

The **Allen Consulting** Group

**Police, Ambulance and Clinical Early
Response (PACER) Evaluation**

Final Report

The Allen Consulting Group

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Executive summary

Introduction

In Victoria, determining the most appropriate way of responding to mental health crises in the community has received attention in policy, legislation and protocols. Emergency services agencies including police, mental health and ambulance are frequently required to be at the front line of responders to such crises. Efforts to improve the capacity of each agency to respond to mental health crises, together with improvements to inter-agency cooperation and collaboration, aim to deliver a more streamlined response to persons experiencing a mental health problem. The Police, Ambulance and Clinical Early Response (PACER) trial is one product of this collaboration.

Background

It is estimated that over a 12 month period around one million Victorians are affected by mental health problems. Three per cent of the Victorian population experience severe mental illness, with less than half who are unwell accessing public mental health services. Police report weekly contact with persons who are mentally ill and it is estimated that around 500 people apprehended each month may be experiencing mental illness.

In Victoria, the strategic approach to management of mental health problems envisages new models of care for persons in crisis that deliver the most appropriate and direct response. This response will have regard for human rights, the mental health needs of the person in crisis, the roles and responsibilities of emergency services agencies and the demand on hospital emergency departments.

The PACER project offers a model that builds on similar successful initiatives in other countries to implement improved responses to mental health crises. The PACER model centres on a dedicated joint police and mental health secondary response activated by police, targeted to times of greatest demand and offering on site and telephone mental health assistance.

PACER differs from usual service provision in that it is a mobile emergency mental health response acting as a secondary police response, informed by 'real time' police and mental health background information, assessing the person close to the time of crisis. From the consumer's perspective, PACER offers early intervention in their mental health crisis and avoidance of potentially inappropriate delays and restrictions to their liberty.

Project objectives

This project evaluated the effectiveness and efficiency of the PACER project in managing and resolving mental health crises in the community over a 16 month period. The project included a cost effectiveness component whereby the PACER model was compared to usual service provision in a comparator site. Stakeholder consultation on the impact and transferability of the PACER model was also conducted. Consumer and carer perspectives were accessed through existing reports and journal articles.

Key findings

There is clear direction in policy and legislation for improved pathways for persons experiencing mental health crisis to access appropriate and timely support in the community. The PACER project trials a new model of early intervention that builds on the evidence of what works in other countries and the particular skills and knowledge of police and mental health agencies to deliver a more cost effective response to the management and resolution of mental health crises. Importantly, the objectives of the model are consistent with the reported perspectives of consumers and carers who value timely access to mental health treatment and referral and avoidance of compulsory sectioning or hospitalisation where possible.

Key findings regarding the effectiveness and efficiency of the PACER project when compared to usual service provision in the comparator site are summarised below.

- PACER intervention provides more timely access to mental health assessment for the person in crisis than occurred in the comparator site, reducing the time to assessment from an average of approximately three hours to less than one hour.
- On average, the police first responder unit is released more quickly when PACER is involved than in the comparator site. Under PACER, the first responder unit is released in about one third of the time, enabling them to meet other demands for emergency response in the community.
- A critical feature of PACER operation is the more streamlined approach to emergency response through sharing of police and mental health databases and networks informing their advice to police, patient assessment and referrals, and updates to police and mental health case histories.
- Where transport is required, ambulance services are utilised more often than police for transport of a person experiencing a mental health crisis under PACER. This gives effect to the preferred method of transport of mental health patients and is consistent with the least restrictive approach to management of the crisis.
- With PACER intervention, there are fewer referrals to hospital emergency departments than in the comparator site. Available data shows a reduction in the proportion of mental health crises being transferred to emergency departments. This reflects the increased options and more tailored response available through the earlier intervention provided by PACER.
- On average, the length of stay in hospital emergency departments for mental health patients referred by PACER is reduced by approximately two hours compared to the length of stay in the comparator site.
- Based on the assumptions made about the data in the cost effectiveness analysis, the PACER model is less costly than usual service provision provided in the comparator site based on the calculated average cost per mental health crisis. — However, these findings need to be interpreted in the context of the data assumptions that make any firm conclusions about cost effectiveness difficult. The study assumptions should be read in conjunction with the expanded commentary about data limitations under section 3.1 and the detailed breakdown of PACER activity data in section 2.3.

Among the stakeholders consulted in this project, there is widespread support for improved inter-agency collaboration in responding and managing mental health crises in the community. The extent to which this can be achieved through better utilisation or enhancement of existing services, such as mental health triage, is beyond the scope of this report but warrants further consideration. Any broader implementation of the lessons from the PACER pilot must consider local community requirements, existing arrangements and resources.

Chapter 1

Introduction

1.1 Victorian Government policy context

Considerable attention has been given in policy, legislation and protocols, to the appropriate emergency services response to persons experiencing a mental health crisis in the community. This includes the individual responses of police, mental health and ambulance services as well as the opportunity for more integrated action by agencies to improve outcomes for persons in crisis.

Strategies

The *Victorian Mental Health Reform Strategy 2009-2019: Because mental health matters* (the strategy) (Department of Human Services (DHS) 2009), reflects the body of knowledge that encompasses support for good mental health and management of mental health problems. In positioning Victoria to sustain development and innovation across the continuum of mental health care, the strategy sets out a vision for the future. The vision includes, that Victorians experiencing mental health problems are able to ‘access timely, high quality care and support to live successfully in the community’.

The aspirations of the strategy include a society in which:

- all mental health services operate within a culture that upholds rights, equity and respect for consumers and carers, and are responsive to diversity in terms of rurality, ethnicity, indigeneity, gender and sexuality;
- people of all ages, including children, adolescents and older people, are better able to access early and effective advice, treatment and care for the mental health problems that affect them – without having to be in crisis; and
- those Victorians with severe mental health problems have access to a stepped range of care options that provide them with the least intrusive care, and include emergency response and acute medical care when required.

Early intervention to avoid escalation and minimise harm to the individual, their family, carers and the wider community is one of the core elements of the strategy. Guiding principles promote consumer-centred service provision and a social model of health that includes a greater focus on the impact of trauma, stigma and discrimination.

Expected outcomes of the strategy include ‘support for the development of strategic cross-agency responses to address local needs’. Strong partnerships are envisaged between police, courts and community based mental health services to increase the capacity to meet the mental health needs of individuals and their likelihood of being supported to remain in the community.

A key reform area of the strategy is to 'build a robust, integrated emergency service system to respond effectively to people in urgent need' as part of improving pathways to care. A focus for this goal includes better coordination of Crisis Assessment and Treatment Team (CATT) services, police and ambulance responses to people in need of emergency care with a view to a 'more decisive response to people in urgent need' and avoidance of police custody, generally considered to be inappropriate unless there are safety concerns. In particular, a strategic approach is proposed that would target coordinated mental health and police emergency responses to periods and locations of high need and to reduce demand on hospital emergency departments through new models of care for persons in crisis.

In recognition of the prevalence of mental health problems in the community and the need to tailor police services to better meet community needs in this area, Victoria Police sets out its future directions in the Strategic Directions Paper *Peace of Mind: Providing policing services to people with, or affected by, mental disorders* (the paper) (Victoria Police, 2007). The paper includes a focus on investigating alternative approaches to responding to people with a mental disorder so that police involvement is appropriate, targeted and well supported. It also supports minimum standards, protocols and information sharing guidelines with relevant agencies to foster timely and appropriate service delivery. Training is a further focus 'to reflect the range of mental disorders, effective operational responses and appropriate police roles and responsibilities'. Responding to people in the community with a mental disorder is seen as part of core policing.

The paper identifies the following policing objectives related to the outcome of 'reduced impact of mental disorders on individuals, families and the community where possible':

- refer to health/support services promptly;
- minimise unnecessary contact with police;
- minimise the use of force; and
- avoid using the justice system to access other services.

Responding to these objectives, a proposed direction in the paper is to trial collaborative service models that will increase police access to clinical expertise, especially for those in crisis. These trials would build on previous models such as the Crisis Support Units (1989-1994) a joint initiative of Victoria Police and the then Department of Human Services designed to provide on scene assessments, referrals and training.

Legislation

The secondary response role of police in supporting partner agencies is provided for in the *Mental Health Act 1986* (the Act). The Act aims to facilitate provision of treatment for people with a mental disorder and to protect the rights of such people. A specific objective of the Act is that:

In providing for the care and treatment of people with a mental disorder and the protection of members of the public any restrictions upon the liberty of patients and other people with a mental disorder and any interference with their rights, privacy, dignity and self-respect are kept to the minimum necessary in the circumstances.

The Act also provides for the Secretary of the Department of Health (DH) to facilitate education about mental disorders to non-health professionals, including the police, to enable them to make referrals. There is the intent to provide timely and quality treatment and care to people with a mental disorder and a preference for treatment in the community.

Section 10 (s10) of the Act gives powers to the police to apprehend a person deemed to be a risk to themselves or others and who appears to be mentally ill for the purposes of arranging for an examination by a medical practitioner or a mental health assessment.

Protocols

A number of protocols exist to clarify agency roles, responsibilities and procedures relating to mental health. *The Department of Health and Victoria Police: Protocol for Mental Health* (DH(a) 2010), outlines the following expectation for urgent referrals under the *Mental Health Act*:

Section 10 does not mandate the transport of a person to a specific location for assessment. Good practice is to assess the person onsite in the community and to avoid unnecessary transport. Police are responsible for the safety of all persons present. However police will not transport a person to a police station and lodge them in a cell or interview room to await assessment where there is no operational need to do so.

Where transport of a person with mental illness to a hospital emergency department or a psychiatric facility is required, the joint protocol specifies that Ambulance Victoria is responsible for providing emergency transport for persons with a mental illness. Police may need to be involved if the person with mental illness is in police custody or poses a risk of harm to themselves or others. Transport options for police are to accompany the person in another vehicle, escort the other vehicle or transport the person in the police vehicle.

The joint protocol envisages that Emergency Services Liaison Committees (ESLCs) should review all police transport of patients for the appropriateness of the decision.

The *Ambulance transport of people with a mental illness protocol 2010* (DH(b) 2010) reinforces the need for the least restrictive practices and the primacy of Ambulance Victoria responsibility for transport of people with a mental illness, especially for those in need of urgent treatment in a hospital.

In addition to statewide protocols, the 21 ESLCs are required to establish local protocols that have regard for 'particular communities, services and clientele' (DH(a) 2010).

1.2 Consumer perspectives

Spokesperson for Lantern, a support service for the disadvantaged and mentally ill:

'...When people are unwell they often fear police, but this program (PACER) has helped to build bridges. I would have liked to have seen the program rolled out across the state...'

Source: Mental health uproar. Moorabbin Leader, 28 June 2010

Consumer and carer experiences and perspectives on emergency responses to mental health crises in the community form a critical component of the context relevant to this evaluation. A targeted literature review was conducted to examine consumer and carer perspectives. Details of the literature review methodology are provided in section 1.4 below.

The sources considered in this summary represent a readily accessible selection of the literature reviewed. The findings are reported according to:

- policy support for consumer and carer engagement in service development and delivery;
- what consumers experience; and
- what consumers need.

Consumer engagement

The importance of including consumers and carers in the development and delivery of mental health services is well recognised across all tiers of government in Australia. Consumers and carers have direct experience and therefore a unique perspective on what works well. Improved consumer and carer participation and satisfaction are also linked to improved health outcomes (DHS 2005 and Ruggeri et al 2006).

Consequently governments at a state and national level are seeking to incorporate the views, rights and perspectives of consumers into their policy frameworks. The *Victorian Mental Health Reform Strategy 2009-2019* (DHS 2009) advocates for the need to promote:

an approach based on genuine consumer and carer participation in all parts of the service system – recognising the distinct needs of both groups. It also acknowledges that consumers and carers have a wealth of experience to contribute to the development of policy and the delivery of services.

Similar efforts to reform mental health systems underway at a state and national level are also explicit on the need to incorporate the views of consumers into policy design and implementation (Commonwealth of Australia 2009 and Mental Health Commission 2011).

What consumers experience

Police Youth Resource Officer (YRO) as part of a first responder unit:

Called to a young suicidal male in a public place. While the young male agreed to be transported voluntarily, PACER was able to arrange admission to Stepping Stones (a youth mental health unit) and facilitate the father's arrival to accompany his son and the police to the mental health facility. The police officer considered that if:

'..police attendance was the only option, the van would have no option but to use S.10 MHA to take him to hospital. This would further entail the van being off the road for some hours, as there was no guarantee of any "fast track" in hospital to Stepping Stones, or even an admission so late in the night, even though he was in no way drug or alcohol effected....The result of prompt attendance, admission and subsequent treatment I believe as a YRO was in the best interests of the child and his family and this will have a long term successful outcome...There is no ability for Police to "directly admit" to Stepping Stones without first being assessed....BOTH services looked and acted professionally, and the best interests of the client and the public were shown.....Most Police would not have the knowledge that a place like "Stepping Stones" even exists....The information I have is that (the client) is progressing well and will be referred to me as a YRO for school advice down the track...'

Source: Internal Victoria Police communication, April 2010

The Mental Health Council of Australia's 2005 *Not for service* report, used a range of quantitative and qualitative measures to determine the views and experiences of consumers and carers of mental health services across Australia.

