allen Consulting Group (2012)	Police and mental health professionals	Pre-post study with control group.	N=783 assistance requests for service for individuals in a suicidal or mental health crisis.	Victoria, Australia	2009-2011, 16 months	Not given.	No age restrictions reported.
A-PACER; as above	Lee et al. (2015)	Police and mental health professionals	Descriptive study (mixed methods).	N=296 contacts for service for individuals in a suicidal or mental health crisis.	Victoria, Australia	2011-2012, 6 months	60% Male.	No age restrictions reported.
West Moreton co-responder; mental health clinicians work alongside police. Mental health co-responder undertakes rapid triage following on-site assessment by police, advises on referrals to ED or other services, and undertakes follow-up.	Meehan, Brack, Mansfield, & Stedman (2019)	Police and mental health professionals	Pre-post study (interrupted time series)	N=171 individuals; N=226 occasions of service. Direct contact with N=137. Information on disposition following contact available for N=122. Individuals were those in a suicidal or mental health crisis.	West Moreton, Queensland, Australia.	2017, 4 months	49% Female.	No age restrictions. 51% aged 20-39 years.
2. Brief Contact Interventions – time limited, structured interventions focussed on problem solving, crisis planning, and linking to other services.								
Distress Brief Intervention (DBI); A time limited (14 days) problem-solving intervention available in addition to services as usual.	O'Neill (2018)	Stage one delivered by police, paramedics, ED or primary care professionals; stage 2 delivered by mental health professionals and peer support workers with lived experience.	Currently underway.	Interim findings reported on 1,322 referrals received up to September, 2018. Individuals in distress who come to the attention of police, ambulance, hospital EDs, or primary care.	Four trial sites across Scotland	2016-2021, ~4.5 years	Not given.	Originally developed for adults, but undergoing expansion in stages to include 16 and 17 year olds, and scope feasibility for those aged 15 years and younger.
3. Short stay safe havens – safe, comfortable spaces for people in suicide or mental health crisis to go, as an alternative to presenting to an ED.								
Aldershot Safe Haven Service; A walk-in centre that provides an alternative to ED presentation for adults in crisis.	Griffiths & Gale (2017)	Mental health professionals and peer support workers with lived experience.	Mixed design. Interrupted time series of impacts, descriptive study of client satisfaction.	N=4,275 attendances at the service, approximately 670 individuals needing mental health support out of hours.	Aldershot, Hampshire, United Kingdom	2016-2017, 12 months	Not given.	Indicates the service is for adults (18 years and over).

Model name; description	Author & Year	Staffing	Evaluation Type/ Design	Sample characteristics/ inclusion criteria	Setting	Study period	Gender	Age
St Vincent's Safe Haven Café; provides a safe, supportive and welcoming place for people to gain information on support options available to them, understand more about reactions to crises, and facilitate development of therapeutic skills to manage crises and improve mental health. Free tea, coffee and snacks are provided.	Price Waterhouse Coopers (2018)	Mental health professionals; peer support workers with lived experience; volunteers.	Cost-benefit analysis	N=41 participants who completed a survey. Data on ED presentations from May-September 2018 were compared with data from the same period one-year prior and six months immediately prior. (N=62 participants individuals made 400 visits to the café over this period.) Individuals were people seeking mental health support, including loneliness, personal difficulties, or seeking social connection.	Melbourne, Victoria	2018, 5 months (compared with: 5 months period 12 months prior; and previous 6 months)	Not given.	Indicates the service is for adults.
Brisbane North Safe Space; Safe Space provides a warm, welcoming, supportive environment that people can go to when experiencing psychological distress. Activities are offered.	-	Non-clinical staff	None currently.	-	-	-	-	-
The Living Room (TLR); A community-based alternative to ED available to "guests" in an emotional crisis. The approach is recovery orientated and the TLR environment is arranged like a home living room to maximise guests' comfort.	Heyland, Emery, & Shattell (2013) Heyland & Johnson (2017)	Mental health professional and peer support workers with lived experience.	Descriptive study	N=56 visits, N=16 clients participated in study; N=228 visits, 87 individuals in mental health crisis.	Chicago, Illinois, United States of America	2015, 8 weeks (clients followed up 30 days post separation with service)	Not given.	No age restrictions reported. However, findings limited to those 18 years of age or over.
4. Blended models - a holistic, multi-factorial model of service, beginning at the point of call and that combines multiple service elements.								
Crisis Now; A comprehensive model of care. Model is centred around principles and practices of recovery focussed, trauma-informed treatments, use of peer workers, commitment to safety and zero suicide, and collaboration with law enforcement.	-	Mental health professionals; peer support workers with lived experience; non-clinical staff.	None currently	-	-	-	-	-
5. Culturally appropriate crisis responses - crisis services that focus on the needs of specific cultural groups.								
Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project (ATSIPEP); Comprises two components: A Critical Response Stream (CRS) operating state-wide with the role of providing assistance to Indigenous families following a suicide; and a Community Development Stream (CDS) operating in four sites to upskill communities in suicide prevention activities and critical responses.	Dudgeon, Milroy, Luxford, & Holland (2017)	Non-clinical staff.	Study design/ methodology not described	N=46 Aboriginal and/or Torres Strait Islander families affected by suicide or critical incident, including suicide or situation where suicide is a high risk, murders, or multiple casualty events, that place family, kin and community of the deceased at elevated suicide risk.	Four trial sites across Western Australia	2015-2016, ~ 12 months	Not given.	No age restrictions reported.
National Indigenous Crisis Response Service (NICRS); Similar to ATSIPEP (above)	-	Non-clinical staff identifying as Aboriginal and/or Torres Strait Islander.	None currently (however, informed by ATSIPEP evaluation)	-	-	-	-	-

Model name; description	Author & Year	Staffing	Evaluation Type/ Design	Sample characteristics/ inclusion criteria	Setting	Study period	Gender	Age
6. Aftercare services - Services that link people in need to appropriate services to prevent suicidality in the future.								
The Way Back; A non-clinical, short term support service that provides linkages to support networks in the first three months after discharge. Clients can access the program via referral from ED or a psychiatric inpatient ward.	beyondblue (2016)	Non-clinical staff with human services training.	Mixed design. Pre-post study (quantitative and qualitative). Descriptive study of client characteristics.	N=122 referrals, N=87 individuals who were recently discharged from hospital for a suicide attempt or suicidal crisis. N=46 interviews with stakeholders.	Darwin, Northern Territory	2014-2015, 18 months	40% Male.	No age restrictions reported. 78% under 45 years of age.
PAUSE; A peer support program recently implemented by Brook RED in Brisbane. The intervention delivered is individualised and tailored to the person based on their needs, including peer support focussed on recovery, advocacy, linkage to services, and providing education to carers and family members of the person.	–	Peer support workers with lived experience.	Currently underway.	–	–	–	–	–
Green Card Clinic; provide expedited access to three structured treatment sessions with trained clinicians, following deliberate self-harm or suicidal crisis.	Wilhelm et al. (2007)	Mental health professionals.	Mixed design. Pre-post study of outcomes, descriptive study of client characteristics and feedback.	N=456 individuals who presented to St Vincent's hospital ED for deliberate self-harm or suicidal ideation.	Sydney, Australia	1998-2005, 7 years	57% Female.	No age restrictions reported. Mean age =31.6 years.
Pieta House; a suicide intervention outpatient service for people who are actively suicidal, who self-harm, or who have made a suicide attempt; intensive therapy is delivered over a timeframe of up to 12 weeks.	Surgenor, Freeman, & O'Connor (2015)	Mental health professionals.	Pre-post study.	N=432 individuals in suicide crisis who were invited to participate pre-therapy.	Ireland	No date range given	44% Male.	No age restrictions reported. Age range 18-74.
Veteran Suicide Prevention Pilot	–	Non-clinical staff	None currently.	–	–	–	–	–

ED: Emergency Department

Table 2 Summary of models of care and literature in relation to clinical outcomes measured, case characteristics and outcomes.

Model Name; Author & Year	Clinical outcomes measured	Key Findings - Case characteristics	Key Findings - Outcomes
1. Co-responder – mental health clinician co-responds with police or paramedics. May provide advice, conduct mobile assessments, and/or take over the care of a person in suicidal crisis			
Review of co-responder models (Puntis et al., 2018)	No	NA	<ul style="list-style-type: none"> Lack of consistency in evaluation methods, no randomised controlled trials. Unclear whether co-responder model had an impact on psychiatric hospitalisations. Some evidence for reduction in use of police powers with the ride-along model. Lack of evidence regarding cost effectiveness or clinical outcomes.
Psychiatric Emergency Response Team (PAM) (Bouveng et al., 2017)	No	97% of requests received had high or medium priority. Reasons for attendance were: Severe suicide threat (36%); suspicion of severe psychiatric illness (25%).	<ul style="list-style-type: none"> Of those assessed by PAM, 17% were assessed as high or very high suicide risk. PAM was well received by stakeholders. <p>For the people PAM was in contact with, outcomes were:</p> <ul style="list-style-type: none"> No action or referral to other services (34%); Admitted to psychiatry ED (25%); Admitted to substance use ED (18%); Job handed over to paramedics (10%); Admitted to psychiatric child care (4%); Person died by suicide at arrival (0.3%); Other or unknown (10%).
Police Ambulance Clinical Early Response (PACER) (The Allen Consulting Group, 2012)	No	Reason for attendance were: Concern for individual's welfare (48%); section 10 apprehensions (37%).	<p>Of those assessed by PACER:</p> <ul style="list-style-type: none"> 64% of those assessed by PACER did not require transportation. 43% of those that did not require transportation had been attended to for threats of suicide, self-harm or harm to others. Use of force by police decreased in the PACER area and increased in the comparator site. 36% of cases required transportation from the PACER site, compared to 99% in the comparator site. <ul style="list-style-type: none"> Proportionally more cases were transported by ambulance than police in the PACER site, compared with the comparator site (40% police and 45% ambulance versus 61% police and 37% ambulance). Proportionally fewer cases were transported to ED at the PACER site in comparison to the comparator site. (34% versus 84% for police; 79% versus 86% for ambulance). Proportionally more cases were transported to a psychiatric facility at the PACER site in comparison to the comparator site (30% versus 15% for police; 19% versus 8% for ambulance).
A-PACER (Lee et al., 2015)	No	The two most common reasons for referral were: Threatened suicide (33%); Welfare concerns (22%).	<p>Outcome of A-PACER referral:</p> <ul style="list-style-type: none"> 32% were transported to ED; 22% were referred to another service; 20% did not require further assistance; 11% were directly admitted to a psychiatric unit; 9% of contacts resulted in a criminal charge.
West Moreton Co-Responder (Meehan et al., 2019)	No	The two most common reasons for referral were: Threatening suicide/self-harm (60%); Situational crisis (22%). 36% of individuals had had previous contact with a mental health service. 7% were currently case managed by a mental health service at the time of the crisis.	<p>For the 122 people who had direct contact with the co-responder team:</p> <ul style="list-style-type: none"> 67% remained at the scene; 29% were transported to ED (51% were admitted); 4% were taken into police custody. There was a statistically significant reduction in mental health related ED presentations for the six-month period after the program was introduced. 23% were transported to hospital under an Emergency Examination Authority (Public Health Act).