Themes to emerge in Victoria from the consumer and carer experience (MHCA 2005, DHS 2008) include:

- a lack of respect for the views of consumers and carers;
- an inability to access services like CATT when needed;
- delays in assessment and treatment;
- inappropriate uses of restraint and transportation by police and emergency services personnel;
- a lack of support in rural and regional areas; and
- deficiencies in treatment and assessment within hospital emergency department environments.

An examination of a small number of consumers and carer views in a review of emergency mental health services in Perth corroborates the Victorian experiences. Consumers and carers who attended focus groups found the emergency department experience a negative one, and interactions with police and ambulance staff were not viewed as popular options (Smith et al 2010).

Considering the perspectives from a rights-based framework, consumer and carer advocates have deeply held views on how mental health and emergency services respond to people experiencing mental health crises in the community. These views include consumers having to experience inadequate access to appropriate services and a lack of service coordination leading to inevitable presentation to hospital based acute care (NMHCCF 2010).

More confined and rigorous examples measuring consumer participation against different models of mental health care for people experiencing mental health crises are examined in further detail below.

What consumers want

The concept of recovery is central to consumer and carer perspectives. Seeking availability and access to quality services that are humanistic, holistic and recovery orientated are prominent features in advocate submissions, papers and position statements (VMIAC *What Consumers Want* 2011, VMIAC *Submission to the Mental Health Act Review* 2011).

They are also recurring themes from focus groups, surveys and other qualitative sources summarised below.

- In a series of focus groups with consumers from Victoria examining enablers and barriers to recovery, Happell found that consumer participation in treatment decisions, principally through crisis treatment plans, timely assessment and respectful support from staff were all critical enablers to recovery (Happell 2008).
- An examination of the views of consumers and mental health staff on joint crisis plans highlighted the importance of shared decision making to enhance recovery (Henderson et al 2009).
- A study undertaken in New Zealand, found strong consumer support for alternatives to hospital admission, for consumers to play a role in decision making, and to receive support quickly from professional staff (Agar–Jacomb 2009).
- In the US a set of consumer recommendations were developed for improving emergency psychiatric care. This included improving the initial in–community contact with crisis staff, police and other emergency personnel and a range of alternatives to hospital admission including through better triage and mobile crisis intervention teams. Additionally the importance of a more humanistic initial contact by police and other emergency personnel, where the potential for restraint or violence is mitigated, is deemed central to recovery (Allen et al 2003).
- In relation to avoidance of unnecessary hospitalisations, findings from a study in Italy and the United Kingdom showed significantly higher satisfaction scores for the system providing a range of alternatives compared to the one that relied on admission to a hospital. Importantly there was also more compulsory sectioning under the relevant Mental Health Act in the catchment that relied solely on hospital–based services for emergency psychiatric care. The study examines the importance of consumer satisfaction in preventing consumers from disengaging from their treatment and support networks. Disengaged consumers are potentially at greater risk of re–presenting to emergency services through compulsory admission or sectioning under legislation (Ruggeri et al 2006).

- In an evaluation of a Mobile Crisis Program in the US state of Georgia, satisfaction levels of both consumers and police officers were explored. The Georgia mobile crisis model is centred around a team of police and psychiatric nurses who either provide secondary consultation or relieve first responders on site. Surveyed consumers and police officers gave positive ratings to the program. Just as significant though was the decrease in hospitalisation rates for people experiencing a psychiatric emergency and the impact of the program on regular police practices (Scott 2000).
- In Canada an evaluation of an integrated police and mental health response to people experiencing a psychiatric emergency response, found that despite increased use by consumers there was improved response times, consumers showed greater subsequent engagement with treatment, and improved partnerships between police and the mental health system can improve collaboration and efficiency between the agencies and lead to better treatment of people with a mental illness. Qualitative feedback from consumers resonated around availability, accessibility, and satisfaction with the service. Particularly prominent themes included having someone to talk to, obtaining advice and support, and facilitating referral to appropriate services (Kisely et 2010).

Summary of findings

Literature on what consumers want to experience when suffering from severe mental illness, stress the importance of:

- participation in decision making;
- timely access to treatment and referral; and
- the preference of alternatives to compulsory sectioning or hospitalisation.

The selection of articles evaluating joint police and mental health programs highlight not just the high levels of consumer satisfaction but the broader outcomes of lower rates of compulsory hospitalisation and better collaboration between agencies.

There is a high concurrence between what consumers cite as being important to them and their recovery from a mental health crisis, and the objectives of integrated police and mental health programs. These also align with the aspirations of identified reform areas in the Victorian mental health reform agenda, particularly relating to Pathways to care — streamlining service access and emergency responses (DHS 2009).

1.3 Police, Ambulance and Clinical Early Response (PACER)

PACER project

The PACER project was initiated in 2007 as a joint venture of the then Department of Human Services and the Victoria Police. The project responded to the increased prevalence of mental health crises experienced in community policing, the need to respond appropriately to the needs of people with mental health problems and the increase in demand for hospital emergency department mental health assessment services. The initiative was designed to test a new model of care for responding to people in the community experiencing a mental health crisis.

The PACER unit comprises a mental health clinician and a police member, currently operating an eight hour shift daily based at Moorabbin police station. The PACER unit is a secondary unit that can be requested by an operational police unit (primary responder unit) attending an incident in the community. PACER can also be requested by ambulance services through Police Communications.

PACER assistance can be requested for any incident requiring one or more of the following (Memorandum of Understanding 2007):

- onsite clinical assessment of a person's mental health;
- onsite or telephone advice on mental health referral options;
- advice on appropriate transport options;
- advice on de-escalation tactics and options; and
- design of intervention strategies for high users of emergency services.

A detailed explanation of how PACER operates is provided in Chapter 2. The assumptions and anticipated benefits of PACER are described in Box 1.1 below.

Box 1.1

PACER PROJECT ASSUMPTIONS AND BENEFITS

The PACER project *assumptions*

- A dual police and mental health secondary response unit is an effective model of care.
- Early intervention and assessment will:
 - reduce requirement for section 10 transportation to emergency departments;
 - reduce the risk of behavioural escalation;
 - provide more rapid access to mental health information; and
 - provide a wider set of possible referral options.
- PACER will enhance:
 - communications within local mental health, health and police services; and
 - mutual understanding of police, mental health and ambulance services.

Anticipated *benefits* of PACER

- A more streamlined and coordinated response to calls.
- An integrated multi-disciplinary response with a shared understanding of mental health issues and options.
- Improved patient outcomes.
- Targeted use of police, ambulance, CATT and hospital emergency department resources.
- Better information on mental health service demands and outcomes.
- Streamlined inter-agency communication including timely access and accurate assessment of risks.
- Planned responses to high users of emergency services.

Source: Memorandum of Understanding. Trial of PACER: A Police, Ambulance and Crisis Assessment Team Early Response. Southern Health, Victoria Police, Metropolitan Ambulance Service, 2007. Internal document.

The PACER project has extended beyond its initial trial period and continues to operate within its trial location, which is aligned to the Local Government Area boundaries of Glen Eira, Kingston and Bayside. This area falls within the police response zones of Southern Metropolitan Region Division 2 (formerly Region 1, Division 4) and the corresponding catchments within Southern Health (Monash Medical Centre) and for Ambulance Victoria.

An early evaluation of the PACER project, that supported extension of the trial, concluded (Victoria Police, 2008):

Overall, PACER provided a flexible, consumer-oriented service that made it easier to accurately identify those experiencing mental health and other issues and move them more quickly from police custody or ambulance care to the appropriate type and level of care in the community.

An audit conducted by the Victorian Auditor-General's Office in 2009 assessed the coordination, preparedness and effectiveness of emergency services responses to mental health crises. The audit report commended the collaborative and innovative model of PACER, noted all of the aims had been met in the first three months of operation and that there was a high level of support from police and mental health clinicians involved. The audit report included the following recommendations (VAGO 2009):

All agencies continue collaborative innovation by:

- continuing the PACER trial and acting on its evaluation;
- focusing on opportunities to address issues particular to regional/rural areas.

The audit report also recommended a wide range of actions for agencies separately and collaboratively to better meet the standards set out in the *Mental Health Act* and agency protocols. These recommendations focus on performance measurement, capability to respond to emergency crises, ensuring the response is appropriate for the consumer and making best use of mechanisms to support interagency coordination.

The operation of PACER potentially provides:

- the police first responder unit with a dedicated service able to inform management of the specific crisis including de-escalation, assessment, transport and referral options;
- the consumer with a more immediate mental health response to their service needs, the least restrictive approach and the likelihood of better outcomes; and
- emergency services agencies with improved utilisation of client information and better use of agency resources.

PACER models in other Australian jurisdictions

The PACER model is based on a similar dual secondary response, the System-wide Mental Assistance Response Teams (SMART) implemented by the Los Angeles Police Department and the LA County Department of Mental Health. Two other PACER type models operating in Queensland (the Mental Health Intervention Program) and New South Wales (the Mental Health Intervention Team) are based on the Memphis Police Department's Crisis Intervention Team.

A recent review of emergency mental health services in North Metropolitan Perth (Smith et al 2010) recommends that pending the outcomes of the evaluation of PACER, a similar program be implemented in Western Australia.

1.4 Evaluation of PACER

Objectives of the evaluation

The objectives of the PACER project evaluation are outlined below.

- Assess the effectiveness and efficiency of PACER in managing and resolving mental health crises in the community compared with mental health, police, health and ambulance usual service provision.
- Complete a cost effectiveness analysis of the use of mental health, police and ambulance resources through the PACER model compared with usual service provision.
- Identify enablers and challenges to the implementation of the PACER model.

The evaluation includes consideration of the following issues:

- differences in CATT service referrals, hospital emergency department presentations, client outcomes and any impacts on the broader service system;
- local factors which may impact on the cost effectiveness of the model should it be expanded to other regions; and
- issues that may affect transferability of the model to other Area Mental Health Services and police regions.

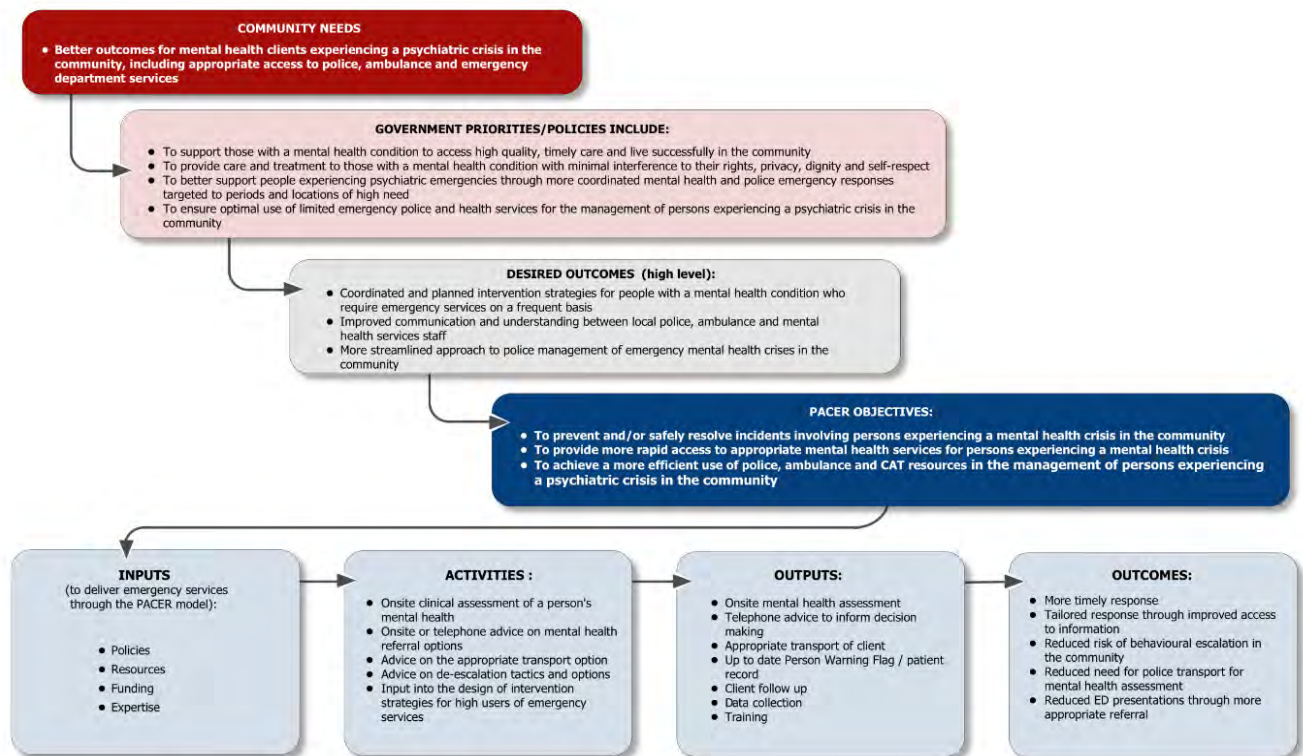
Approach to the evaluation

Evaluation framework

The development of the evaluation framework for the PACER project involved an initial round of desk research and discussions with key stakeholders in the Department of Health, Victoria Police and Southern Health. A wider group of stakeholders was also drawn on through the PACER Evaluation Project Reference Group, which included representation from Ambulance Victoria, Area Mental Health Services and consumer/carer organisations.

A program logic map was produced as part of the evaluation framework development process and is summarised in Figure 1.1.

Figure 1.1
EVALUATION OF THE PACER PROJECT: PROGRAM LOGIC MAP



Source: The Allen Consulting Group

The program logic map provides the broader context for the PACER project, which responds to government policies and priorities that focus on meeting the needs of people experiencing mental health crisis in the community in the most appropriate way. Consistent with policy, the PACER model recognises the different roles and responsibilities of emergency services agencies, the importance of a coordinated and integrated response to deliver the best outcomes and the value of improved inter-agency communication and understanding.

The program logic map identifies the desired outcomes (high level), PACER outputs and outcomes that have been used in determining the effectiveness of the intervention. Similarly, articulation of the inputs and outputs guide assessment of the efficiency of PACER.

The evaluation framework for the PACER project poses a series of evaluation questions to enable assessment of the success of PACER in achieving the outcomes summarised in Figure 1.1. These questions are listed in Box 1.2.

Box 1.2

PACER EVALUATION FRAMEWORK: KEY EVALUATION QUESTIONS

- What impact has PACER had on facilitating a coordinated response that provides more timely access to mental health patient care?
- Does PACER provide a more streamlined and quality approach to mental health crises in the community through improved access to mental health advice and agency client histories?
- Are there fewer adverse events in the community arising from management of emergency mental health crises?
- Is there a reduced demand on agency resources in responding to emergency mental health crises?
- Is there a reduction in referrals of people experiencing mental health crises to emergency departments and an increase in referrals to other non-emergency services or direct admission to psychiatric inpatient facilities?

Source: The Allen Consulting Group

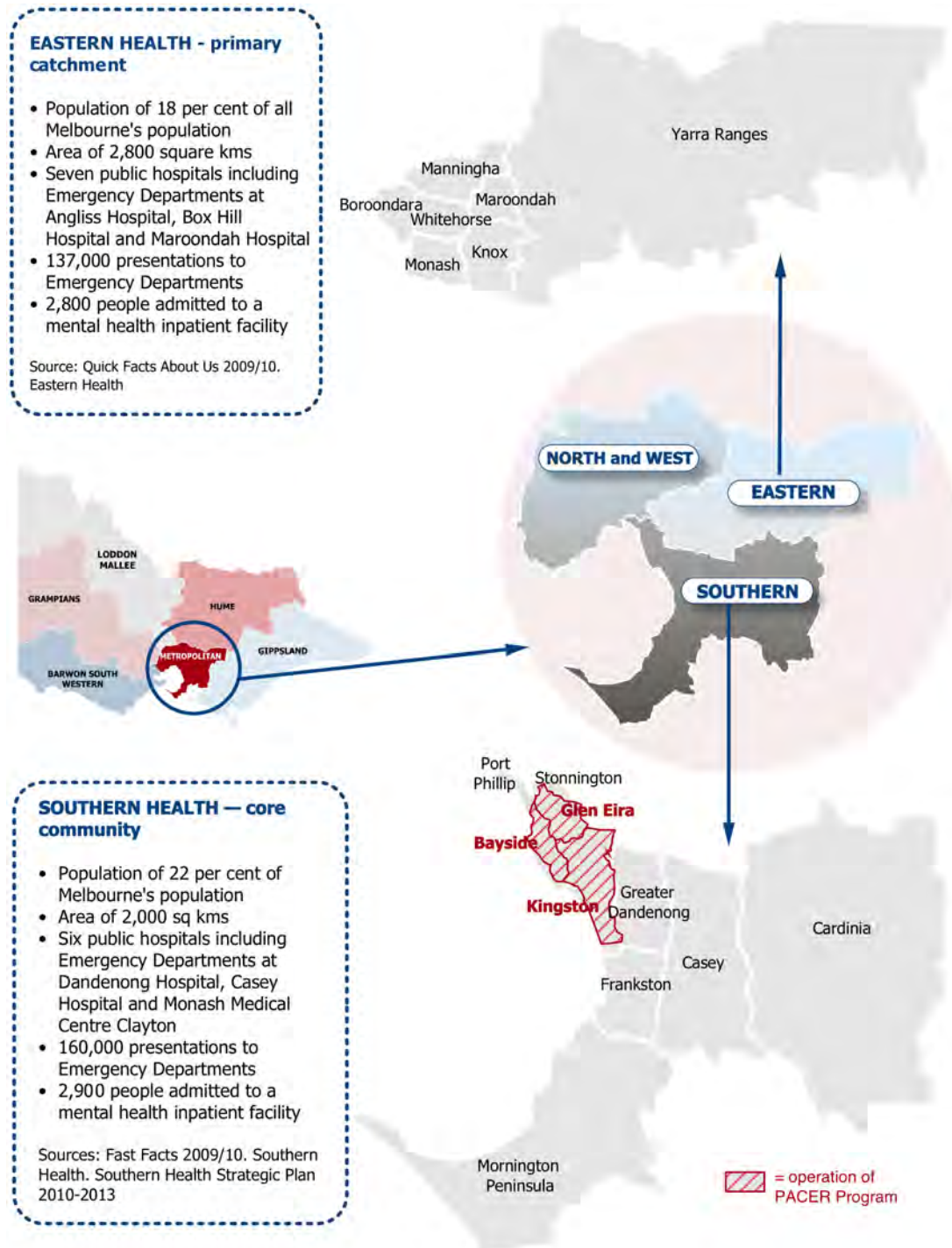
The methodology for evaluating the PACER project, based on the evaluation framework, included a mix of qualitative and quantitative approaches applied to a comparative analysis of the PACER project to usual service provision in a comparator site.

As described above, the PACER project operates within the boundaries of Southern Health and the corresponding police region, Southern Metropolitan Region (SD2). For the purposes of this evaluation, Eastern Health has been used as the comparator area/site together with the corresponding police region, Eastern Region (ED2). The Southern Health and Eastern Health metropolitan regions are shown in Figure 1.2 with the area of PACER operation mapped within Southern Health.

It is noted that the mental health services associated with Eastern and Southern Health are a good fit but not a complete match to regional and local government boundaries.¹

Figure 1.2

GEOGRAPHICAL COVERAGE OF SOUTHERN HEALTH, EASTERN HEALTH AND PACER PROJECT



Source: The Allen Consulting Group based on Department of Health Victoria data

¹ Southern Health has two Area Mental Health Services (AHMSs): Dandenong (Casey, Cardinia, Greater Dandenong LGAs and Frankston East SLA) and Middle South (Bayside LGA, Kingston North, Glenn Eira South and Monash South West SLAs). Eastern Health also has two AMHSs: Outer East (Marroondah, Knox, Yarra Ranges LGAs and Whitehorse-Nunawading East SLA) and Central East (Manningham LGA, Monash-Waverly-East, Monash-Waverly-West, Whitehorse-Box Hill and Whitehorse-Nunawading SLAs).

Ambulance Victoria services have been aligned to postcodes corresponding to Southern Health and Eastern Health and hospital emergency departments are those with catchments falling within Southern Health and Eastern Health.

The areas used to source data for PACER operations and for the comparator site are summarised in Table 1.1.

Table 1.1

AGENCY CATCHMENTS ALIGNED TO PACER AREA OF OPERATION AND COMPARATOR AREA

	Health/Mental Health	Victoria Police	Ambulance Victoria
PACER	Southern Health hospital emergency departments	PACER area of operation - catchment area for Southern Metropolitan Region, Division 2 (SD2)	LGA postcodes corresponding to Southern Health
Comparator (usual service)	Eastern Health hospital emergency departments	Eastern Region, Division 2 (ED2)	LGA postcodes corresponding to Eastern Health

Source: Based on advice provided by Department of Health, Southern Health, Victoria Police

Data analysis

The evaluation included a review of related policy and program documentation including protocols and legislation. This information provided the background and context for the project and a reference point for consistency with wider agency structures and directions.

Data was sourced from a number of different service utilisation datasets providing a patchwork of information about activity, outputs and outcomes related to emergency services associated with the process of responding to and resolving mental health crises in the community. The difficulties in matching points of alignment across datasets affected the robustness of the cost effectiveness analysis, which is discussed in more detail later in this report and highlighted in the Conclusion.

The data analysis in this report included data from the sources in Table 1.2.

Table 1.2

PROGRAM DATA SETS

Data set	Detail
PACER Activity Sheets	Accessed from Victoria Police for the period 1 December 2009 to 31 March 2011
Mental Disorder Transfer (VP Form L42)	Accessed from Victoria Police for police region (SD2) aligned to PACER area of operation and for the police region (ED2) aligned to the comparator area of Eastern Health. Data obtained for the period 1 December 2009 to 31 March 2011
Use of Force (VP Form 237)	Accessed from Victoria Police for SD2 and ED2 showing frequency of submission of form. Data obtained for the period 1 December 2009 to 31 March 2011
Victorian Emergency Minimum Dataset (VEMD)	Accessed from Department of Health for Southern Health and Eastern Health hospital emergency departments for mental health patients transported by police and ambulance services in the period 1 December 2009 to 31 March 2011
Victorian Ambulance Clinical Information System (VACIS)	Accessed from Ambulance Victoria for transport of mental health patients in Southern Health and Eastern Health in the period 1 December 2009 to 31 March 2011

Consultations

The evaluation included small group discussions, focus groups, telephone interviews and a series of meetings with key stakeholders about agency policy, practice and directions.

Consultations were conducted with the following stakeholders.

- Victoria Police:
 - police members of the PACER unit;
 - police members in first responder units (divisional vans);
 - senior members of the police; and
 - Manager, Victoria Police Mental Health Strategy project.
- Area Mental Health Services:
 - Managers of CATT services including enhanced CATT (ECATT) operating in hospital emergency departments;
 - Southern Health mental health clinicians; and
 - Southern Health mental health clinician members of the PACER unit.

- Ambulance Victoria:
 - Ambulance paramedics; and
 - senior managers with responsibility for a variety of roles.

Discussion guides were developed for use in consultations with agency representatives, with comments on specific topics sought from some stakeholders.

- Senior members of Victoria Police and Area Mental Health Services were asked specifically about transferability of a PACER model to other regions.
- First responder police and ambulance paramedics were asked to comment on current challenges in dealing with mental health crises and any perceived benefits of PACER on the development of skills and wider collaborative efforts.
- PACER unit members were consulted on the strengths and weaknesses of the model in resolving mental health crises, the impact of PACER on police skills and whether PACER had stimulated other collaborative efforts between agencies.

A list of stakeholders consulted is provided at Appendix A. The membership of the Project Management Team and the PACER Evaluation Project Reference Group are also included.

Literature review

A targeted literature review was conducted to obtain consumer and carer experiences and perspectives on emergency responses to mental health crises in the community.

Searches were conducted on PsychInfo, MEDLINE and Informit databases for English language articles that appeared between 1995 and 2011. A search for grey literature from think tanks, non-government agencies, academic institutes and government agencies was also undertaken. Search terms included crisis intervention, police and emergency services, client and consumer participation and satisfaction, cooperation, collaboration and integrated services.

Efforts were also made to source grey literature from the consumer advocacy representative peak body, the Victorian Mental Illness Awareness Council (VMIAC) and a carer consultant.

These searches resulted in ninety sources. This list was further refined by searching for connections between consumer and carer experiences with emergency personnel and hospital emergency departments, as well as evaluations of integrated models of crisis response. A total of 20 references were considered relevant to this review. Of these, 14 were accessible in the timeframe available.

1.5 Structure of this report

The following chapters provide:

- description of emergency services responses to mental health crises comparing the PACER model to that of usual service provision;
- comparative analysis of the effectiveness of PACER in achieving the objectives for the project drawing on quantitative and qualitative information;
- comparative analysis of the efficiency of PACER including a cost effectiveness analysis;
- stakeholder perspectives on the transferability of a PACER model; and
- concluding remarks on the way in which PACER has influenced agency performance and consumer outcomes.

Chapter 2

Description of emergency responses to mental health crises in the community

2.1 Background

The *Mental Health Act 1986*, defines mental illness as ‘a medical condition that is characterised by a significant disturbance of thought, mood, perception or memory’. Some of the impacts of mental illness in Victoria are highlighted in Box 2.1 below indicating the prevalence and complexity of such illness.

Box 2.1

IMPACT OF MENTAL HEALTH

Examples of the impact of mental health on the Victorian population and services include the following.

- An estimated 19 per cent of the Victorian population is affected by a mental health problem in any 12 month period – equivalent to around 1 million Victorians in 2008.
- Around three per cent of the Victorian population is estimated to have severe mental illness in any one year. Less than half of this group access public mental health services.
- At least 30 per cent of public mental health consumers also experience harmful drug and alcohol use.
- Over ten per cent of people with a severe mental illness commit suicide within ten years of diagnosis.
- Almost half of those brought into police custody have some history of mental illness and 17 per cent are current clients of public mental health services.
- Ninety per cent of 3,500 police surveyed in 2009, reported weekly contact with someone who is mentally ill.
- An estimated 500 arrests are made each month of persons suspected by police of having a mental illness.
- More than one in ten (10.9%) persons surveyed in 2008 reported seeking professional help for a mental health problem in the last 12 months.
- There was no difference between metropolitan and rural areas of Victoria in the proportion of persons seeking professional help.