Model Name; Author & Year	Clinical outcomes measured	Key Findings - Case characteristics	Key Findings - Outcomes
2. Brief Contact Interventions - time limited, structured interventions focussed on problem solving, crisis planning, and linking to other services.			
Distress Brief Intervention (DBI) (O'Neill, 2018)	None reported so far.	Provisional outcomes (as of September, 2018): <ul style="list-style-type: none"> 24% self-reported being under the influence of alcohol/substances at point of referral. Presenting problems reported, included: <ul style="list-style-type: none"> Stress/anxiety; Low mood; Suicidal ideation; Self-harm. 	<ul style="list-style-type: none"> 78% of the appropriate concluded cases engaged in further DBI support Data available up to 24 May, 2018 indicate overall reduction in distress among participants of 50% from intake to the end of DBI level 2.
3. Short stay safe havens - safe, comfortable spaces for people in suicide or mental health crisis to go, as an alternative to presenting to an ED			
Aldershot Safe Haven Service (Griffiths & Gale, 2017)	No	Reasons for attendance: <ul style="list-style-type: none"> 56% crisis prevention; 23% 'social reason'; 13% crisis; 7% other. 	Of those who had previously attended an ED: <ul style="list-style-type: none"> 53% showed a decrease in ED attendance following introduction to Safe Haven; 28% showed an increase in their attendance at ED. Additional outcomes reported, were: <ul style="list-style-type: none"> 16% reduction in admission to acute inpatient psychiatric beds in the Safe Haven service catchment area, 12 months post; 42% drop in calls marked "mental health related" from 2013 to 2016 with the introduction of Safe Haven; Reduced police deployments in the area of the Safe Haven (66% of calls resulted in deployment versus 43% of calls resulted in police deployment. Qualitative data indicate that this is linked to the ability to refer to Safe Haven cafés.). Service users rated Safe Haven favourably.
St Vincent's Safe Haven Café (Price Waterhouse Coopers, 2018)	No	NA	<ul style="list-style-type: none"> 37% of the 41 people who completed a sign in sheet reported they would have gone to ED if the Safe Haven was not open. This equates to 151 ED presentations that were diverted in a six-month period based on the self-report data. Modelling based on ED data suggested that 12% of presentations to the café would have resulted in an ED presentations, had the café not existed (60 presentations over six months).
Brisbane North Safe Space	-	-	-
The Living Room (TLR) (Heyland & Johnson, 2017; Heyland et al., 2013)	Subjective Units of Distress Rating (SUDS) (0 no distress – 10 highest distress). Measured on arrival and discharge (not linked to evaluation).	SUDS score on arrival was 7.7. Presenting problems: stress + anxiety or depression (62.5%); anxiety (25%).	<ul style="list-style-type: none"> Guests reported an average SUDS reduction of approximately 2 points on departure. 94% reported they did not re-attend at ED within the 30-day follow-up. Guests at TLR reported the following as beneficial outcomes of engagement: <ul style="list-style-type: none"> Talking with someone about the problem and using problem solving skills (80%); Learning coping skills (67%); Reassurance of knowing the Living Room was there if needed (53%); Resources and referrals provided by staff (40%); Other specific person-centred factors, such as goal setting, finding the staff helpful, liking the comfort of the environment (40%).

Model Name; Author & Year	Clinical outcomes measured	Key Findings - Case characteristics	Key Findings - Outcomes
4. Blended models - a holistic, multi-factorial model of service, beginning at the point of call and that combines multiple service elements.			
Crisis Now	–	–	–
5. Culturally appropriate crisis responses - crisis services that focus on the needs of specific cultural groups.			
Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project (ATSIPEP) (Dudgeon et al., 2017)	No	21 families directly helped.	21 families directly helped. Services completed: <ul style="list-style-type: none"> 354 telephone calls with affected families, 45 tele-meetings with affected families; 497 telephone calls with services, 72 tele-meetings with services; Conducted 92 face-to-face meetings with families and community groups.
National Indigenous Crisis Response Service	–	–	–
6. Aftercare services - Services that link people in need to appropriate services to prevent suicidality in the future.			
The Way Back (beyondblue, 2016)	WHO-5 – World Health Organisation, Well-Being Index (0=worst imaginable well-being – 25=best imaginable well-being).	14% of participants identified as Aboriginal and/or Torres Strait Islander. N=13 clients completed a WHO-5 pre- and post. Mean score on intake was 12.5.	<ul style="list-style-type: none"> Mean score on exit was 22.5. Qualitative data indicate that clients were highly satisfied with the service.
PAUSE	–	–	–
Green Card Clinic (Wilhelm et al., 2007)	Centre for Epidemiological Studies Depression Scale (CES-D). (0-60. Higher score indicates greater depressive symptoms. Score of 16+ identifies individuals at risk of clinical depression. FANTASTIC lifestyle checklist (0-50. Higher score indicates greater control over one's lifestyle)	Two most common reasons for ED presentations among attendees were: overdose (66%); suicidal ideation (17%). 51% of attenders had a previous reported instance of deliberate self-harm. <ul style="list-style-type: none"> Mean CES-D on intake (n=282) was 35.7 (s.d.=12.0). 95% scored 16 or more, indicating possible depression. 85% scored 23 or more, indicating significant depression. Mean FANTASTIC scores 25.9 (s.d. = 7.3).	Re-attendance rates were 57% at second session and 34% at third session. 21% of attenders were able to be followed up. Of these: <ul style="list-style-type: none"> 67% of these stated they had made positive lifestyle changes since attending the clinic; 16% reported that they had self-harmed again. There was a statistically significant reduction in symptoms of depression among N=40 participants who attended all three sessions and completed the post-test CES-D (mean 17.9, s.d. = 12.9).
Pieta House (Surgenor et al., 2015)	Single item indicator (“I have high self-esteem”) rated on 5-point scale (1=low; 5=high) Patient Health Questionnaire (PHQ-9). 9-item scale. Lower score indicates lower level of depression. Positive and Negative Suicide Ideation Inventory (PANSI). Lower scores indicate fewer symptoms. Scores for positive items refer to protective behaviours.	Pre-treatment scores were: <ul style="list-style-type: none"> Mean self-esteem score was 1.76 (s.d. 1.07) Mean PHQ-9 score was 18.58 (s.d. 5.77) Mean negative suicidal ideation was 13.04 (s.d. 4.22) Mean positive suicidal ideation was 9.48 (s.d. 3.69) 	Post-treatment scores were: <ul style="list-style-type: none"> Mean self-esteem score was 2.79 (s.d. 1.08); Mean PHQ-9 was 10.87 (s.d. 7.47); Mean negative suicidal ideation was 7.77 (s.d. 4.82); Mean positive suicidal ideation was 13.76 (s.d. 3.66). Changes in scores pre- and post-treatment were statistically significant (p<.001 for all measures).
Veteran Suicide Prevention Pilot.	–	–	–

Co-responder models

Co-responder programs assist first responders by providing advice, conducting mobile assessments, and taking over the care of a person in suicidal crisis; enabling the first responders to return to duties, avoiding extended engagement with the person in crisis, and thus increasing first responder capacity.

Psychiatric Emergency Response Team (PAM), Stockholm, Sweden

Model description

The Psychiatric Emergency Response Team (Psykiatrisk akut Mobilitet – PAM) operates in Stockholm, Sweden, and attends emergency calls involving members of the community with severe mental illness or acute suicide risk (Bouveng et al., 2017). PAM is described as representing a unique approach to pre-hospital care, that provides the consumer with specialist assessment and intervention, is time efficient (average waiting time 15-20 minutes, and average assessment time 1 hour 15 minutes), and reduces work load for first responders (Bouveng et al., 2017). Suicide prevention is the main objective. PAM operates from 3pm to 1am daily. PAM is staffed by two specialist psychiatric nurses and a paramedic, who liaise with police, paramedics, rescue services and the psychiatrist on call at the psychiatric emergency department, who can provide advice and assistance, as required (Bouveng et al., 2017). Staff are chosen based on their high level of specialisation and clinical experience in suicide prevention¹. PAM staff operate a modified vehicle, with space for conducting assessments, delivering psychiatric treatment, and transporting consumers (Bouveng et al., 2017). The vehicle is equipped with mobile computer systems to access medical records (prior to or during assessment of the consumer), psychiatric medications, breathalyser, and a defibrillator (Bouveng et al., 2017). Calls are triaged by the emergency services call centre operator, and the vehicle is dispatched in order of priority, with suicidal crises a high priority (Bouveng et al., 2017).

Consumer characteristics

In the initial implementation of PAM, dispatch was made on the basis of clinical judgement; there were no formal guidelines used to assess which presentations warranted attendance by PAM¹. Decision-making was based on clinical assessment, which included: questioning around presenting problem; consideration of historical factors impacting on the suicidal crisis; mental illness history; frequency, duration and severity of suicidal thoughts, plans, intent; risk versus protective factors and what supports can be utilised in the community; and mental status examination¹.

More stringent criteria for PAM involvement were implemented in January 2019, with inclusion and exclusion criteria as follows:

Inclusion to the service, if:

- Ongoing suicide attempt or severe plans;
- Urgent acute psychiatric condition which requires clinical assessment for which delay could cause damage to the individual, others, property, or which could cause significant deterioration of the condition;
- Post-partum psychosis¹.

Exclusion to the service, if:

- Panic attacks;
- Reaction to crisis (e.g., death of a family member);
- The person has already died by suicide;
- Isolated substance abuse;
- Medically unstable¹.

These criteria are checked by the prehospital emergency call centre, who act as gatekeepers as to whether PAM are engaged¹.

Over a 12-month period, PAM received 1,580 requests, of which they attended 80% (n = 1,254). PAM dealt with 1,036 unique individuals, of whom 43% were male, and 56% were female. Individuals ranged from 5-100 years of age. The 18-29 year old age group presented the largest demand, at 27% of those in contact with PAM (Bouveng et al., 2017).