Sources: Victorian Mental Health Reform Strategy 2009-2019 (DHS, 2009). Victorian Population Health Survey 2008 (DH, 2010). Survey, Victoria Police & Centre for Forensic Behavioural Sciences, 2009 cited in *Responding to Mental Health Crises in the Community* (Victorian Auditor-General, 2009). ABC News report of 8 August 2011 and communication with Victoria Police.

In Victoria, people with mental illness are treated and receive support through a wide range of services that include public and private providers. The specialist public mental health infrastructure in Victoria includes telephone based mental health triage services — available to all emergency services to respond to requests for secondary consultations, bed based and community facilities centred around a network of Area Mental Health Services (AMHS). These services differentiate between the mental health needs of children, adolescents and adults. The AMHS are governed by public health services and operate within a defined geographical area. Each AMHS operates differently reflecting the contrasting needs, health facilities and geographies of the communities they serve.

CATT services are located in AMHS providing a community based outreach service. CATT services are provided by a dedicated team in the 13 metropolitan AMHS and usually through integrated mental health service teams in the eight rural services. CATT services are not intended to be an immediate emergency response to all mental health crises. An enhanced CATT (ECATT) provides a hospital emergency department based psychiatric assessment and treatment service.

Emergency services liaison committees (ESLC) have been established for each AMHS and are supported by an Interdepartmental Liaison Committee. The ESLC include representatives from mental health services, ambulance, police, consumers and carers. The committees facilitate interagency cooperation, address operational service issues, agree on joint case plans for shared clients and promote workforce development. (DHS 2007, DH(a) 2010)

2.2 Responding to mental health crises in the community

First responder police:

Following a call to an address of a female who had sent a text message to her psychologist that she intended to take an overdose of prescription medicine, and advice that the female had access to morphine, the female could not be located and PACER assistance was sought to provide a background check and medical advice. The information provided by PACER led to police actively seeking to locate the female, which was achieved through triangulation of her mobile telephone. The female was hospitalised for an overdose of medications and later transferred to an in-patient psychiatric facility for on going treatment. The attending police had acted with urgency based on the PACER risk assessment and believed that this incident:

‘...shows the value of the PACER unit even without direct contact with the patient...’.

Source: Internal Victoria Police communication, July 2010

PACER was established specifically to improve the way in which emergency services responded to psychiatric crises in the community. A psychiatric crisis is described (DHS 2009) as:

the situation where a person with a mental illness or severe mental disorder experiences thoughts, feelings or behaviours which cause severe distress to themselves or those around them, requiring immediate psychiatric treatment to assess and manage risk and alleviate distress. This may be the person’s first experience of mental illness, a repeat episode or the worsening of symptoms of an often continuing mental illness.

In many instances emergency services are called to attend a behavioural event in the community that may involve a person with a mental illness or condition experiencing a crisis. It is difficult for the emergency service — usually police — responding to an emergency call to ascertain accurately whether the event is linked to a mental illness or condition prior to the conduct of an assessment by a mental health clinician. While police are given training in screening for mental health issues, this training is not — nor is intended to be — a full mental health assessment that enables clear identification of a mental health illness or condition. Consequently, it is expected that PACER will attend behavioural crises in the community that are not psychiatric or mental health crises. For simplicity of expression and congruence with the objects of PACER, this evaluation refers to behavioural crises in the community that are deemed by the first responder emergency services as having a mental health aspect as mental health crises.

Box 2.2

CRITERIA FOR REQUESTING PACER ASSISTANCE

PACER assistance may be requested where the following is indicated.

- Onsite clinical assessment of a person's mental health
- Onsite or telephone advice on mental health referral options
- Advice on appropriate transport options
- Advice on de-escalation tactics and options
- Design of intervention strategies for high users of emergency services.

Source: Memorandum of Understanding 2007

As noted previously and highlighted in Box 2.2 above, the criteria for requesting PACER assistance offers an early response to situations determined by first responder police (and ambulance) units to require mental health advice ranging from assessment of a person's mental health to strategies to target high users of emergency services.

The incident types to which PACER might respond are summarised in Box 2.3 below. These include section 10 apprehensions, welfare concerns and family violence. Welfare concerns present in a wide range of behaviours from threats to suicide to frightening or erratic behaviour in public places or at home. PACER responses to welfare concerns have included on site assessment, referral advice, de-escalation tactics and in some instances, elimination of the need for mental health support.

Box 2.3

PACER INCIDENT TYPE

The type of incidents for which PACER assistance might be sought are categorised as follows.

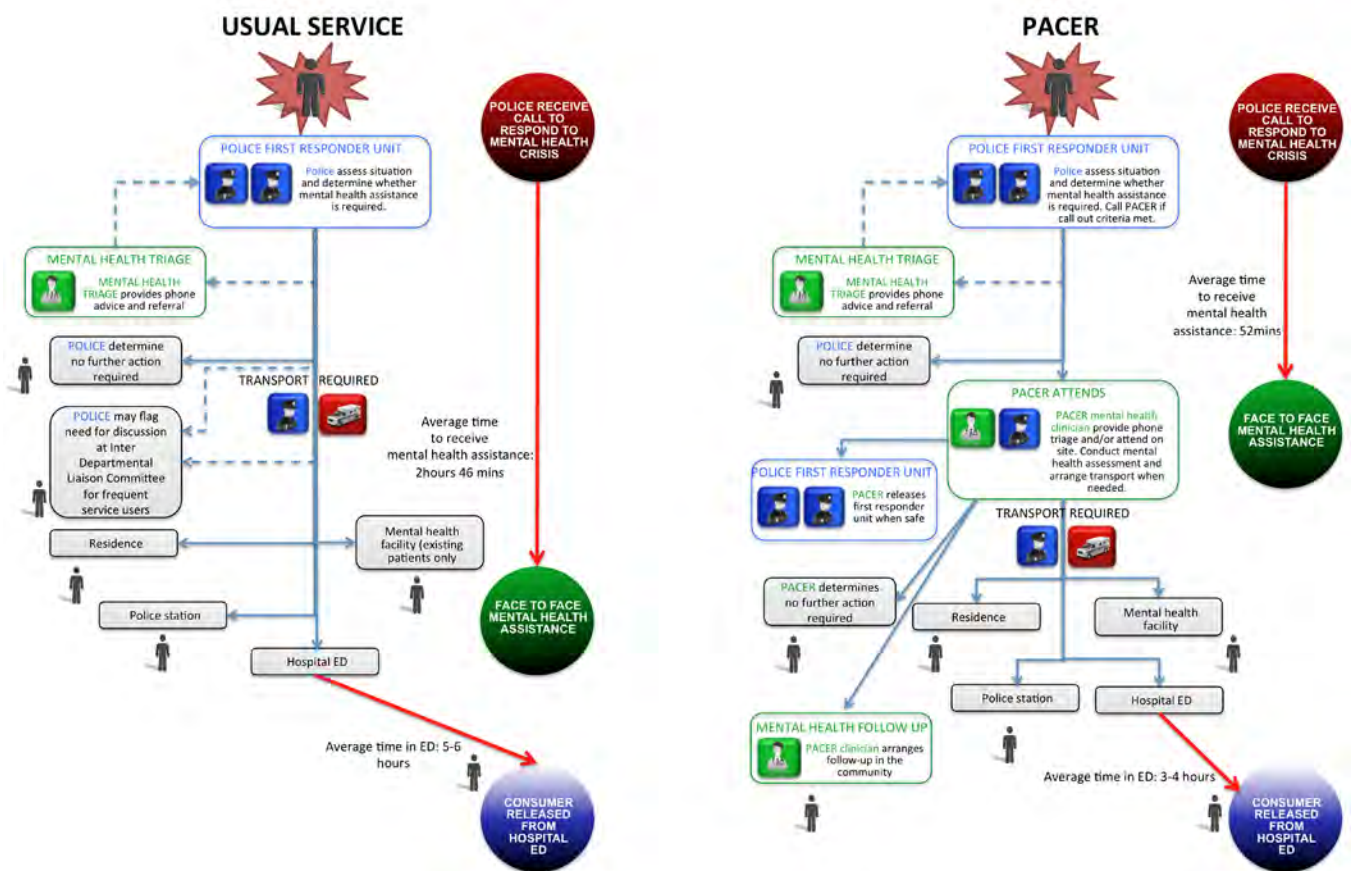
- Suicide / self harm (s10)
- Threaten / harm others (s10)
- Welfare concerns
- Family violence
- Assist CATT
- Assist ambulance
- Other / education

Source: PACER Activity Sheet form

Further detail about PACER activity is provided in section 2.3 below.

The consumer's pathway from a mental health crisis in the community to assessment and treatment is summarised in the diagram in Figure 2.1. This figure shows the experience in the usual service environment compared to an environment in which PACER operates. The average time to mental health assistance and time in hospital emergency department draws from this evaluation.

Figure 2.1
CONSUMER EXPERIENCE



Source: The Allen Consulting Group

The first elements of the pathway are common under both models. A key resource available to emergency services is the mental health telephone triage service, which includes referral and determining an appropriate response. The response may include face to face assessment with police in the community.

- *Seeking assistance for a person experiencing a mental health crisis* – this is most often through police or ambulance communications (000) but may include calls through the screening and referral services of the mental health triage.
- *The first responder unit* – following from above the first responders to the call for assistance are most usually police or ambulance, but may be a CATT. The first responder unit could seek assistance from either of the other two services.

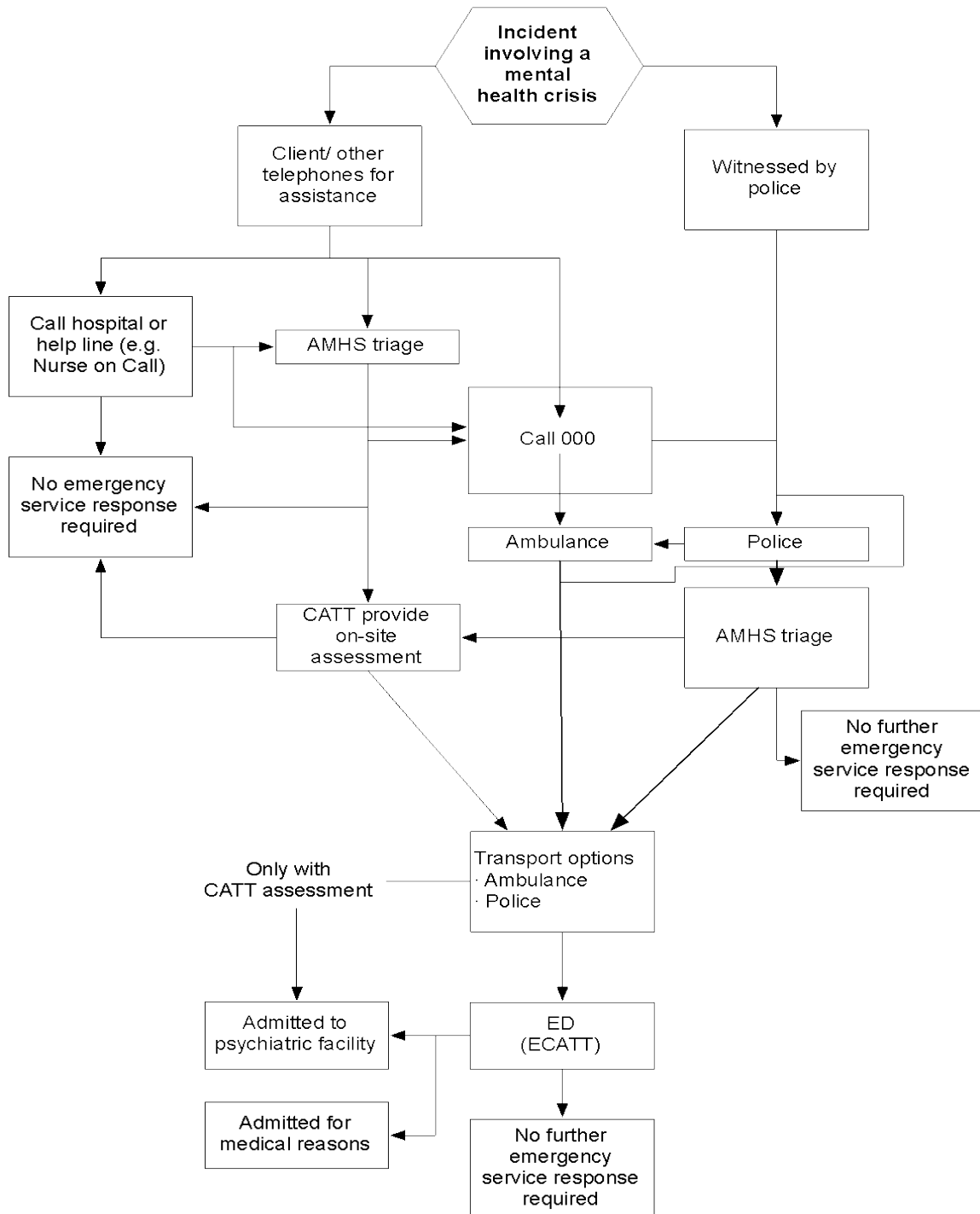
A more detailed description of the remainder of the process under the two operating systems is provided in the following sections.