Of the 1,580 requests for assistance, 1,392 of these were able to be classified into the following categories:

- Severe suicide threat (36%);
- Suspicion of severe psychiatric illness (25%);
- Acute crisis (18%);
- Severe suicide attempt (6%);
- Suspicion of intoxication/overdose (3%); and
- Other (12%; Bouveng et al., 2017).

Evaluation

An evaluation of the PAM service was undertaken for the year 2015-2016. No clinical outcomes were reported. Outcomes of contact, for the 1,036 individuals that PAM was in contact with, were as follows:

- No action or referral to other services (34%);
- Admitted to psychiatric emergency department (25%);
- Admitted to substance use emergency department (18%);
- Job handed over to paramedics (10%);
- Admitted to psychiatric child care (4%);
- Person died by suicide at arrival (0.3%); and
- Other or unknown (10%).

¹Olof Bouveng, Lead Author Bouveng et al., 2017. Personal communication via email. 8th November 2018.

The evaluation reported that PAM was well-received by all stakeholders, and that it may have assisted in reducing stigma associated with suicidal crises and mental illness (Bouveng et al., 2017).

Limitations

No data on clinical outcomes were reported. No pre-data nor control group data provided.

Systematic review of co-responder models

Model description

Puntis et al., (2018) conducted a systematic review of co-responder models. They found differences in design, with some models involving remote telephone contact only, and others involving mobile teams attending the site in person (Puntis et al., 2018). Of the 26 papers utilised, 19 different co-responder models were found:

- Twelve were ride-along, whereby the police officer and mental health clinician attended in the vehicle together.
- Five encompassed both a ride-along model and communication support, whereby the clinician can advise police via telephone or police radio remotely. Four of the five predominantly utilised communication support remotely, with only serious incidents activating the ride-along unit.
- Two services utilised communication support remotely as the only method.

Pathway of referral to the co-responder was ascertained for 15 models, and included emergency control rooms ($k = 2$ studies), directly from police on location ($k = 4$), emergency control rooms plus directly from police ($k = 8$), and a direct co-responder phone line ($k = 1$; Puntis et al., 2018). Operation times were variable, ranging from afternoons and evenings to 24 hours per day (communication support models only), seven days per week (Puntis et al., 2018).

Consumer characteristics

Males were more likely to be referred to the co-responder teams than females (range 47% – 77% of referrals received) (Puntis et al., 2018). Five studies reported mean ages, which ranged from 34.7 years of age to 40 years of age. One study reported that 46% of consumers were between 18-39 years of age, while two studies reported that most consumers were between 35-44 years of age (28%) and 35-54 years of age (35%). Three studies reported the most common reason for referral to the co-responder as: Suicidal behaviour (two studies); or “Bizarre or disorganised behaviour” (one study) (Puntis et al., 2018).

Evaluation

There was no consistency across studies in regards to evaluation methods. Numerous studies did not measure outcome effectiveness. Of the studies that measured the use of police powers ($k = 5$), the co-responder model was associated with a reduction in the use of police powers to detain an individual, when the co-responder model was ride-along in person assessment (Puntis et al., 2018). A reduction in psychiatric hospitalisations due to the implementation of the co-responder model was found in three studies, however hospitalisations were found to increase in another three studies (Puntis et al., 2018). Seven studies found that consumers were positive with regards a co-responder model, in comparison to previous experiences they had had with police, however three studies reported that consumers were dissatisfied with lack of follow up and referral pathways (Puntis et al., 2018). Nine studies reported on perceptions of the co-responder service, finding that service providers viewed the service positively, and that police viewed it neutrally compared to service as usual, with the main limitations being availability of the co-responder and restricted hours (Puntis et al., 2018). Cost-effectiveness was investigated in three studies. One study found co-responders to reduce costs by 23%, one study found it reduced policing costs but increased health provider costs, and one study found costs increased by less than 1% (Puntis et al., 2018).

Limitations

The authors identified three major limitations of the studies reviewed:

1. Service user characteristics were not described adequately, if at all;
2. Co-responder models were often poorly described and there was a wide variation in the operationalisation of services; and
3. Effectiveness of co-responder models has not been rigorously tested.

The authors concluded that despite the increased use and interest in co-responder models recently, overall there is a lack of evidence regarding the effectiveness of such models and consumer outcomes.

Australian co-responder models

In Australia, a number of co-responder models have been trialled. This review specifically outlines the evaluations of Australian co-responder units (“the units”):

1. Police, Ambulance and Clinical Early Response (PACER), Melbourne, Victoria (hours of operation not given)
2. Alfred Police Ambulance and Clinical Early Response (A-PACER), Victoria (2pm to 10pm)
3. West Moreton Co-Responder Program, Ipswich, Queensland (2pm to 10pm, days of operation not given)

Model description

The PACER units acted as secondary units engaged by police or paramedic first responders via police communications centres, local Crisis Assessment and Treatment Teams (CATT), or the police Officer in Charge (OIC) (Lee et al., 2015; The Allen Consulting Group, 2012). Each unit comprised a police officer and mental health clinician/s. Some models employed the mental health clinician to be located within the police station, and others involved the police co-responder picking the clinician up from the local hospital where they would be located (Lee et al., 2015; The Allen Consulting Group, 2012). The units' aims were:

- To provide onsite mental health assessment in a timely manner. This was facilitated by access to background information via a shared police and mental health database;
- To reduce unnecessary transportation to hospital by police or ambulance, through assessing the appropriateness of community referral options or not requiring further intervention; and
- To assess and facilitate the most appropriate referrals to those encountered, including to psychologists and psychiatrists, general practitioners, community based organisations, as well as hospital and psychiatric facilities (The Allen Consulting Group, 2012).

Consumer characteristics

Inclusion criteria for attendance by the PACER units were:

- Onsite clinical assessment of the crisis was required (The Allen Consulting Group, 2012);
- Onsite or telephone advice was needed regarding referral options (The Allen Consulting Group, 2012);
- Guidance on transport options and de-escalation techniques was requested (The Allen Consulting Group, 2012);
- Assistance in treatment planning for frequent users of emergency services was requested (The Allen Consulting Group, 2012);
- The clinician had triaged the call and ascertained it was appropriate for attendance (Lee et al., 2015).

Demographics of the units are reported below.

PACER demographics

During a 16 month period (2009-2011), PACER received 783 assistance requests (The Allen Consulting Group, 2012). No demographic data were reported on.

Reasons for referral, included:

- Welfare concerns (48%, including threatening suicide/self-harm, threatening harm to others, at risk of harm, frightening/delusional behaviour, confused/incoherent);

- Section 10 (37%);
- Family violence (7%);
- Assist CATT (2%);
- Assist ambulance (2%);
- Other (3%; The Allen Consulting Group, 2012).

Most consumers (54%) seen by PACER were a registered mental health client, and most were also known to police.

A-PACER demographics

During the six-month trial from November 2011 to May 2012, 296 contacts were made with A-PACER. Of these, 60% were male, and 40% were female (Lee et al., 2015).

Reasons for referral, included:

- Threatened suicide (33%);
- Welfare concerns (22%);
- Psychotic episode (18%);
- Assist CATT or police (12%);
- Family violence (7%);
- Revoked community order (3%); and
- Follow up after prior contact with A-PACER (2%; Lee et al., 2015).

West Moreton co-responder program demographics

Of 137 people who had direct contact with the unit, 50% were male. Just over one-half (51%) of consumers were between 20-39 years of age (Meehan et al., 2019).

The most common reasons for co-responder involvement with the 137 who had direct contact were:

- Threatening suicide/self-harm (60%);
- Situational crisis (22%);
- Threatening harm to others (5%); and
- Other not reported (13%).

Personality disorder was the most common diagnosis (22%) with intoxication accounting for 11% of call outs. Previous contact with mental health services had occurred in 36% of cases (Meehan et al., 2019).

Evaluations

PACER

PACER was evaluated over a 16-month period (1 December, 2009–31 March, 2011; The Allen Consulting Group, 2012). The evaluation design was a pre-post study with control group.

- Over three-quarters (78%) of assistance requests were responded to on-site. Of this 78%, 82% received a PACER mental health assessment;
- In addition, 36% of cases required transportation from the PACER site, compared to 99% in the comparator site;

- Ambulance transport was used more in PACER (45%) and police transport was used less (40%), compared to the comparator site, where ambulance transport was used in 37% of transports and police used in 61% of transports;
- At the PACER site, 52% of transportations were to hospital emergency departments, and 27% were to a psychiatric facility. At the comparator site, 82% of transportations were to a hospital emergency department and 12% were to a psychiatric facility (The Allen Consulting Group, 2012).

PACER was well accepted by stakeholders, including police, paramedics, mental health staff, and viewed favourably by consumers who experienced reduced waiting times, more flexibility in options for care, less need for transportation to hospital, and better utilisation of resources. The authors concluded PACER was more cost effective than the comparator site (The Allen Consulting Group, 2012).

A-PACER

Of the 296 contacts, 32% were transported to emergency department; 22% were referred to a suitable service; 20% were judged as not requiring any further assistance; 11% were directly admitted to a psychiatry ward; and 9% received phone assistance (Lee et al., 2015). Transportation was more often with police (58% of those needing transportation) than ambulance (36%) or other services (6%; Lee et al., 2015).

It was noted by the lead author that PACER/A-PACER models function most efficiently in high density metropolitan areas where locations are easily reached by car². Rural areas provide time restraint challenges, as one job may take hours to respond to². In these areas, Lee recommended a telephone model could be implemented whereby a clinician could provide advice and assistance via telephone and mental health trained police officers could respond in person to the crisis². Alternatively, the team could service the town centre in larger rural areas, with police being the respondents to out of town calls with telephone assistance from the clinician².

West Moreton co-responder program

During the initial 16 weeks of the program, in 2017, the co-responder team had direct contact with 137 individuals, as well as providing phone advice to other agencies for 44 people (Meehan et al., 2019). Information for analyses was available for 122 of the persons who had direct contact with the co-responder team. Of these, 67% remained at the scene; 29% were transported to the emergency department; and 4% were taken into police custody (Meehan et al., 2019).

Those who remained at the scene were referred to various government and non-government agencies for follow up (Meehan et al., 2019).

There was a statistically significant reduction in mental health related emergency department presentations for the six months after the program was introduced (299 presentations per month pre-program, and 265 per month post-program; Meehan et al., 2019). Surveys of police first responder intentions as they were leaving the scene indicated that police had intended to transport 82% of consumers to hospital under an Emergency Examination Authority (EEA). However, when co-responders were present, only 23% of consumers were transported on an EEA (Meehan et al., 2019).