Usual service provision

The flow diagram in Figure 2.2 shows the key components, processes and agencies involved in responding to a mental health crisis in the community under usual service provision.

Figure 2.2

USUAL SERVICE PROVISION: FLOW DIAGRAM OF EMERGENCY RESPONSE TO MENTAL HEALTH CRISIS IN THE COMMUNITY



Source: The Allen Consulting Group

The key stages mapped in Figure 2.2 following attendance by the first responder unit are described below.

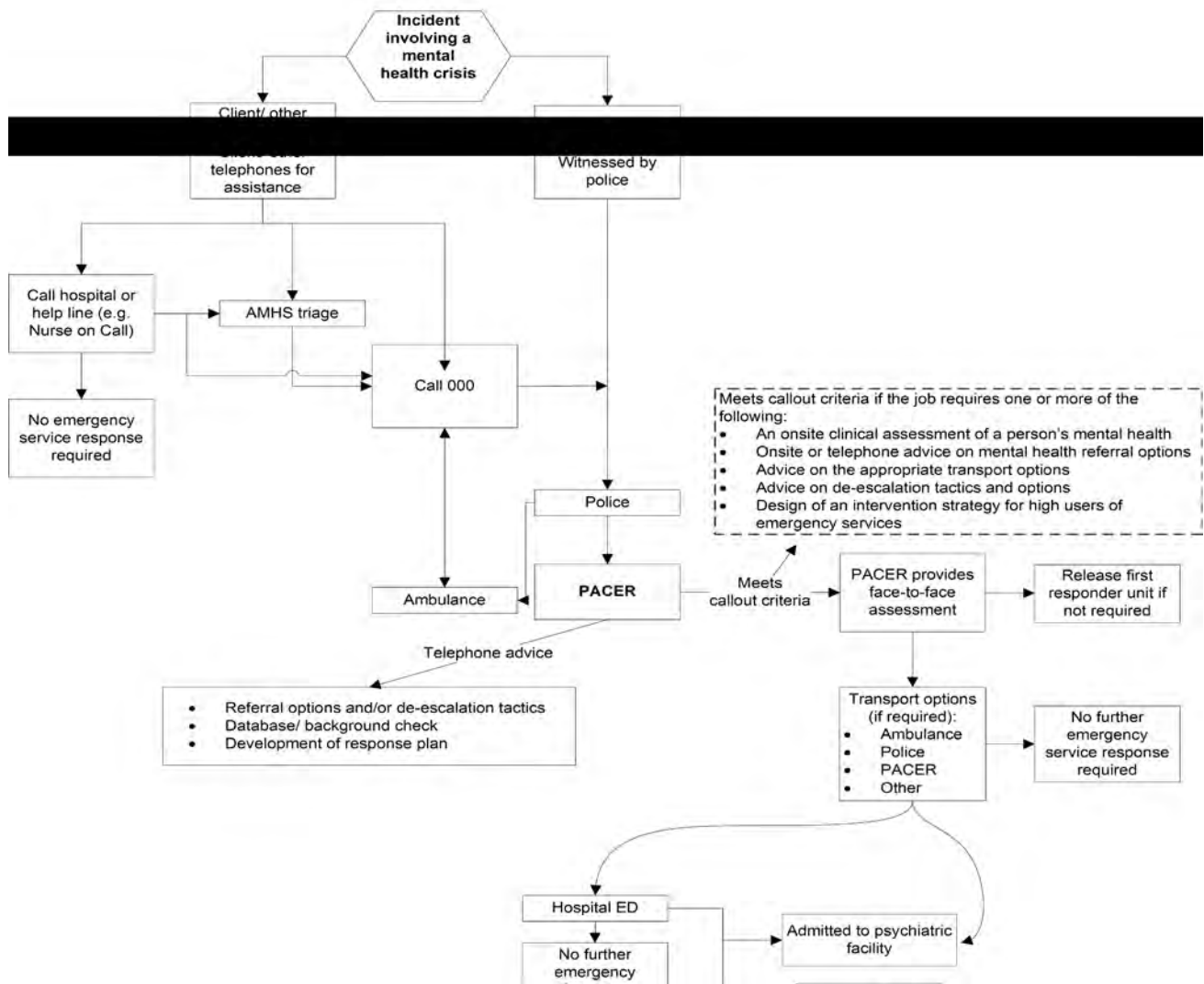
- *Mental health assessment of the person in crisis and options available* - first responder police can seek mental health triage and/or ambulance assistance, and/or leave the scene if no further action is required. Section 10 powers under the *Mental Health Act* provide for apprehension of the person based on their behaviour and the crisis nature of the situation. Should these powers be used, police are not able to leave the scene and arrange for later community follow up. Where s10 is used, if onsite assistance is not sought or not available in a timely way, police will transport the person, usually to a hospital emergency department, for assessment. If ambulance is the first responder unit and the consumer requires transport, a limited range of options is available to the ambulance paramedics. Transport is usually to the emergency department of a hospital, with referral options able to be worked through in consultation with mental health services. If mental health triage determines that a face to face CATT assessment is the most appropriate response, an onsite mental health assessment may be undertaken and a range of options are available to them for management of the person in crisis.
- *Transport and release of first responder unit* – ambulance have the primary responsibility for transporting persons experiencing mental health crises unless there are security concerns, in which case police will provide transport. In the absence of an onsite mental health assessment, the person will be transported for assessment at a hospital emergency department. The police first responder unit will be released when the assessment service is available.
- *Destination* – persons experiencing mental health crises in the community will be transported to a hospital emergency department for assessment unless they have received an on site mental health assessment following contact with triage, or are returned as an existing patient of a psychiatric facility.

PACER

Figure 2.3 illustrates the PACER intervention where a mental health clinician attends the scene where the person is experiencing the crisis and conducts a mental health assessment where necessary. The range of options available to the PACER unit is greater than that available to a first responder unit under usual service provision.

Figure 2.3

PACER: FLOW DIAGRAM OF EMERGENCY RESPONSE TO MENTAL HEALTH CRISIS IN THE COMMUNITY



Source: The Allen Consulting Group

Key elements of the response under the PACER model are:

- Mental health assessment of the person in crisis* — PACER team members are able to access information from both the police database (LEAP) and mental health services (CMI), and use this data to inform their approach to the situation and any assessment conducted. As a mental health clinician forms part of the PACER unit, a mental health assessment can be performed on site. The timely response increases the likelihood that the mental health clinician will witness the disturbing behaviour that precipitated the emergency call. The police first responder unit is released when the PACER clinician deems it is safe for them to leave.

- *Transport* — ambulance have the primary responsibility for transporting the person experiencing mental health crises unless there are security concerns, in which case police will provide transport. An onsite mental health assessment has already occurred, removing the need to transport persons who do not require further assistance.
- *Destination* — options available to the PACER unit include arranging transportation to a hospital emergency department usually for a co-morbid medical issue, transportation to a psychiatric facility for new or existing patients, contacting a treating clinician for existing patients, and arranging for follow up in the community. The PACER mental health clinician is able to access their network of contacts to determine the most appropriate facility able to accommodate the person experiencing a mental health crisis.

2.3 PACER activity

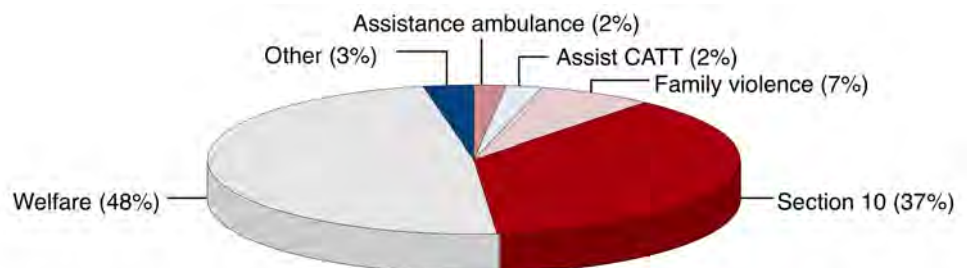
PACER activity for the purposes of this evaluation covers the 16 month period from 1 December 2009 to 31 March 2011. During that period, PACER activity included:

- response to 783 requests for assistance;
- a maximum of nine cases in any one shift with an average of two cases per shift;
- average duration of PACER attendance of one hour and 19 minutes;
- provision of on site advice and/or assessment in 78 per cent of cases;
- section 10 invoked for 37 per cent of cases;
- attendance at incidents located at the person’s residence (70 per cent), in a public area (16 per cent) and at a police station (13 per cent);
- transportation was not required for 64 per cent of cases; and
- the primary response unit was cleared by PACER in 53 per cent of cases.

The reasons for PACER attendance (see Box 2.3 above) are shown in Figure 2.4 below.

Figure 2.4

ATTENDANCE BY PACER (N=783 CASES)



Source: PACER Activity Sheets, Victoria Police

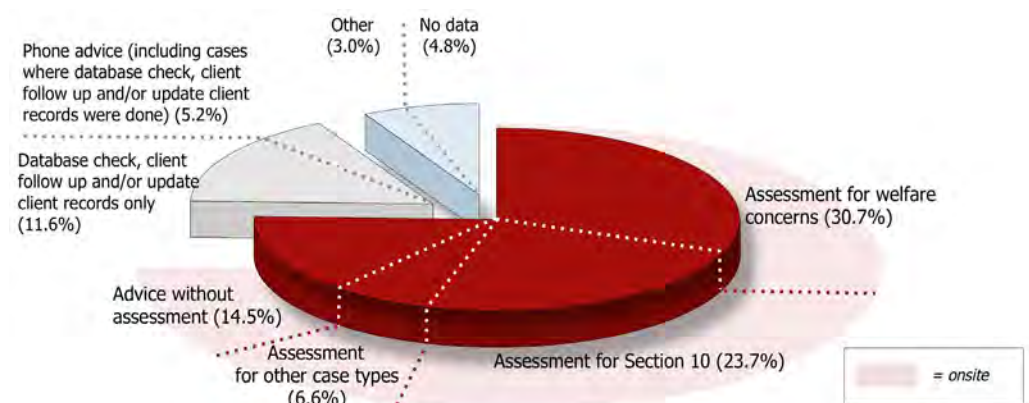
The majority of cases attended were in response to concerns for an individual’s welfare (48 per cent) and section 10 apprehensions (37 per cent).

Incidents not resulting in transportation

In the 502 (64 per cent) cases that did not require transportation following PACER response, the majority (75.5 per cent) involved the provision of on site assessment and/or advice. As indicated in Figure 2.5 below, just over one half of the cases not requiring transportation involved on site assessment for welfare concerns (30.7 per cent) and section 10 apprehensions (23.7 per cent).

Figure 2.5

PACER CASES THAT DID NOT REQUIRE TRANSPORTATION: PACER ACTIVITIES UNDERTAKEN (N=502)

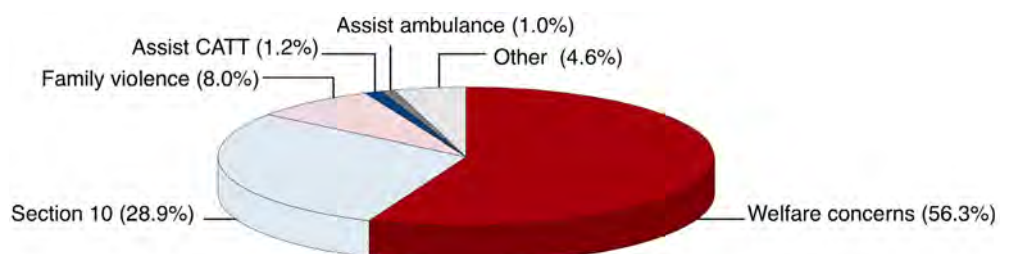


Source: PACER Activity Sheet data, Victoria Police

The description provided of the incident type for the 502 cases that PACER responded to and that did not require transportation, is shown in Figure 2.6 below. As indicated, just over half (56.3 per cent) of the incidents were described as welfare concerns with a further approximately one quarter (28.9 per cent) of incidents categorised as section 10 under the *Mental Health Act*.

Figure 2.6

INCIDENTS ATTENDED BY PACER THAT DID NOT REQUIRE TRANSPORTATION (N=502)

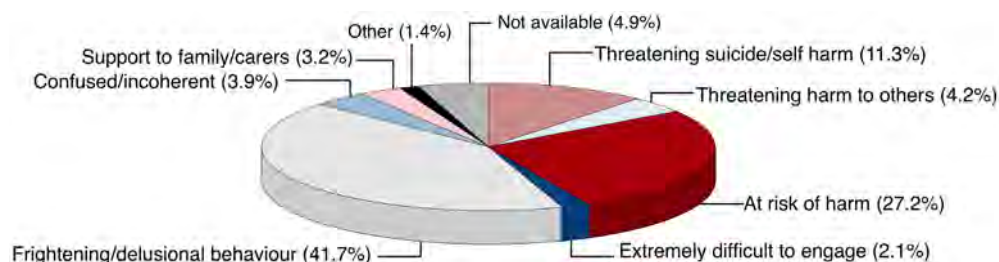


Source: PACER Activity Sheet data, Victoria Police

Of the 56.3 per cent (283) of cases / incidents described as welfare concerns and that did not require transportation following PACER response, just under half (42.7 per cent) were described as at risk of harm, threatening suicide/self harm or threatening harm to others. This is indicated in Figure 2.7 below that also shows a similar proportion (43.8 per cent) of welfare cases involved persons displaying frightening / delusional or extremely difficult behaviour.