Limitations

PACER

The evaluation by The Allen Consulting Group (2012) did not report on demographics of consumers. The study authors noted some limitations due to the fact that police and ambulance service staff did not always complete the Mental Disorder Transfer Forms (L42), the study's key data source. Additionally, the evaluation only reported descriptive statistics, thus limiting the conclusions that can be drawn regarding the efficacy of PACER (The Allen Consulting Group, 2012).

A-PACER

No clinical outcome data was collected. No pre- and post-tests for consumers nor questionnaire for consumers on how they experienced A-PACER were reported.

West Moreton co-responder program

It is unknown whether service users engaged with services to which they were referred, as this information was not gathered or available (Meehan et al., 2019). Additionally, there has been no follow-up with consumers, nor collection of clinical outcomes data. No comparator site evaluation was conducted.

Brief contact interventions

Brief Contact Interventions, such as the Distress Brief Intervention (DBI), are time limited, structured, interventions that aim to deliver a compassionate and proportionate first response to individuals in crisis (The Scottish Government, 2015). Delivery of these interventions should not be reliant on mental health or allied health professionals, but open to suitably concerned and interested individuals who receive appropriate training. These models of contact are time limited, but involve ongoing contact, employing multiple forms of communication (e.g., telephone or written contact).

² Stuart J Lee, Lead Author Lee et al., (2015). Personal communication via email 21st November 2018.

Distress Brief Intervention, Scotland

Model description

DBI is currently being trialled in Scotland, in four sites, for a period of 53 months (November 2016 – March 2021). The purpose of DBI is to co-ordinate care across multiple service providers in order to increase engagement and maintain support for people in a suicidal crisis, as well as those with mental illness (O'Neill, 2018). DBI is a time limited (14 days) problem-solving intervention available in addition to services as usual. DBI has been designed as a potential care pathway for individuals in crisis who come in contact with police or paramedic responders, present to a hospital emergency department, or present to a primary care professional (O'Neill, 2018).

DBI adopts an 'ask once get help fast' motto, and comprises two levels of support. Level 1 is implemented by frontline staff where the person presents (as listed above) and includes a compassion focussed response, education regarding relevant services, and referral to level 2 DBI, if the person in crisis accepts the offer (O'Neill, 2018). Trained staff from numerous organisations provide DBI level 2, which includes contacting the person within 24 hours, delivering community-based and compassionate problem solving, planning around wellness and distress management, and support in connecting with follow up services (O'Neill, 2018). DBI is staffed by trained practitioners, including peer workers and other interested individuals.

Consumer characteristics

DBI was initially designed for individuals aged 18 years or over. However, it has since been expanded to include young persons who are 16-17 years old (O'Neill, 2018). As of September 2018, 1,322 people had been referred to DBI, of which 43% were male, and 57% were female. The main presenting problems of those referred, included:

- Stress/anxiety;
- Low mood;
- Suicidal ideation;
- Self-harm (O'Neill, 2018).

Evaluation

From October 2017 to September 2018 (the controlled implementation phase), 1,322 referrals to DBI level 2 had been received (O'Neill, 2018). Data to date indicated that engagement with DBI was high, with self-reported levels of distress reducing from 8 out of 10 (extreme) to 4 at the last session (O'Neill, 2018). At completion of DBI level 1, a number of questions were asked of consumers, which were rated from 0 to 10. These findings showed that consumers:

- Felt they received a compassionate response, rating this an 8 or more out of 10 in 76% of cases; and
- Felt they could now manage their immediate distress (median score of 8; O'Neill, 2018).

At the final session of DBI level 2, consumers were again asked a series of questions regarding their experience, with results showing consumers:

- Felt they had met their own goals (76% rated this an 8 or more out of 10);
- Had received a compassionate response (96% rated as an 8 or higher); and
- Felt they could manage their immediate distress (median score of 9; O'Neill, 2018).

A formal evaluation will be conducted at the finalisation of the trial period.

Limitations

Data presented are provisional pending completion of the full evaluation.

Short stay safe havens

Safe havens are characterised by safe, comfortable spaces where people in suicidal or mental health crisis can go, as an alternative to presenting to an emergency department.

Aldershot Safe Haven Service, Aldershot, UK

Model description

The Aldershot Safe Haven Service (Safe Haven) in England was opened in 2014, as a mental health crisis service providing an alternative to emergency department presentation for adults (Griffiths & Gale, 2017). It is a walk-in centre, operating from 6-11pm Mondays to Fridays, and 12:30-11pm on weekends and public holidays (Griffiths & Gale, 2017). Safe Haven is staffed by two peer support workers and a mental health clinician (Griffiths & Gale, 2017). Entry to Safe Haven is restricted via a locked entry door; this ensures that every individual is greeted on arrival by a staff member, who can then assess the level of service required (Griffiths & Gale, 2017).

The services offered include: peer to peer contact with persons in similar situations (other service users); a place of safety for individual time alone; or direct contact and communication with a staff member (Griffiths & Gale, 2017). Peer supports provide social contact, and can reduce feelings of social isolation (Griffiths & Gale, 2017). Support workers assist in crisis plan development and can make contact with a person's GP or mental health team if needed (Griffiths & Gale, 2017). If a formal assessment of the person's mental health is required, the support worker will identify this and engage the onsite clinician (Griffiths & Gale, 2017). If appropriate, the clinician can refer the consumer onto other mental health services. Support is also provided to carers of people with mental illness.

Consumers identified that their engagement with Safe Haven involved:

- Socialising with other people (65%);

- Speaking with staff about how they were feeling (62%);
- Receiving advice about mental health care and treatment (28%);
- Receiving advice about coping techniques to help manage distress (28%);
- Action planning with a staff member (17%); and
- Receiving advice about services available (housing, financial, employment, 10%).

Consumer characteristics

During the 12-month period of August 2016 to July 2017, there were 4,275 attendances at the service, by approximately 670 persons, with most people attending the service on multiple occasions (Griffiths & Gale, 2017). Safe Haven provided services for people 18 years of age or over. The evaluation did not report on age or gender of consumers. The predominant reasons consumers gave for attending Safe Haven were:

- Preventing the escalation of symptoms (56%);
- Social reasons (meeting and socialising with other service users to reduce social isolation and loneliness, 23%);
- Crisis (13%); and
- Other (7%; Griffiths & Gale, 2017).

Evaluation

The service evaluation assessed the possible impacts of the service on emergency department presentations and police, as well service user and staff satisfaction.

Based on a sub-sample of 92 service users, the evaluation found that 67% (62 of 92) had attended an emergency department at least once in the 12 months prior to the first Safe Haven visit, and 24% had attended an emergency department on three or more occasions (Griffiths & Gale, 2017). Of those who had previously attended an emergency department, 53% showed a decrease in emergency department attendance following introduction to Safe Haven, 19% showed no change, and 28% showed an increase in their attendance at an emergency department (Griffiths & Gale, 2017).

Comparison of police data in Aldershot and surrounding areas one year prior to the introduction of Safe Haven (2013-2014), and two years after showed a 42% drop in calls marked “mental health related” from 2013 to 2016 (Griffiths & Gale, 2017). A comparison site showed consistent levels of mental health related calls in the same time frame. However, when only Aldershot area data were analysed, an increase in mental health related calls was noted (Griffiths & Gale, 2017).

In the wider district of Rushmoor, which encompasses Aldershot, police deployments to mental health related calls reduced by 155 deployments in 2016-2017, compared to 2013-2014, equating to a saving of 310 police hours (Griffiths

& Gale, 2017). When Aldershot was analysed in isolation in the same time periods, police deployments for calls marked “mental health” reduced (Griffiths & Gale, 2017). Police detentions under the Mental Health Act in the wider area (North East Hampshire) reduced, despite a national trend increase (Aldershot was not analysed separately; Griffiths & Gale, 2017). Anecdotal reports from local police suggested that reduced call outs were linked to police awareness of the Safe Haven as an appropriate referral pathway for individuals experiencing crisis.

Service users rated Safe Haven favourably, with 85% or more agreeing or strongly agreeing that Safe Haven had prevented their crisis, had helped them manage in a difficult time, or had provided them with a safe place to go (Griffiths & Gale, 2017). Nearly 30% of those surveyed reported that they would have presented to an emergency department if Safe Haven was not there and 18% stated that Safe Haven helped them stay alive (Griffiths & Gale, 2017).

Staff members were asked what worked about the service and responded that the most important things were teamwork, promotion of service user independence, provision of a safe space for people to de-escalate, ability to increase speed of treatment, effective service promotion and signposting, and building strong partnerships with other service providers (Griffiths & Gale, 2017).

Limitations

The evaluation did not determine what Safe Haven’s impact was on acute psychiatric admissions. It was noted that police deployments reduced across the district, and thus may not be attributable to Safe Haven. Additionally, the analyses used different geographical areas for comparison, at times confusing the interpretability of results.

St Vincent’s Safe Haven Café, Melbourne, Australia

Model description

St Vincent’s Safe Haven Café opened in Fitzroy, Melbourne, in May 2018 based in the art gallery space of St Vincent’s Hospital (St Vincent’s Hospital, 2018). Each shift is staffed by a mental health clinician and a peer support worker. Volunteers have been involved in the program, however new roles in a different service area are currently being designed for them³. The Safe Haven Café operates as an after-hours drop in centre, on Fridays 6-8pm and Saturdays and Sundays 2-8pm (St Vincent’s Hospital, 2018). The Safe Haven Café is designed to provide a safe, supportive and welcoming place for people to gain information on support options available to them, understand more about reactions to crises, and facilitate development of therapeutic skills to manage crises and improve mental health (St Vincent’s Hospital, 2018).

³ Fran Timmins, Director of Nursing, Mental Health, St Vincent’s Hospital. Personal communications via telephone. 5th May 2019.

Consistent with the café concept, free tea, coffee and snacks are provided.

Consumer characteristics

Any person aged 18 years of age and over can drop in to the café. A peer support worker is embedded within the hospital's emergency department and connects with people in crisis, directing them to the Safe Haven Café if appropriate and if the person is willing³. This includes people who have been transported to an emergency department by first responders, if the peer worker deems them to be suitable at that time. The peer worker can also offer people the opportunity to stay in the Safe Haven Café while waiting for an emergency department assessment. The space is non-clinical, and as such purposefully does not collect psychometric assessment data, nor demographics of consumers seen³. There is a sign in sheet that people can use if they like, which collects information including: date, time they entered and left, postcode, what transportation they used to get to the Safe Haven Café, if they are presenting as an alternative to an emergency department, and what they would have done if they had not attended the Safe Haven Café³.

Evaluation

An economic evaluation of the service was completed after six months, and a more comprehensive twelve-month evaluation was due later in 2019. The costs analysis revealed that from May to September 2018, the Safe Haven Café had 400 visits by 62 individuals (Price Waterhouse Coopers, 2018). Of the 41 attendees who completed the sign in questionnaire regarding where they would have gone if the Safe Haven Café was not open, 37% stated that they would have gone to the emergency department (Price Waterhouse Coopers, 2018). This equated to 151 emergency department attendances avoided, approximately 30 per month. Further analysis of hospital presentation data in the six-months prior and the same six-month time period in 2017 (May to September), revealed that 12% of the Safe Haven Café attendees would have presented to an emergency department if they were not open, equating to ten visits per month, lower than that reported by the attendees themselves (Price Waterhouse Coopers, 2018). Sixty percent of respondents stated that a main reason for attending was to meet and socialise with other people (Price Waterhouse Coopers, 2018).

Limitations

No data are available on consumer characteristics or clinical outcomes.

Brisbane North Safe Space, Caboolture, Australia

Model description

Safe Space was opened in September 2018 at Richmond Fellowship Queensland (RFQ) at Caboolture, Queensland with another Safe Space due to open in Redcliffe in early 2019.

It is staffed by non-clinical staff with training in supporting people with mental illness and sensory approaches. Safe Space provides a warm, welcoming, supportive environment that people can go to when experiencing psychological distress and was designed to meet the needs of people who frequently present to the hospital due to mental distress (Wesley Mission Queensland, 2017). The opening hours are from 10am to 3pm Fridays, Saturdays and Sundays (My Mental Health, 2018).

At Safe Space, visitors are expected to participate in one or more of the activities offered, which usually last for one hour. These activities include:

- Gaining emotional and social support and connection;
- Utilising the sensory room;
- Safety planning; and
- Gaining education regarding accessing other relevant services and support for self-referral (My Mental Health, 2018).

Consumer characteristics

The pathway to attend is self-referral. Inclusion criteria to the service are:

- Being 18 years of age or over;
- Experiencing or recently experienced psychological distress; and
- Being able to engage with the service appropriately (My Mental Health, 2018).

Evaluation

This model has not yet been evaluated.

The Living Room – Illinois, USA

Model description

The Living Room (TLR) is a community-based alternative to emergency departments, available to “guests” in an emotional crisis (Shattell et al., 2014). TLR opened in 2011, in an existing community mental health centre, with TLR having a separate entrance. The approach is recovery orientated and the TLR environment is arranged like a home living room to maximise guests’ comfort (Shattell et al., 2014). Staff include registered counsellors, psychiatric nurses, and peer workers who are in recovery from mental illness. TLR is open to individuals aged 18 years of age or older seven days of the week, from 3pm to 9pm (National Alliance on Mental Illness, 2019).

On arrival, guests are greeted by one or more staff members immediately and are introduced to other staff. They are offered refreshments, and welcomed warmly. Each consumer is assessed and triaged by a clinician and asked to rate

³ Fran Timmins, Director of Nursing, Mental Health, St Vincent's Hospital. Personal communications via telephone. 5th May 2019.

their subjective units of distress (SUDS) from 0 (no distress) to 10 (most distress) on arrival and departure from the service (at both time points this is done by a mental health professional). Guests are then introduced to a psychiatric nurse who takes basic vital signs and provides health and medication information. From there, guests spend the majority of their time talking with peer workers. Interventions delivered include exploration of the consumer's problems, discussion of problem solving techniques, and skills development (Heyland & Johnson, 2017).

Consumer characteristics

One evaluation spanned eight weeks, during which time TLR was visited 56 times (including people who presented multiple times) (Heyland & Johnson, 2017). The ages of guests ranged from 20-59 years, gender was not reported. Sixteen guests agreed to participate in the evaluation. The presenting problems were listed as:

- Mixed stress plus anxiety and/or depression (63%);
- Anxiety (25%); and
- Depression (13%; Heyland & Johnson, 2017).

Evaluation

An initial evaluation during the first year of TLR found that it had hosted 87 guests (no demographics provided), and received a total of 228 visits, (Heyland et al., 2013). Heyland and colleagues estimated that service utilisation of TLR represents a 93% deflection rate from emergency departments (Heyland et al., 2013). Guests reported an average SUDS reduction of 2.13 points on departure (Heyland et al., 2013).

During a later eight-week evaluation period, TLR received 56 visits (Heyland & Johnson, 2017). The average entry SUDS score was 7.7 on arrival and 4.8 on departure. Of the 16 guests who consented and were able to be reached at telephone follow up, only one had presented to an emergency department (due to depression and suicidality and was not admitted) within a 30 day period following attendance at TLR (Heyland & Johnson, 2017). Ninety four percent did not attend any emergency departments during the 30 day follow up. When the 16 guests were asked about the most helpful aspects of TLR, they listed:

- Talking with someone about the problem and using problem solving skills (80%);
- Learning coping skills (67%);
- Reassurance of knowing The Living Room was there if needed (53%);
- Resources and referrals provided by staff (40%); and
- Other specific person-centred factors, such as goal setting, finding the staff helpful, liking the comfort of the environment (40%; Heyland & Johnson, 2017).

Limitations

Evaluation was limited by small sample sizes, lack of demographics, use of a subjective consumer rated SUDS scale without clinician administered psychometric measures or more in-depth self-report tools, and short follow up period. Additionally, the presenting problems were listed as anxiety, depression and stress, however it was noted that one consumer presented to the emergency department with suicidality. Suicidal ideation was not captured in the listed presenting problems.

Blended models

Blended models provide a holistic, multi-modal model of service, beginning at the point of call and that combines multiple service elements.

Crisis Now, Various Locations, USA

Model description

Crisis Now is a comprehensive model of care initially introduced in Arizona, and now replicated across the United States of America and New Zealand (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016). The data presented below are based on the Crisis Now Arizona Model. The model centres around the essential principles and practices of recovery focussed, trauma-informed treatments, use of peer workers, commitment to safety, commitment to zero suicide, and collaboration with law enforcement (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016).

The model is based on the following components:

1. High-Tech Crisis Call Centres

The call centres use real-time co-ordination of care. Utilising integrated software platforms, the call centres are staffed by counsellors who provide crisis intervention, information and referral services and can be accessed via phone, text, or chat in over 200 languages with real time interpreter services. If needed, call centre staff can connect the person in crisis with their private treating psychologist or psychiatrist (if they have one) while simultaneously dispatching police. The software used includes:

- Status of callers – everyone that is waiting for care, how long they have been waiting, and where they are located;
- Outpatient scheduling – staff can book individuals in crisis into local mental health practitioners;
- Shared bed tracking – staff can see where beds are located and how many are available;
- High-tech GPS mobile crisis team dispatching – staff are able to see where crisis teams are located, estimate how long they will be at a call, and dispatch the next available team to the caller; and

- Real time performance outcomes dashboard – to see statistics on how many people are being helped and how quickly.

The person in crisis is monitored via the technology after the call ends in order to ensure that they have received appropriate follow up care (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016).

2. 24/7 Mobile Crisis Teams

Mobile crisis teams provide outreach and support to the person in crisis. In the Arizona model, each Mobile Crisis Team is staffed by one master’s level clinician, and one bachelor’s level clinician or behavioural health technician (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016). The team travels in an unmarked vehicle, to reduce trauma and stigmatisation in the community. Staff are trained in de-escalation and support strategies, and offer care pathways matched to the person’s needs (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016).

3. Crisis Stabilisation Retreats/Programs

Crisis stabilisation retreats and programs provide short term care and support, as an alternative to hospital. These are safe retreats for persons to present to, and for police to take persons in mental health and suicidal crises. The retreat model has three essential criteria:

- The physical layout of the retreat is open, resembling a home (the “living room” model);
- The staff comprise a significant number of people with lived experience of mental illness and/or suicidality; and
- They make a positive and substantial community impact (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016).

The retreats are open 24 hours a day, seven days a week, and are available to anyone. There are no exclusion criteria. The treatment philosophy is recovery focussed, with warm and positive engagement encouraged. The multidisciplinary team comprises peers with lived experience of mental illness or suicidality, professional therapists and doctors. There are secure and safe drop off entry points for marked police vehicles, where peer supporters greet guests and orientate them to the retreat. A peer support worker is both the first and the last person the guest has contact with when entering or departing from the service (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016). Peer support workers are viewed as an integral part of the recovery process, providing social and emotional support, and providing living proof that recovery can happen (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016).

Consumer characteristics

There are no exclusions to accessing Crisis Now services.

The 2017 annual report for Crisis Now identified the top five primary reasons for calling as:

- Coordination of Care (28%);
- Self-harm/Suicidal (18%);
- Substance Abuse (8%);
- Anxiety (7%); and
- Social Concerns (6%; National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016).

Evaluation

The 2017 annual report for Crisis Now, identified 278,037 inbound Crisis Calls and 176,012 ‘Warm Line Calls’ received. 30,240 requests for transportation were received, and 27,137 mobile team requests were received (National Action Alliance for Suicide Prevention: Crisis Services Task Force, 2016).

Limitation

No published evaluation of clinical outcomes were available for review.

Culturally appropriate crisis responses

Culturally appropriate crisis responses are those that are focussed on meeting the needs of specific cultural groups, for example, Aboriginal and Torres Strait Islander peoples. This review included discussion of two crisis response models developed by, and for, Aboriginal and Torres Strait Islander peoples.

The Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project Western Australia, Australia

Model description

The Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project (ATSISPEP) operated in Western Australia (WA) for 12 months, from December 2015 to December 2016 (Dudgeon et al., 2017). There were two components to the project, a Critical Response Stream (CRS), operating state-wide with the role of providing assistance to Indigenous families following a suicide, and a Community Development Stream (CDS) operating in four sites to upskill communities in suicide prevention activities and critical responses (Dudgeon et al., 2017). Staff were non-clinical, and as such did not provide counselling or therapy to consumers. The CRS’s role was to provide linkages and referral options to families and individuals, and operated 24 hours per day, seven days per week (Dudgeon et al., 2017).

Notifications of suicides and critical events were received by the CRS team by families via a dedicated mobile phone

number, people or organisations associated with the affected family, monitoring of social media and news, and through establishment of communication pathways with the WA Mental Health Commission (Dudgeon et al., 2017). The CRS team endeavoured to make contact with the affected family and/or individual. From there, they would conduct needs assessments, co-ordinate local services to meet those needs, follow up and monitor the family and service providers as needed, and assess community needs and monitor risk of suicide contagion (Dudgeon et al., 2017).