Figure 2.7

ATTENDANCE BY PACER AT WELFARE CASES THAT DID NOT REQUIRE TRANSPORTATION: CATEGORISED BY CIRCUMSTANCES (N=283)



Source: ACG analysis based on PACER Activity Sheet data, Victoria Police

Examples of the descriptions of these welfare concern cases are provided in Table 2.1 below. The descriptions are included as part of the incident details recorded by PACER and relate to the circumstances of the incident. They depict the emergency nature of the incident, the potential safety issue and the known or potential need for mental health support.

Table 2.1

EXAMPLES OF WELFARE CASES RESPONDED TO BY PACER THAT DID NOT REQUIRE TRANSPORTATION (N=283)

Category	Example of circumstances
Threatening suicide / self harm	<ul style="list-style-type: none"> Lying on train tracks, intoxicated and suicidal Aggressive towards family with threats to self harm Reported by counsellor as threatening suicide by walking into traffic
Threatening harm to others	<ul style="list-style-type: none"> Presented at station with threatening letter Threatening staff at medical centre
At risk of harm	<ul style="list-style-type: none"> Not responding to CATT attempts at contact History of suicide attempt and unable to be contacted by psychiatric facility Deteriorating due to eating disorder and personal circumstances
Frightening / delusional behaviour	<ul style="list-style-type: none"> Acting anxious and frustrated and frightening family/friends Dispute with father, damaged property and drug affected, previous diagnosis of bipolar Verbally aggressive in pharmacy Aggressive at aged care facility Violent and damaging property at DHS house Making delusional statements, involved in family court issues
Extremely difficult to engage	<ul style="list-style-type: none"> Aggressive at psychologist and uncooperative with police DHS disability services requested assistance with client having violent episode
Confused / incoherent	<ul style="list-style-type: none"> Presented at police station unable to state name or address Frequently contacts police station when intoxicated
Support to family / carers	<ul style="list-style-type: none"> Following husband's suicide Contacted police seeking help for son's behaviour

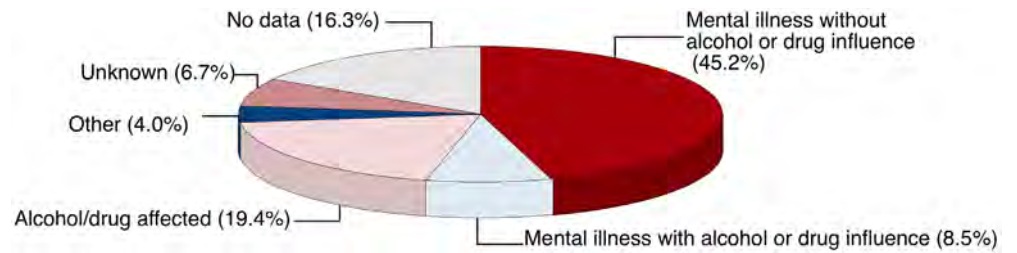
Source: PACER Activity Sheet data, Victoria Police

In relation to the 41.7 per cent of cases referred to above in Figure 2.7 and Table 2.1 where the incident circumstances were described as frightening / delusional behaviour, a diagnosis of mental illness was made in over one half (60 per cent) of these cases.

When considering all of the cases recorded as welfare concerns as shown in Figure 2.8 below, mental illness was diagnosed in nearly 54 per cent of cases with 8.5 per cent associated with alcohol or drug use. A further 19 per cent of cases were diagnosed as alcohol and/or drug affected only.

Figure 2.8

PACER WELFARE CASES THAT DID NOT REQUIRE TRANSPORTATION: BY DIAGNOSIS (N=283)



Source: PACER Activity Sheet data, Victoria Police

Chapter 3

Effectiveness of PACER

CASE STUDY

Ms G is 63 years old and lives alone. She is known to mental health services and has a diagnosis of paranoid schizophrenia. Ms G had sporadic contact with mental health services since 1999 and came to the attention of local police following complaints by neighbours and Ms G's complaints about her neighbours both verbally and in writing. Police were unaware of Ms G's mental health history and considered her to be a vexatious complainant.

Discussions between police and PACER revealed a similar pattern of behaviour in the past consistent with psychotic illness. Subsequently, both police and the local CATT made separate and several attempts to contact Ms G and referred the matter again to PACER when she could not be contacted at all, neighbours had not seen her and there were concerns about her personal welfare.

Ms G had no known relatives or friends recorded in her file and it was decided that police would enter her premises on the high likelihood that she was still in the house. Ms G was located hiding in the house and in deteriorating circumstances. Ms G was hospitalised, treated and returned to the community with a requirement for regular contact with her case manager and a regime of medication. This contact has been sustained with the possibility of involuntary intervention again should it lapse.

As a result of PACER intervention, Ms G has received the mental health support she needs, had foreclosure of her housing tenancy cancelled and can be maintained in the community without undue concerns to neighbours and police.

3.1 Scope of analysis

Analysis of effectiveness of PACER includes comparison with usual service provision as represented by police, mental health and health services responses to mental health crises in the community provided in the Eastern Health and Victoria Police Eastern Region (the comparator site).

Consideration of CATT service referrals occurs through CATT's role in the PACER team, the extent to which police have sought CATT assistance for incidents resulting in transfer of persons with a mental health crisis, and ECATT involvement in the outcome of hospital emergency department presentations.

Emergency department presentations are considered as part of timeliness of crises responses, referrals and referral outcomes.

Client outcomes are identified from PACER outcomes, Victoria Police mental disorder transfer destinations and hospital emergency department dispositions for patients with a mental health condition referred by police.

The number of relevant mental health crises in the community under the PACER model has been taken as being the number of referrals accepted by the PACER team. For the comparator site, the comparable number of mental health crises in the community is taken as being the number of incidents resulting in transfer of a person with a mental health condition. This is reflected in the flow diagram showing the consumer experience in Figure 2.1 above and in the data for transport to hospital emergency departments for PACER and the usual service provision in the comparator site in Figure 4.2 below.

There are a number of assumptions made in establishing the point of comparison with the PACER activity, which draw from the following reasoning in aligning police data sets.

- The first responder police units in both PACER and the comparator site have made decisions leading up to the need for mental health advice. The actions available to the units are to resolve the matter on site with no further action required on their part, including calling for an ambulance if there is a need for medical attention.
- At the point of calling for mental health assistance, the first responder units in the PACER area and time of operation can utilise mental health triage services and/or call for PACER. The usual service provision in the comparator site also allows for access to telephone advice from mental health triage but based on police stakeholder feedback and the police data used for cost effectiveness analysis this option is seldom accessed leaving the police with the option to transfer the person to access crisis mental health intervention. Data concerning the number of times police accessed mental health triage was not available to the review. Whether transport is provided by police or by ambulance, it could be expected that a Mental Disorder Transfer form (L42) would be completed. Hence, PACER activity is equated to action in usual service provision in the comparator site that would warrant completion of the L42.
- The first responder unit in both PACER and comparator sites are deemed to have made similar initial assessments about client needs, with or without recourse to triage, before either completing a L42 form (comparator site) or seeking PACER assistance. It is not known whether the presence of PACER inflates the propensity of police to call for mental health assistance in comparison to usual service provision.
- The difference in the level of PACER activity (783) and comparator activity (211) denoted by completed L42s is considered to be attributable to a mix of factors including low compliance in the use of L42s rather than a reflection of a lower incidence of behavioural disturbance in Eastern. This is supported by information about police involvement in mental health presentations in Eastern from hospital emergency department data (307 presentations for the equivalent period). It is also understood that there may be some discretion in completing the L42 form if similar information is captured on other processes/forms, such as that for family violence incidents.

- To this extent, the L42s completed for usual service provision in the comparator site are considered to be a sample of cases and the assumption is made that this is a representative sample and sufficient for the purposes of obtaining proportions to apply the cost effectiveness analysis. In addition, the sensitivity analysis undertaken allows for the potential for overlap between PACER activity (see Figure 2.5) and use of triage by first responder units in the comparator site.

Information provided by Ambulance Victoria for ambulance transport of mental health patients indicates that police involvement was recorded in a total of 281 cases transported to Eastern Health hospital emergency departments compared to 343 cases transported to Southern Health emergency departments. The corresponding data from police records utilised in this analysis, of the use of ambulance transport for mental health emergencies (Mental Disorder Transfer forms and PACER activity sheets) is 66 and 99 respectively. There are a number of possible explanations for the discrepancy between these figures (77 per cent for Eastern and 71 per cent for Southern) including:

- PACER area of operation is within Southern Health but does not cover the breadth of catchment areas for the hospital emergency departments in that region and would not be available for call out;
- first responder police units in the PACER area and the comparator site are able to resolve a substantial number of incidents, including with the support of ambulance paramedics, without escalating the case to a PACER call out or a Mental Disorder Transfer; and conversely
- ambulance paramedics are able to manage a substantial number of incidents with limited police assistance required.

Because of the difficulties posed by the ambulance call out areas differing significantly from the health and police regions, ambulance data has not been used in the effectiveness analysis.

Data on the use of ambulance transport of mental health patients is taken from police and health data collections and contributes to consideration of the effective and efficient use of resources.

Comparison data in all instances has been restricted to the PACER period of operation of 3pm – 11pm daily. The period of 1 December 2009 to 31 March 2011 for which data has been extracted, corresponds to the period for which PACER data are available and commencing from introduction of the Victoria Police Mental Disorder Transfer form (1 December 2009).

Further detail about alignment of catchment areas and utilisation of program data sets is provided above in Table 1.1 and Table 1.2.

Consistent with the evaluation questions, the following effectiveness analysis covers:

- timeliness of response;
- streamlined and quality approach;
- incidence of adverse events;

- demand on agency resources; and
- referrals to hospital emergency departments.

3.2 Impact of PACER on timeliness

The effectiveness of PACER in providing a more timely response is analysed in the following ways.

- The time taken from the arrival of police (the first responder unit) at the location of the mental health crisis to mental health assessment of the person in crisis. This information is augmented by the time for PACER to arrive on site where this is an appropriate secondary response.
- The time taken for the first responder unit to be cleared, releasing them to meet service demand.

Time to attendance by mental health clinician

When PACER is requested by the first responder police unit, the large majority of cases result in PACER providing an on site activity. On site activity is recorded in 78 per cent of cases and telephone assistance in a further four per cent of cases.

Of the 78 per cent of on site activity, 82 per cent resulted in PACER providing a mental health assessment.

As noted in consultations with both mental health practitioners and police, ability for mental health assessment to occur close to the presentation of the crisis improves the ability for an accurate assessment with resulting improved client outcomes.

In that context, it is of interest to note the time taken by the PACER unit to arrive on site when this response is indicated. As shown in Figure 3.1 below, in 90 per cent of cases PACER responded in 30 minutes or less from the time contacted.

Time to mental health assessment

Figure 3.1 also summarises the time taken to release of the primary responder unit for section 10 apprehensions and cases involving welfare concerns. These incidents make up 85 per cent (669 cases) of PACER activity and 89 per cent (187 cases) of usual service provision in the comparator site.

For PACER, the majority of cases involving section 10 and welfare concerns received mental health assistance in less than one hour, with an average time of 52 minutes. In the comparator site, people experiencing a mental health crisis waited an average of nearly three hours (two hours and 46 minutes) before they received mental health assistance.

The results reflect the police responsibility for a person subject to a section 10 until such time as an assessment can be made of their mental health condition and service needs. For welfare concerns, it has been assumed that police clearance on safety grounds will be informed by mental health assessment.

The data accessed from the PACER activity sheet was restricted to provision of on site assessment for determining time to attendance by a mental health clinician. For time to mental health assessment under PACER, data was restricted to section 10 and welfare cases where time to release of the police first responder unit is known (506 cases), and the data used from the police transfer records (the comparator) was for total time of police involvement where recorded (167 cases).

Figure 3.1

PACER AND COMPARATOR SITE (USUAL SERVICE) RESPONSES: COMPARISON OF TIME TAKEN TO MENTAL HEALTH ASSESSMENT FOR PERSONS IN MENTAL HEALTH CRISES, 3 – 11PM, 1 DECEMBER 2009 – 31 MARCH 2011



Sources: PACER Activity Sheets and L42 Mental Disorder Transfer Form, Victoria Police

Time to release of first responder unit

Figure 3.1 also serves to reflect on the effective use of resources for the management of mental health crises under the PACER model and that of usual service provision in the comparator site. In both scenarios, the time to mental health assessment has been equated to time to clearance of the primary responder unit, usually the police. With PACER providing earlier intervention following police call out, the first responder unit has been cleared, on average, in a third of the time (52 minutes) police were involved under usual service provision in the comparator site (nearly three hours).

Finding

The PACER model appears to offer a clear improvement on timeliness over usual service provision provided in the comparator site for mental health crises in the community, from the perspective of both client access to mental health assessment and the more effective use of police resources.

3.3 Streamlined and quality approach of PACER

Information to assess the extent to which the PACER model facilitates inter agency sharing of information and contributes to improved client outcomes has been based on police data that show:

- usual service provision in comparator site — reference to CATT and mental health triage and update of Person Warning Flags; and
- PACER — client mental health and police record status, activity to provide management options such as background checks and response plans, and activity to pursue client outcomes.