The work of CRS was designed to be predominantly phone based, with visits to the community indicated when:

- Family was based remotely with no or minimal existing services available;
- Mediation was required to resolve conflicts between existing services or in the community; or
- The family/community members asked for a visit (Dudgeon et al., 2017).

The CDS team worked to upskill Indigenous communities in suicide prevention and responses to critical incidents by enhancing relationships with communities, service providers, needs assessments for community training, and facilitating training (Dudgeon et al., 2017).

Consumer characteristics

This service is tailored to Aboriginal and Torres Strait Islander peoples. In the twelve-months the service was operational, the team was informed of 46 families affected by suicide or a critical incident (Dudgeon et al., 2017). Demographics regarding those who were assisted were not reported on (Dudgeon et al., 2017).

Evaluation

Of the 46 cases that were notified:

- 39 were suspected suicides;
- Two were suicide attempts;
- One involved a suicide threat;
- One involved alleged manslaughter;
- One involved death following the hospital refusing admission;
- One involved alleged murder; and
- One involved a drowning (Dudgeon et al., 2017).

Twenty one families received direct help from the CRS. The remaining families were unable to be contacted or did not receive direct assistance from CRS (Dudgeon et al., 2017).

The CRS completed:

- 354 telephone calls with affected families;
- 45 tele-meetings with affected families;
- 497 telephone calls with services;
- 72 tele-meetings with services; and
- Conducted 92 face-to-face meetings with families and community groups (Dudgeon et al., 2017).

Limitations

Demographics of people assisted were not reported. Completion of a record sheet by CRS staff was limited, with only six being completed despite 21 families being helped, and of the six sheets completed some lacked important information (Dudgeon et al., 2017). The evaluation did not report outcomes for the families and communities assisted.

National Indigenous Critical Response Service, Australia

Model description

The National Indigenous Critical Response Service (NICRS) is delivered by Thirrili Ltd, a non-profit organisation focussed on the wellbeing of Aboriginal and Torres Strait Islander peoples (Thirrili Ltd., 2017). Like ATSIPEP, the aims of NICRS are to:

1. “provide a critical response to support individuals, families and communities affected by suicide-related or other trauma that is culturally responsive to their needs” (Thirrili Ltd., 2017); and
2. “strengthen community capacity and resilience in communities where there have been high levels of suicide to better recognise and respond to critical incidents and strengthen service system coordination.” (Thirrili Ltd., 2017)

Advocates can be contacted on a free phone number 24/7. If not able to be answered, an advocate will respond as soon as practicable. The service is staffed by advocates who identify as Aboriginal and/or Torres Strait Islanders (Thirrili Ltd., 2017). Staff are not counsellors and do not provide counselling or clinical support. The aim of service is to provide a culturally responsive service, support local services and strengthen community resilience through response to critical incidents (Thirrili Ltd., 2017). Service provision includes an informal needs assessment, practical social support, linkages with local social, health and community services, cultural supports, and ongoing support to individuals and families (Thirrili Ltd., 2017).

The advocates ensure that culturally appropriate engagement with service providers occurs, they monitor how the services fulfil the psychosocial needs of the person, and encourage services to adopt a collaborative approach to care and through-care (Thirrili Ltd., 2017).

NICRS also encompasses a community capacity building program that assists communities to support families and respond to community needs following a suicide, or traumatic event, help the family access co-ordinated care, and focus on local risk factors that contributed to the suicide such as mental illness, homelessness, violence, alcohol or drug abuse, unemployment, and forensic issues (Thirrili Ltd., 2017).

Consumer characteristics

This service is tailored to the needs of Aboriginal and/or Torres Strait Islander people.

Evaluation

No evaluations are available for this service.

Aftercare services

Post-ED services (aftercare services) provide follow up support to people who have recently presented to an emergency department with a suicidal crisis. The role of a post-ED service is to engage with the person for a limited time, linking them in with appropriate services to prevent suicidality in the future. Non-clinical and clinical post-ED services are available. It is possible that pathways to these services could be modified, so that first responders link directly with these types of services.

Beyond Blue's The Way Back Support Service

Model description

The Way Back Support Service (The Way Back) by Beyond Blue was designed to meet a service gap in continuity of care in Australia for people recently discharged from hospital after a suicide attempt or suicidal crisis (beyondblue, 2016). The Way Back is a non-clinical, short term support service that provides linkages to support networks in the first three months after discharge, the time of greatest risk of another attempt or crisis (Hunt et al., 2009). Consumers can access the program via referral from the emergency department or a psychiatric inpatient ward.

The setting for Way Back is community based, staffed by a manager and two support co-ordinators with tertiary qualifications in human services/social science fields (but not registered health professionals), and with knowledge and experience working with Aboriginal and/or Torres Strait Islanders (beyondblue, 2016). One of the support co-ordinators identified as Aboriginal and/or Torres Strait Islander. Support workers provide assistance via a number of platforms, including text messaging and email, as well as face-to-face and telephone. The main objective of the service is to connect a person who has been in a suicidal crisis to community supports, including government and non-government services, or private organisations and practitioners (beyondblue, 2016). A support co-ordinator attempts to make contact with the person at risk within 24-48 hours of receiving the referral (beyondblue, 2016).

Support co-ordinators conduct intake assessments to ensure the referral is appropriate for the service's approach of short term support, encouraging resilience and consumer locus of control (beyondblue, 2016). Coordinators help

consumers identify and access appropriate services in their community and follow up to check consumers' progress in accessing services. Risk monitoring is conducted during each interaction with the consumer (beyondblue, 2016).

Consumer characteristics

The intake criteria for The Way Back is: "Distress accompanied by suicidal thoughts and articulating an intent to die in someone whom, in the absence of assertive follow-up to engage with other community-based services/agencies, would be vulnerable to increased risk of suicide" (beyondblue, 2016).

A trial of The Way Back in the Northern Territory (NT) identified three referral pathways to The Way Back:

- The Royal Darwin Hospital crisis assessment and treatment team (CATT, 87% of referrals);
- Psychiatric inpatient ward (11% of referrals); and
- The sexual assault service of the hospital (2% of referrals; beyondblue, 2016).

During The Way Back NT trial period of June 2014 to December 2015, 122 consumers were referred to The Way Back. Of these, 40% were male and 60% were female. Just over three-quarters (78%) were under 45 years of age (age range <15 to 75 years of age). Fourteen percent identified as Aboriginal or Torres Strait Islander (beyondblue, 2016).

Evaluation

During the trial in the NT from June 2014 to December 2015, the service operated during day hours, with provision for out of hours contact if required (beyondblue, 2016). During the trial period, 122 consumers were referred, with 71% uptake of the service (beyondblue, 2016).

Between January and August 2015, the most common referrals made by support co-ordinators of The Way Back NT to external services were for:

- Practical support (accommodation, food, clothing, household items, financial support);
- Medical support;
- Psychiatric support; and
- Counselling/psychologist (beyondblue, 2016).

Fifteen percent of consumers had a World Health Organization – Five Well-Being Index (WHO-5) completed at intake and after discharge from the service (beyondblue, 2016). The WHO-5 is a subjective measure of psychological wellbeing, with five questions rated on a six-point Likert scale. On average there was a 10 point improvement (from 12.5 to 22.5) in wellbeing at post-test (a score of 0 = worst quality of life and a score of 25 = best quality of life, with a score of 13 or under equating to low quality of life worthy of further investigation; Topp, Ostergaard, Sondergaard, & Bech, 2015). Six consumers were interviewed and all were highly satisfied with the service.

Over one-half of consumers (53%) had an unplanned exit from the service, an undesirable outcome given that planned exits give scope for finalisation of treatment planning and appropriate closure of the therapeutic relationship (beyondblue, 2016).

Limitations

Re-admission data could not be accessed for this evaluation. There was a high rate of missing data on the key outcome measure (WHO-5), because co-ordinators thought completion of the measure may interfere with the therapeutic relationship (beyondblue, 2016). Low numbers of consumer participation in feedback interviews were noted. Limitations in sample size and completeness make it difficult to draw conclusions regarding whether The Way Back decreased suicide attempts, crisis, and deaths during the trial period (beyondblue, 2016).

Further evaluations are planned, for other regions of Australia.

Peer, Acceptance, Support, Understanding and Empathy (PAUSE) by Brook Recovery, Empowerment, Development (Brook RED), Brisbane, Australia

Model description

PAUSE is a peer support program implemented by Brook RED in Brisbane. The program works directly with Logan Hospital's emergency department, which is the only referral pathway into the program, after a person has presented in a suicidal crisis or with deliberate self-harm⁴. Following triage, and if it is considered to be appropriate, the person may be referred to PAUSE during or after discharge from the emergency department⁴. Referrals are received by Brook RED via email, and once received, the PAUSE team endeavour to contact the person within 24 business hours. Contractually, PAUSE have seven days to attempt contact with the consumer, however the team emphasises the importance of contacting a person as soon as practicable⁴. The PAUSE team comprises four peer support workers with lived experience of mental illness or suicidality, and generally operates within normal business hours⁴. However, there is some flexibility, and sometimes staff will attempt to contact a referred person outside of business hours, in order to best meet their needs⁴.

The team will sometimes start with a "soft" introduction via text or email to gain the trust of the person and explain the program⁴. The aim then is to meet the person face-to-face and explore the reasons for their suicidality. The person is met in a place of their choosing, mainly in community settings for safety requirements, but the team is flexible in attending homes if required⁴.

The intervention delivered is individualised and tailored to the person based on their needs. Common interventions include peer support focussed on recovery, advocating for the person to link in with services including private psychologists, psychiatrists, and GPs, assisting with linkages to public services such as Department of Housing as well as non-government organisations (NGOs) for services such as financial counselling, and providing education to carers and family members of the person⁴. The PAUSE team encourage naturalistic supports in the community (aimed at increasing social support and connection) and help the individual problem solve issues they may be having with accessing these services⁴.

Consumer characteristics

Inclusion criteria for accessing PAUSE is that the person presented to Logan Hospital emergency department for suicidal or self-harming behaviour. Exclusion criteria, include the person being under the age of 16. Generally, a referred person stays in the program for up to 13 weeks however, PAUSE are flexible regarding end dates, and are willing to continue to work with people until they have achieved their goals⁴.

Evaluation

An evaluation was underway at the time of writing.