The police data available from the transfer information for the comparator site has limited reference to existing client history apart from a requirement to update or create Person Warning Flags (PWF). The PWF provides brief information about client behavioural aspects such as ‘self injury, violent, drug association, mental disorder’. This information was completed by police for virtually all occasions of mental health disorder transfers but would require little input, if any, from mental health or health agencies.

Indicators of agency collaboration in the comparator site are summarised in Table 3.1. They show that there were relatively few requests for mobile CATT services, amounting to 11 per cent of all transfer cases with CATT available to respond to just over half of those requests. In about four per cent of cases the person was released as an outcome of CATT assessment.

The option to refer the person by fax to Mental Health Triage was recorded for just over two per cent of cases.

Ambulance transport was used in just over one third of transfers while there was no recorded use of transport by CATT/Area Mental Health Service. The large majority of transport by police was to a hospital emergency department.

Table 3.1

COMPARATOR SITE: INDICATORS OF AGENCY COLLABORATION

	Number	% of total cases
Activity (N=211)		
PWF completed	205	97.2%
Mobile CATT responded to request	12	5.7%
Mobile CATT not available	11	5.2%
Outcome of police involvement (N=211)		
CATT assessed and advised release	9	4.3%
Fax referral to mental health triage	5	2.4%
Transportation (N=209)		
Police	127	60.8%
Ambulance	77	36.8%
CATT/ Area Mental Health Service	0	0%

Source: L42 Mental Disorder Transfer Form, Eastern Region, Victoria Police

In comparison, the PACER data summarised in Table 3.2 shows a wider range of opportunities for mental health input to management of a mental health crisis. Through the PACER unit, on site mental health assessment was provided in almost two thirds of cases. In addition, advice was provided on strategies to manage the crisis including the development of a response plan in almost one quarter of cases. Mental health and police client databases were updated in over one third of cases and drawn on for background checks in just under half of all cases.

Where transport was indicated, better use was made of ambulance services than under usual service provision in the comparator site. Ambulance was chosen in just under half of the PACER cases requiring transport. About one third of transport by police was to a hospital emergency department with a similar number to a psychiatric facility.

Table 3.2

PACER: INDICATORS OF AGENCY COLLABORATION

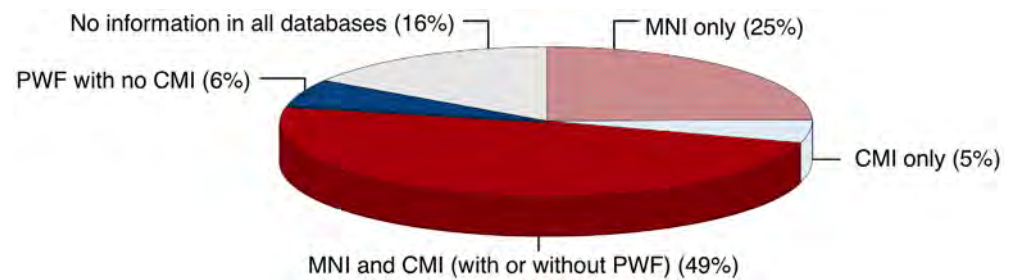
PACER activity	Number	% of total cases
Activity (N=783)		
Onsite assessment	499	63.7%
De-escalation advice	82	10.5%
Response plan developed	87	22.2%
Update PWF/ client record	310	39.6%
Client follow-up	100	14.2%
Database/ background check	352	45.0%
Transportation (N=281)		
Police transport	112	39.9%
Ambulance transport	126	44.8%

Source: PACER Activity Sheets, Victoria Police

Of the total of PACER cases, it is known that just over half (54 per cent) involved a registered mental health client as shown in Figure 3.2, with most of those cases also known to police. There was no existing information about persons involving PACER activity in 16 per cent of cases.

Figure 3.2

PACER: CLIENTS WITH EXISTING POLICE (MASTER NAME INDEX (MNI), PERSON WARNING FLAG (PWF)) AND/OR MENTAL HEALTH (CLIENT MANAGEMENT INTERFACE (CMI)) RECORDS*



* Does not add to 100 per cent because of rounding

Source: PACER Activity Sheets, Victoria Police

Consultations reinforce the barriers to appropriate and timely outcomes for clients that arise from the lack of shared information between agencies during and following crisis management. For some stakeholders, especially those in the health sector, a critical success factor for a PACER type model was cited as improved information sharing. For the police, usual service provision in the comparator site did not foster the level of networking and resultant trust that achieved a satisfactory working relationship and the level of support they required to better manage mental health crises in the community.

Finding

A more integrated / streamlined approach to management of mental health crises in the community is suggested both by provision for data related to PACER activity that allows for shared agency information, and by data recorded for activity that requires a 'real time' and more seamless response from police and mental health practitioners and their agencies. Consequently, there is greater capacity than exists in usual service provision to collaborate on effective management of emergency events.

3.4 Incidence of adverse events associated with PACER

An important expectation of the PACER model is the potential influence of a secondary dual response within the community to reducing the risk of behavioural escalation. This aspect was considered through investigation of the number of times a use of force form was completed for PACER activities and for usual service provision.

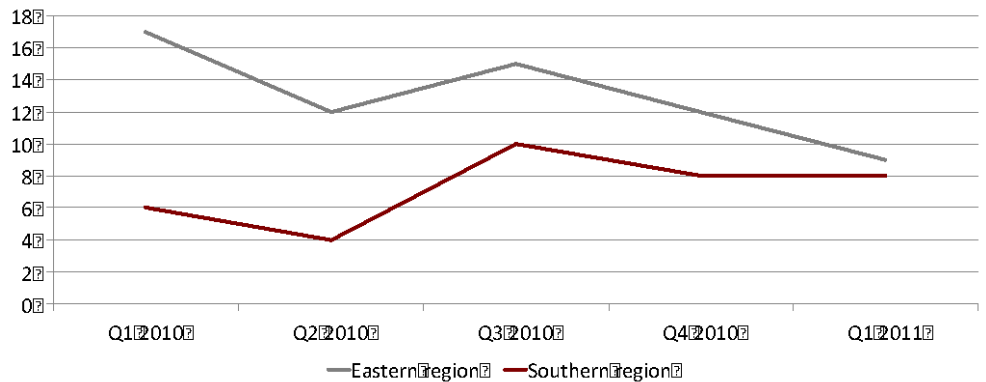
Although the Mental Disorder Transfer form provides for reporting whether or not force was used, this information is not coded routinely. For the purposes of this evaluation, data sourced directly from the Use of Force form are used for the Southern Metropolitan and Eastern Regions of Victoria Police that show the number of times a use of force form has been submitted for persons with irrational or unstable behavioural factors, known mental history or acts of suicide/self harm. Information has been restricted to cases during 3 – 11pm, coinciding with the operation of PACER.

As shown in Figure 3.3, use of force associated with mental health crises in the community occurred on fewer occasions in the Southern Metropolitan Region compared to the Eastern Region over the period from January 2010 to March 2011. This difference was more marked in the early stages of PACER implementation. Use of force has generally declined in the Eastern Region ranging from 17 occasions of use of force in the first quarter of 2010 reducing to nine occasions in the first quarter of 2011. Over the same period, Southern has gone from a low of four and ending with a high of eight occasions of force.

Without closer analysis of the type of force used, it is not possible to comment on the extent to which there might be a lower level of escalation in Southern Metropolitan Region compared to Eastern Region, for example. Use of force includes use of handcuffs and capsicum spray.

Figure 3.3

PACER AND USUAL SERVICE PROVISION IN THE COMPARATOR SITE: USE OF FORCE, JANUARY 2010 – MARCH 2011



Source: Use of Force (VP Form 237), Southern Metropolitan and Eastern Regions, Victoria Police

It is known that PACER has provided de-escalation advice on 10 per cent of occasions and undertaken other activity that might assist police to better manage the crisis. A similar intervention is not apparent from the data available on the police transfer forms for the Eastern Region. However, de-escalation and other advice is available through mental health triage services. It is also known that PACER outcomes have involved a lower proportion of recourse to police transport compared to the Eastern Region.

Finding

While there is a small but consistent difference in the use of force in Southern Metropolitan Region where PACER operates compared to Eastern Region, this difference has reduced over time. Further analysis of the data would indicate whether there was also a difference between the Regions in the type of force used. However, the data presents a small number of cases and, although the data has been restricted to PACER hours of operation, the link to PACER is not clear.

3.5 Demand on agency resources

For purposes of determining the effectiveness of PACER, demand on agency resources in responding to emergency mental health crises has been considered through use of transport and choice of transport mode. Other sections in this Chapter also include related information about hospital emergency department referrals and length of time in emergency departments, which contributes to assessment of demand on agency resources.

Table 3.3 below shows that transport was required for 281 (approximately 36 per cent) PACER cases compared to 209 (99 per cent) in the Eastern Region. At this point it is assumed that the first responder units in both sites have acted similarly to assess client needs, and that the difference in the proportion of people transported is influenced by the subsequent PACER activity allowing for a wider range of responses (for example, see Figure 2.5). Transport choice for cases influenced by PACER was slightly higher (45 per cent) for ambulance as mode of transport than in usual service provision in the comparator site (37 per cent) and markedly lower (40 per cent) for use of police to transport the person experiencing a mental health crisis than for the comparator site (61 per cent).

There was also a reduced use of emergency departments for PACER cases and a higher number of direct referrals to a psychiatric facility compared to usual service in the comparator site.

Table 3.3

PACER AND COMPARATOR SITE: TRANSPORT MODE

Transport mode	PACER	Comparator site
Total cases that required transportation	281	209
Police vehicle	39.9%	60.8%
% of cases requiring transportation by police	<ul style="list-style-type: none"> • 33.9% to ED • 29.5% to psychiatric facility • 17.9% to police station • 12.5% to residential address • 6.3% to other 	<ul style="list-style-type: none"> • 83.5% to ED • 15.0% to psychiatric facility • 1.6% no data
Ambulance	44.8%	36.8%
% of cases requiring transportation by ambulance	<ul style="list-style-type: none"> • 78.6% to ED • 19.0% to psychiatric facility • 2.4% to other 	<ul style="list-style-type: none"> • 85.7% to ED • 7.8% to psychiatric facility • 6.5% no data
Other	15.3%	2.4%

Notes: Only cases where data on transport used are included as requiring transportation. 'Other' includes family members, CATT or PACER

Source: PACER Activity Sheets & Mental Disorder Transfer (VP Form L42), Victoria Police

Finding

Compared to usual service provision in the comparator site, PACER outcomes demonstrate an improved use of agency resources including ambulance as the preferred mode of transport for mental health patients, avoidance of hospital emergency department presentations and reduced use of police to transport persons experiencing behavioural disturbance.

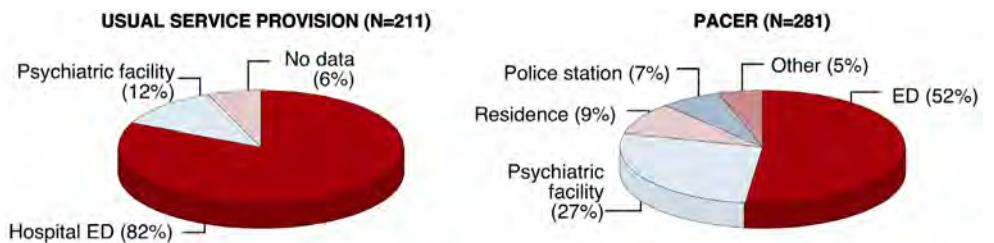
3.6 Reduced referrals to hospital emergency departments

PACER activity data for cases requiring transport is compared to police data for transfer of persons with a mental health condition for Eastern Region to determine client outcomes.

Figure 3.4 shows that just over half of PACER cases requiring transport resulted in presentation to a hospital emergency department. Transport direct to a psychiatric facility occurred for just over one quarter of cases. In comparison, transport under usual service provision in the comparator site as represented by Eastern Region, involved presentation to an emergency department in the large majority (82 per cent) of cases requiring transport. Transport direct to a psychiatric facility occurred for 12 per cent of cases of which more than half were returning the person to the facility.

Figure 3.4

PACER AND COMPARATOR SITE USUAL SERVICE PROVISION: TRANSPORT DESTINATIONS



Source: PACER Activity Sheets & Mental Disorder Transfer (VP Form L42), Victoria Police

Finding

It would appear that PACER intervention has resulted in fewer persons being referred to hospital emergency department services than occurs under usual service provision in the comparator site. This is accompanied by greater use of direct referral to psychiatric facilities and reflects the wider range of choices available on site through PACER involvement.

3.7 Summary of findings

When compared to usual service provision in the comparator site, the PACER model demonstrates more effective outcomes for the person in crisis and the emergency agencies involved, including:

- more timely access to mental health assessment for the person of just under one hour compared to almost three hours; and consequently
- more timely clearance of the first responder unit achieving this on average in one third of the time taken for usual service provision in the comparator site;

- achieving a more integrated approach to management of mental health crises through improved agency information sharing and communication;
- improved use of agency resources including ambulance as the preferred mode of transport for mental health patients, avoidance of hospital emergency department presentations and reduced use of police to transport persons; and
- fewer referrals to emergency departments accompanied by increased direct referrals to psychiatric facilities.