Green Card Clinic – St Vincent's Hospital, Sydney

Model description

The Green Card Clinic (GCC) was designed to provide expedited access to treatment with trained clinicians, following deliberate self-harm or suicidal crisis (Wilhelm et al., 2007). The clinical pathway for entry is via the emergency department at St Vincent's hospital, Sydney, where the consumer is assessed as usual, and if appropriate, provided with a "green card", including an appointment with the service the next day, as well as helpline phone numbers (Wilhelm et al., 2007). The GCC sees consumers for three structured sessions, with some flexibility to extend this if required (Wilhelm et al., 2007). The service comprises three sessions:

Session 1: Complete Centre for Epidemiological Studies Depression Scale (CES-D), and the FANTASTIC lifestyle checklist which records wellbeing across eleven domains including cognitive, psychosocial, and substance use (Wilhelm et al., 2007). Assessment including risk assessment is performed, and consumers identify problem areas from a checklist. Homework is to mood monitor (Wilhelm et al., 2007).

⁴Kezia Schneck, Peer Support Worker Brook RED. Personal communication via telephone. 15th January 2019.

Session 2: Consumers choose up to two goal areas to work on based on their presenting problems and are provided with targeted interventions (Wilhelm et al., 2007). Interventions include: problem solving, relaxation training, mindfulness, goal setting and motivational interviewing (Wilhelm et al., 2007). A care plan is developed with input from the consumer's GP and handouts are provided (Wilhelm et al., 2007).

Session 3: Progress is reviewed, interventions consolidated, and future treatment planning is conducted. The CES-D is repeated (Wilhelm et al., 2007).

Consumer characteristics

During a seven-year period from June 1998 to December 2005, 344 consumers attended the clinic (out of 456 consumers who were referred = 75% attendance rate). Of these, 43% were male and 57% were female. The mean age of consumers was 31.6 years (range 16-80 years of age, SD = 11.3 years) (Wilhelm et al., 2007).

Reasons for presentation to the emergency department for those who attended the clinic, included:

- Overdose (66%);
- Suicidal thoughts (17%);
- Cutting (12%);
- Hanging (2%); and
- Other methods of self-harm (6%; Wilhelm et al., 2007).

Evaluation

The evaluation consisted of a review of records, and an annual survey sent out to clinic attenders via mail or telephone, at 3-15 months follow up (Wilhelm et al., 2007). Results indicated poor re-attendance rates, with 57% of consumers attending the second session, and only 34% attending the third session (Wilhelm et al., 2007). Seventy-three consumers were able to be contacted at the annual follow up (21% of all consumers who attended), with 16% reporting they had self-harmed again (Wilhelm et al., 2007). Sixty-seven percent of the 73 consumers who completed the annual follow up, reported they had made positive lifestyle changes since attending the GCC (Wilhelm et al., 2007). There was a statistically significant reduction in symptoms of depression among those who attended all three sessions and completed the post-test CES-D (55% follow-up; Wilhelm et al., 2007).

Limitations

This study was limited by small sample sizes, attrition and loss to follow-up.

Pieta House, Dublin, Ireland

Model description

Pieta House opened in Dublin, Ireland in 2006, as an alternative to hospital admission. Pieta House is a suicide intervention outpatient service for people who are actively suicidal, who self-harm, or who have made a suicide attempt

(Surgenor et al., 2015). Treatment is free, delivered by a team of 40 therapists and administration staff, and is funded by fundraising efforts and donations (Surgenor et al., 2015).

Intensive therapy is delivered over a timeframe of up to twelve weeks, with 50 minute sessions, which may include daily therapy as clinically necessitated (Pieta House, 2018). A therapist is available to family members, in order to assist families in how to best support the person in crisis at home (Pieta House, 2018). Pieta House also operate a 24-hour help line for people in distress to access.

Surgenor et al., (2015) outlined the Pieta House model of care as involving three phases: pre-therapy (assessment phase), therapy and consolidation, and follow up. The pre-therapy phase consists of an initial meeting whereby potential consumers are assessed for suitability and risk.

Sessions 1-2 involve listening to the consumer's story of their suicidality, exploring their reasons for living and dying, and identifying areas for improvement (Surgenor et al., 2015).

Sessions 3-13 focus on skills development, drawing on cognitive behavioural therapy and dialectical behaviour therapy.

The follow-up period consists of a text message sent two weeks after therapy has been completed, to reinforce that Pieta Houses services are there if needed (Surgenor et al., 2015). Secondly, a letter and material regarding external support agencies is sent to the consumer four weeks after therapy (Surgenor et al., 2015). Finally, a phone call follow-up takes place six weeks after therapy is completed, to check on the consumer's progress, and any experiences of depression, hopelessness, or suicidality (Surgenor et al., 2015). If the consumers is progressing well, therapy is closed (Surgenor et al., 2015).

Consumer characteristics

Individuals can self-refer, or be referred by others, and are seen within one week (Pieta House, 2018). Individuals in crisis are seen urgently and a waiting list does not apply (Pieta House, 2018). Exclusion criteria are based on a consumer's inability to engage with dialectical therapy, including severe mental illness, current alcohol or drug addiction, severe intellectual impairment or behavioural disorder (Surgenor et al., 2015). Half of those who engaged with Pieta House, in the post-therapy stage, were male, and half were female. Mean age was 38.1 years (range 18-74 years of age; Surgenor et al., 2015).

Evaluation

An evaluation of Pieta House was conducted. A sample of 432 consumers responded (65% response rate) in the pre-therapy stage and 147 continued to participate at post-therapy (50.3% response rate), six weeks after therapy had been completed. Pre- and post- psychometric measures were used to ascertain treatment effectiveness in the areas of self-esteem, depression, and positive (protective factors that decrease suicidality) and negative (factors that increase desire to die) suicidal ideation. Self-esteem was measured by one item

(“I have high self-esteem;” Robins, Hendin, & Trzesniewski, 2001) rated on a five-point scale. Depression was measured with the Patient Health Questionnaire (Kroenke, Spitzer, & Williams, 2001), which has good reliability and validity (Pinto-Meza, Serrano-Blanco, Penarrubia, Blanco, & Haro, 2005). Suicidality was measured using eight items from The Positive and Negative Suicide Ideation Inventory (Osman, Gutierrez, Kopper, Barrios, & Chiro, 1998).

Statistically significant improvements were identified among respondents. Consumers had a statistically significant increase in self-esteem; positive suicide ideation; and a statistically significant decrease in depression and negative suicide ideation (Surgenor et al., 2015). Results indicated that Pieta House was successful in achieving its aim to resolve suicidal crises (Surgenor et al., 2015).

Limitations

A limitation was that no data were collected on those people who did not complete the therapy. Differences may exist between completers and non-completers.

There was no control group to compare against.

There was attrition between completion of therapy and post-assessment, with the majority of consumers who did not participate in the post-assessment stating that they did not want to revisit that part of their life (Surgenor et al., 2015). Differences between those who participated post-assessment versus those who did not could be examined in future research.

Veteran Suicide Prevention Pilot, Brisbane, Australia

Model description

The Veteran Suicide Prevention Pilot is a trial program initiated by the Department of Veterans Affairs and Beyond Blue, available to ex-serving Australian Defence Force personnel (Department of Veterans' Affairs, 2018). The program is voluntary and links veterans to appropriate support organisations such as Open Arms, advocates, and social support providers (Department of Veterans' Affairs, 2018). If the veteran accepts entry into the pilot, they are allocated a Support Coordinator who collaboratively develops a personalised safety plan with the veteran (Department of Veterans' Affairs, 2018). The plan includes goal setting and strategies to re-engage with life. Attendance at follow-up care and appointments with service providers is tracked to ensure the veteran is engaging in treatment, and to assist in reducing any barriers (Department of Veterans' Affairs, 2018). The Support Coordinators maintain regular contact with the veteran, utilising face-to-face sessions, phone and email. Support is based on the needs of the veteran, and can last up to three months (Department of Veterans' Affairs, 2018).

Consumer characteristics

Intake into the program is offered to veterans who attend a participating hospital following a suicide attempt, who have suicidal thoughts, or who are inpatients of the hospital and are assessed to have risk factors associated with suicide (Department of Veterans' Affairs, 2018).

Evaluation

A future evaluation, planned at the time of writing, will aim to examine whether the program is effective in reducing veterans' suicide and suicidal behaviour.

DISCUSSION

Key service components

The literature identified several novel models of service with the potential to support diversion of individuals in crisis away from emergency departments and towards care options that effectively and compassionately meet their needs. The literature highlighted the potential benefits of using existing infrastructure to deliver unique services that utilise lived experience to provide compassionate responses and hope through mentorship. A number of models highlighted the importance of making sure that services have a non-clinical decor, and feel safe and warm.

Several models focussed on providing consumers with 'work' to complete as part of service delivery, under the rationale that this would increase sense of achievement and sense of connection with the service. Many services also highlighted the importance of fostering social connectedness, as a key protective factor against suicide.

Service gaps

Several gaps in models of care are evident, including limited tailoring of services to vulnerable sub-groups, and limited services for younger people in a suicidal crisis; nearly all models focussed on adults, 18 years of age or over.

Limitations in the evidence-base

While many evaluations indicated a high degree of consumer satisfaction, there was an overwhelming lack of evidence to support the implementation of interventions. Limitations in evaluations, included:

- Limitations to study design. Specifically, heterogeneity in methodologies and outcomes measures across services; small sample sizes; lack of follow up or attrition in relation to clinical outcomes; and lack of control groups.
- Limitations in measurement of clinical and other outcomes. Specifically, lack of rigorous use of psychometric assessments to detail clinical outcomes for those in a suicidal crisis; lack of measurement of number of hospitalisations, including re-admission rates; limited analysis of cost-effectiveness; and limited measurement of impacts on police or ambulance deployments, or use of legislative powers.
- Limitations in specifications of model of service. Specifically, lack of specific assessment procedures. Models often relied on trained clinicians' judgement, which limits replicability, and lacked detail with regards to actual therapy interventions, including what peer workers provide.

CONCLUSION

The review identified several promising models of care that could comprise care pathways for individuals in crisis who come into contact with police or paramedics. However, given limitations to the evidence base, staged implementation of models, incorporating rigorous evaluation, should be considered. In particular, there is a need to develop and evaluate models of service for vulnerable sub-groups, and children and adolescents. The review did not identify literature on other elements of care pathways, specifically transportation and use of legislative powers to involuntarily detain or transport individuals. Further research is needed in order to comprehensively understand and enhance care pathways for individuals who experience suicidal crises that bring them into contact with police or paramedics.

REFERENCES

- Australasian College for Emergency Medicine (2018) *Waiting Times in the Emergency Department for People with Acute Mental and Behavioural Conditions*. Melbourne: Australasian College for Emergency Medicine. Retrieved from https://acem.org.au/getmedia/0857d22e-af03-40bb-8e9f-f01a2a2bf607/ACEM_Mental-Health-Access-Block.aspx
- Australian Bureau of Statistics (2018) Intentional Self-Harm, Key Characteristics. From <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2018~Main%20Features~Intentional%20self-harm,%20key%20characteristics~3>
- beyondblue (2016) *The Way Back Support Service – Northern Territory: Final Evaluation Report for beyondblue*. Retrieved from <https://www.beyondblue.org.au/docs/default-source/default-document-library/the-way-back-nt-final-evaluation-report-2016.pdf6.pdf>
- Bouveng, O., Bengtsson, F., & Carlborg, A. (2017) *First-year follow-up of the Psychiatric Emergency Response Team (PAM) in Stockholm County, Sweden: A descriptive study*. *International Journal of Mental Health* 46(2), 65-73. doi: 10.1080/00207411.2016.1264040
- Department of Veterans' Affairs (2018) Veterans Suicide Prevention Pilot. From <https://www.dva.gov.au/health-and-wellbeing/mental-health/veteran-suicide-prevention-pilot>
- Dudgeon, P., Milroy, J., Luxford, Y., & Holland, C. (2017) *Report of the Critical Response Pilot Project: Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project*. Perth, Western Australia: University of Western Australia. Retrieved from https://api.research-repository.uwa.edu.au/portalfiles/portal/26165661/FINAL_CriticalResponsePilotProjectReport_WEB.pdf
- Griffiths, A., & Gale, K. (2017) Independent Evaluation of the North East Hampshire and Farnham Vanguard: Aldershot Safe Haven Service. Southampton, UK: Wessex Academic Health Science Network. Retrieved from https://wessexahsn.org.uk/img/projects/Safe%20Haven%20Evaluation_FINAL_October%202017.pdf
- Heyland, M., Emery, C., & Shattell, M. (2013) The Living Room, a community crisis respite program: Offering people in crisis an alternative to emergency departments. *Global Journal of Community Psychology Practice*, 4(3), 1-8.
- Heyland, M., & Johnson, M. (2017) Evaluating an Alternative to the Emergency Department for Adults in Mental Health Crisis. *Issues in Mental Health Nursing*, 38(7), 557-561. doi: 10.1080/01612840.2017.1300841
- Hunt, I., Kapur, N., Webb, R., Robinson, J., Burns, J., Shaw, J., & Appleby, L. (2009) Suicide in recently discharged psychiatric patients: a case-control study. *Psychological Medicine*, 39, 443-449. doi: 10.1017/S0033291708003644
- Johnston, A., Pirkis, J., & Burgess, P. (2009) Suicidal Thoughts and Behaviours Among Australian Adults: Findings from the 2007 National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry*, 43(7), 635-643. doi: 10.1080/00048670902970874
- Kroenke, K., Spitzer, R., & Williams, J. (2001) The PHQ-9: Validity of a Brief Depression Severity Measure. *Journal of General Internal Medicine*, 16, 606-613. doi: 10.1046/j.1525-1497.2001.016009606.x
- Lee, S., Thomas, P., Doulis, C., Bowles, D., Henderson, K., Keppich-Arnold, S., ... Stafrace, S. (2015) Outcomes achieved by and police and clinician perspectives on a joint police officer and mental health clinician mobile response unit. *International Journal of Mental Health Nursing*, 24, 538-546. doi: 10.1111/inm.12153
- McPhedran, S., & De Leo, D. (2013) *Pathways to Care: To examine the mechanisms in place across Australia to respond to and provide care to people at imminent risk of suicide*. Brisbane, Australia: Commonwealth of Australia.
- Meehan, T., Brack, J., Mansfield, Y., & Stedman, T. (2019) Do police-mental health co-responder programmes reduce emergency department presentations or simply delay the inevitable? *Australasian Psychiatry*, 27(1), 18-20. doi: 10.1177/1039856218797424
- Meurk, C., & Smith, J. (2020) *Partners in Prevention. Understanding and enhancing first responses to suicide crisis situations: Perspectives from lived experience*. Brisbane: Queensland Health and Roses in the Ocean.
- My Mental Health (2018) Brisbane North Safe Space Network. From <https://www.mymentalhealth.org.au/page/services/self-care-and-informal-support/safe-space-network/>
- National Action Alliance for Suicide Prevention: Crisis Services Task Force (2016) *Crisis now: Transforming services is within our reach*. Washington, DC: Education Development Centre, Inc. Retrieved from <https://theactionalliance.org/sites/default/files/crisisnow.pdf>
- National Alliance on Mental Illness (2019) Provider: *The Living Room Brochure*. Retrieved from <http://namidupage.org/wp-content/uploads/2016/09/LR-Provider-rev.9-7-16.pdf>
- O'Neill, K. (2018) *Distress Brief Intervention: Programme Manager's Six Monthly Report April 18-September 18, Issue 4*. Scotland: DBI. Retrieved from <https://www.dbi.scot/resources/progress-reports/>

- Osman, A., Gutierrez, P., Kopper, B., Barrios, F., & Chiros, C. (1998) The positive and negative suicide ideation inventory: development and validation. *Psychological Reports*, 28, 783-793. doi: [10.2466/pro.1998.82.3.783](https://doi.org/10.2466/pro.1998.82.3.783)
- Pieta House (2018) Pieta House: Frequently Asked Questions. From <https://www.pieta.ie/faq>
- Pinto-Meza, A., Serrano-Blanco, A., Penarrubia, M., Blanco, E., & Haro, J. (2005) Assessing depression in primary care with the PHQ-9: can it be carried out over the telephone?. *Journal of General Internal Medicine*, 20(8), 738-742. doi: [10.1111/j.1525-1497.2005.0144.x](https://doi.org/10.1111/j.1525-1497.2005.0144.x)
- Price Waterhouse Coopers (2018) *Economic impact of the Safe Haven Cafe, Melbourne*. Victoria, Australia: Price Waterhouse Coopers. Retrieved from https://www.thecentrehki.com.au/wp-content/uploads/2019/06/Safe-Haven-Cafe-Cost-Benefit-Analysis_FINAL.pdf
- Productivity Commission (2019) *Report of Government Services, Part E, Chapter 13: Mental Health Management*. Australian Government Productivity Commission. Retrieved from <https://www.pc.gov.au/research/ongoing/report-on-government-services/2019/health/mental-health-management/rogs-2019-part-e-chapter13.pdf>
- Puntis, S., Perfect, D., Kirubarajan, A., Bolton, S., Davies, F., Hayes, A., . . . Molodynski, A. (2018) A systematic review of co-responder models of police mental health 'street' triage. *BMC Psychiatry*, 18(256), 1-11. doi:[10.1186/s12888-018-1836-2](https://doi.org/10.1186/s12888-018-1836-2)
- Robins, R., Hendin, H., & Trzesniewski, K. (2001) Measuring Global Self-Esteem: Construct Validation of a Single-Item Measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, 27(2), 151-161. doi: [10.1177/0146167201272002](https://doi.org/10.1177/0146167201272002)
- Shattell, M., Harris, B., Beavers, J., Tomlinson, S., Prasek, L., Geevarghese, S., ... Heyland, M. (2014) A Recovery-Oriented Alternative to Hospital Emergency Departments for Persons in Emotional Distress: "The Living Room". *Issues in Mental Health Nursing*, 35(4), 4-12. doi: [10.3109/01612840.2013.835012](https://doi.org/10.3109/01612840.2013.835012)
- St Vincent's Hospital (2018) St Vincent's Safe Haven Cafe. From <https://stvincentsmelbourne.blog/2018/05/17/st-vincents-safe-haven-cafe/>
- Surgenor, P., Freeman, J., & O'Connor, C. (2015) Developing the Pieta House Suicide Intervention Model: a quasi-experimental, repeated measures design. *BMC Psychology*, 3(14), 1-8. doi: [10.1186/s40359-015-0071-6](https://doi.org/10.1186/s40359-015-0071-6)
- The Allen Consulting Group (2012) *Police, Ambulance and Clinical Early Response (PACER) Evaluation*. Victoria. Retrieved from <https://www2.health.vic.gov.au/about/publications/researchandreports/Police-Ambulance-and-Clinical-Early-Response-PACER-Evaluation-Report>
- The Scottish Government (2015) *Distress Brief Interventions: Rationale and Evidence*. Scotland: Health Analytical Services.
- Thirrili Ltd. (2017) National Indigenous Critical Response Service. From <https://thirrili.com.au/>
- Topp, C., Ostergaard, S., Sondergaard, S., & Bech, P. (2015) The WHO-5 Well-Being Index: A Systematic Review of the Literature. *Psychotherapy and Psychosomatics*, 84, 167-176. doi: [10.1159/000376585](https://doi.org/10.1159/000376585)
- Wesley Mission Queensland (2017) *Safe Spaces Network for Brisbane North: Progress Report*. Queensland: Wesley Mission. Retrieved from <http://www.northbrisbane.pirinitiative.com.au/wp-content/uploads/2014/02/Safe-Space-Final-project-report-2017.pdf>
- Wilhelm, K., Finch, A., Kotze, B., Arnold, K., McDonald, G., Sternhell, P., & Hudson, B. (2007) The Green Card Clinic: overview of a brief patient-centred intervention following deliberate self-harm. *Australasian Psychiatry*, 15(1), 35-41. doi: [10.1080/10398560601083068](https://doi.org/10.1080/10398560601083068)
- World Health Organization (2009) *Preventing Suicide: A Resource for Police, Firefighters and Other First Line Responders*. Geneva: World Health Organization. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/44175/9789241598439_eng.sessionid=DDE3370DB27C5F179A44E04A2B9C3755?sequence=1

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NEED HELP?

Suicide can be a difficult topic for many people. If you would like to talk with someone, find support, or locate more information, you can contact:

Lifeline 13 11 14
www.lifeline.org.au/gethelp

Suicide Call Back Service
1300 659 467
www.suicidecallbackservice.org.au

MensLine Australia
1300 789 978
www.mensline.org.au

Beyond Blue Support Service
1300 224 636
www.beyondblue.org.au

SANE Australia Helpline
1800 187 263
www.sane.org

QLife (LGBTI)
1800 184 5270
www.qlife.org.au

Kids Helpline
1800 551 800
www.kidshelpline.com.au

Defence Family Helpline
1800 624 608
www.defence.gov.au/dco/defence-helpline.asp