Chapter 4

Efficiency of PACER

CASE STUDY

At the beginning of the daily operation of PACER, a call was received to assist police who were attending Mr R's flat for the second occasion that day having previously attended for a domestic violence incident. On this occasion, Mr R was reported to be violent and threatening self harm. PACER provided collateral history about Mr R to the Police Critical Response Unit, including up to date information from Mr R's family whose contact information was in the mental health database. Advice was provided that Mr R should be transported to a secure environment for interview because of the high probability for escalation. For safety reasons, Mr R was transported to a police station where he received a psychiatric examination and was admitted to a psychiatric facility for further observation and a second opinion from a psychiatrist. Mr R's diagnosis of antisocial personality disorder was confirmed and he was later arrested and charged in relation to threats to his partner.

This intervention highlights features of the single team, PACER model including rapid response, ability to bring together police and medical/psychiatric histories on site to contribute to a more effective outcome, the ability to plan management to follow the immediate crisis resolution and avoidance of delays including presentations to hospital emergency departments under section 10 where there is not an associated medical problem.

4.1 Efficiency of PACER

Determining the efficiency of PACER, including its cost effectiveness, contributes to the PACER evaluation question:

- is there a reduced demand on agency resources relating to emergency mental health crises?

Efficiency was analysed in terms of the following:

- length of stay in a hospital emergency department for persons referred by police;
- duration of time the first responder unit attended the crisis; and
- cost effectiveness of PACER compared to usual service provision in the comparator site.

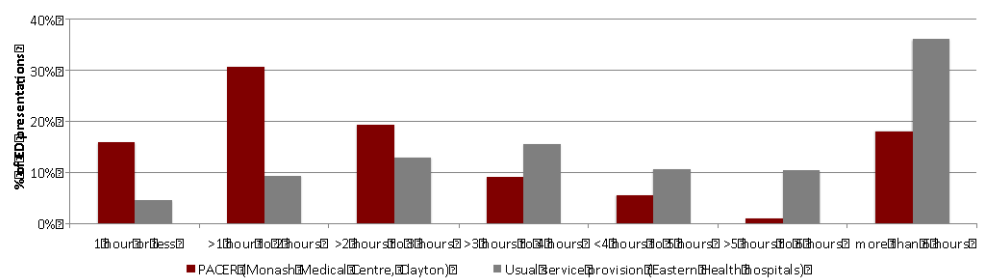
4.2 Length of time in hospital emergency departments

The majority (61 per cent) of presentations to hospital emergency departments referred by PACER were to the Monash Medical Centre, Clayton. Information from the Victorian Emergency Minimum Dataset relating to mental health presentations during the operating hours of PACER for Monash Medical Centre, Clayton has been compared to information for all three emergency departments in Eastern Health. This information was analysed to determine whether there was any difference in the length of stay for presentations in the PACER area compared to Eastern Health.

Presentations in the PACER area had a shorter length of stay in the emergency department on average of approximately four hours, compared to presentations resulting from usual service provision in the comparator site of approximately six hours. Figure 4.1 shows that 66 per cent of PACER area referrals had a length of stay in emergency department of three hours or less compared to 27 per cent of usual service provision referrals in the comparator site. Further, one quarter of PACER area referrals were in the emergency department for more than four hours compared to more than half (57 per cent) of usual service provision referrals in the comparator site.

Figure 4.1

PACER COMPARED TO USUAL SERVICE PROVISION IN THE COMPARATOR SITE: LENGTH OF STAY FOR MENTAL HEALTH PRESENTATIONS TO EMERGENCY DEPARTMENTS



Source: Victorian Emergency Minimum Dataset, 1 December 2009 – 31 March 2011, Department of Health

Finding

There is a reduced length of stay in hospital emergency department for referrals in the PACER area of operation than for usual service provision referrals in the comparator site. The data would appear to be supported by consultation feedback from CATT and ECATT representatives, that PACER is able to transfer persons referred to hospital emergency department with substantial information about their circumstances, facilitating a timely outcome for the person. Conversely, feedback from areas where PACER does not operate emphasises the lack of information available to emergency departments for police referrals.

4.3 Duration of first responder unit attendance

Figure 4.1 above also serves to demonstrate the extent to which PACER results in a more efficient use of police resources in particular in responding to mental health crises in the community.

Finding

The shorter time to release of the first responder unit under the PACER model compared to usual service provision in the comparator site avoids delays associated with transport and referrals to hospital emergency departments. It also ensures that the service provided by the first responder unit is used efficiently.

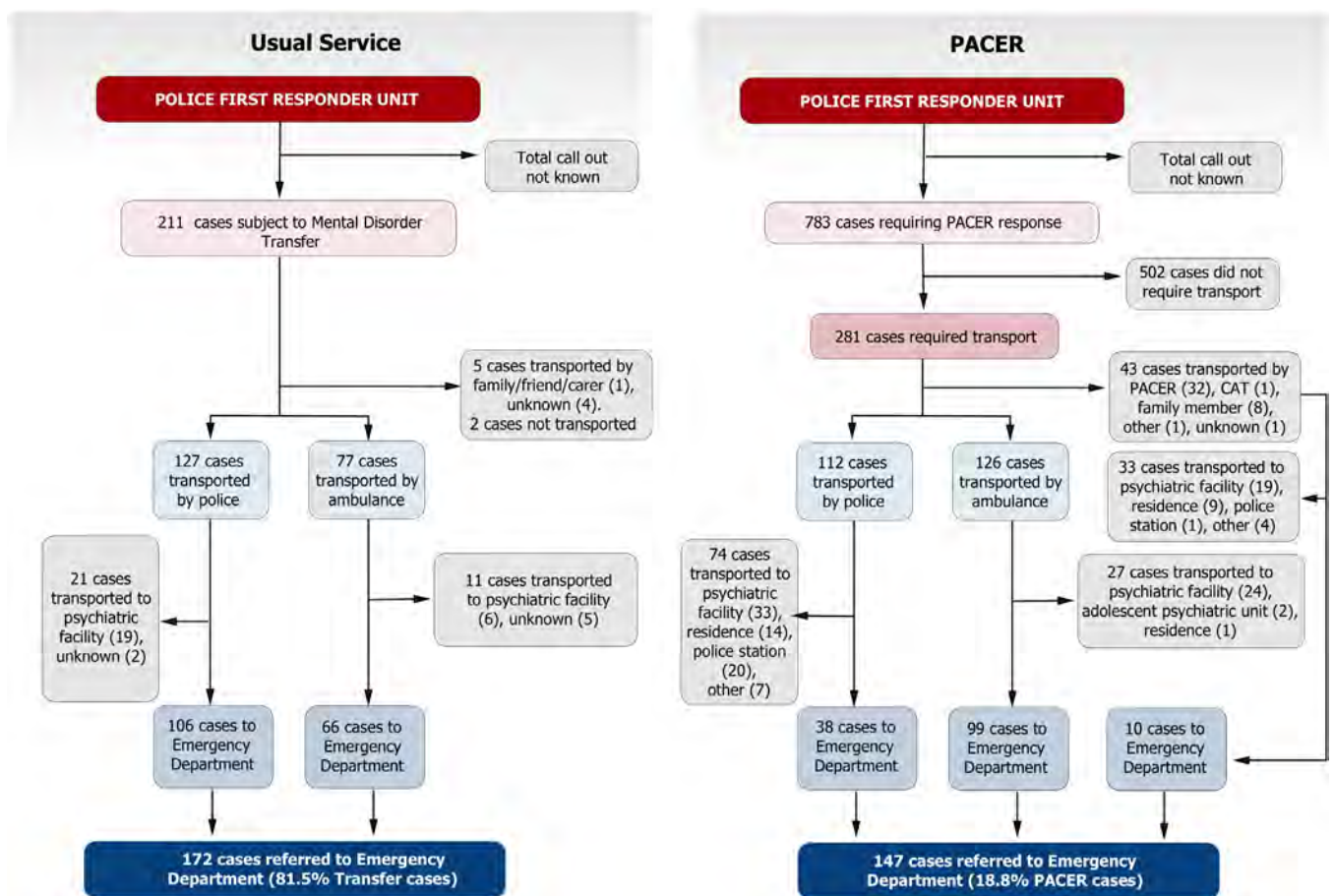
4.4 Cost effectiveness of PACER

The cost effectiveness analysis focuses on the components of responding to a mental health crisis in the community that flow from police call out (first responder unit) to transport to hospital emergency department as required. The derivation of the data that underpins this analysis is illustrated in Figure 4.2 for usual service in the comparator site and PACER. Explanation about the point of comparison between datasets is provided in section 3.1. The difficulties in matching points of alignment across datasets affected the robustness of the cost effectiveness analysis.

As referred to in section 3.1 above, Ambulance Victoria data has not been used and information about involvement of ambulance in transport of mental health patients has been derived from secondary sources.

Figure 4.2

USUAL SERVICE IN THE COMPARATOR SITE AND PACER: TRANSPORT TO HOSPITAL EMERGENCY DEPARTMENTS, 3-11PM, 1 DECEMBER 2009 TO 31 MARCH 2011



Source: The Allen Consulting Group based on data provided by Victoria Police.

In undertaking a cost effectiveness analysis, the assumptions and direct cost of managing a mental health crisis in the community under the PACER model and usual service provision in the comparator site are listed in Table 4.1. This includes information provided by Ambulance Victoria on cost of ambulance transport.

The analysis is conducted for the 16 month period starting from 1 December 2009 through to 31 March 2011.

The cost of CATT services provided by AMHS is excluded from the analysis because they are a cost to both the PACER area and the comparator. In addition, where PACER was available, advice from PACER would generally be sought instead of CATT. Under usual service provision in the comparator site, assistance from a mobile CATT service is not sought for the majority of cases. Data from the Mental Disorder Transfer forms indicate that police requested the mobile CATT services for approximately 11 per cent of all cases — noting that CATT was unavailable for half of those cases.

For the comparator (Southern Health without PACER), the following data from the Eastern Region mental disorder transfer form are applied to the total number of PACER cases:

- percentage of cases requiring transport to a hospital emergency department; and
- average total police time per case.

Complexity of the mental health crises is assumed to be similar for both mental health transfers under usual service provision in the comparator site and cases assisted by PACER as the secondary response unit. This assumption is also discussed under section 3.1 and underpinned by the detail of PACER activity provided in section 2.3, especially in relation to cases not requiring transportation.

Table 4.1

DATA SOURCES AND ASSUMPTIONS FOR COST EFFECTIVENESS ANALYSIS

	Data	Description	Source
Total number of cases	783	Total number of cases requiring PACER's assistance in the period 1 December 2009 to 31 March 2011 (Figure 4.2)	PACER Activity Sheets
PACER			
Mental health clinician	\$267,707	Cost of a mental health clinician (EFT plus overtime) for 16 months. The cost of PACER for the period December 2009 to October 2010 was \$183,857 (\$234,000/14 x 11 months). Funding for the remaining months (November 2010 to March 2011) was calculated based on data on the monthly cost of a mental health clinician (EFT plus overtime) of \$16,750. Total funding from the Department of Health: \$183,857 + \$83,750 = \$267,707	2008/09 – 2010/11 funding data provided by Southern Health
Police member salary	\$120,880	Average salary 2010/11 for a mid range senior constable + salary add on cost for 16 months	Advice provided by Victoria Police
PACER car	\$5,333	Apportioned cost of a police van per individual police member for 16 months	Advice provided by Victoria Police
First responder unit			
Police member salary	\$120,880	Average salary for a mid range senior constable + salary add on cost for 16 months	Advice provided by Victoria Police

	Data	Description	Source
Divisional van cost	\$5,333	Apportioned cost of police van per individual police member for 16 months	Advice provided by Victoria Police
Number of shifts and hours worked	181 shifts p.a. (8 hours per shift)	Number of shifts per year and hours per shift (after leave days, training days, court days etc.)	Advice provided by Victoria Police
Cost per hour of police time	\$65.37	Sum of police member salary and divisional van divided by number of working hours for the 16 months period	Advice provided by Victoria Police
Average first responder police time per case (usual service provision in comparator site)	2.8 hours	Average total police involvement time per case In calculating total police involvement time for transfers involving more than 6.5 hours of police time, a conservative assumption of seven hours is applied	Victoria Police L42 Mental Disorder Transfer Forms
Average first responder police time per case (PACER)	0.7 hour	Average time taken to clear the first responder unit (567.1 hours/ 783 cases). Where data on police time is not available, an assumption of 20 minutes per case is applied	PACER activity sheets and advice provided by Victoria Police
Ambulance			
Ambulance transportation cost	\$880	Average cost per case	Advice provided by Ambulance Victoria
Percentage of total cases transported by ambulance (usual service provision in comparator site)	36.5 per cent	Percentage of total cases under usual service provision in comparator site that involved transportation by ambulance (36.5 per cent equates to 286 cases)	Victoria Police L42 Mental Disorder Transfer Form
Percentage of total cases transported by ambulance (PACER)	16.1 per cent	The percentage of total PACER cases that involved transportation by ambulance (16.1 per cent equates to 126 cases)	PACER activity sheets
Hospital emergency department			
Emergency department: direct cost	\$374	Direct cost/diagnosis related group for 'mental health treatment (same day)'	National Hospital Cost Data Collection V5.2 Public Sector, Round 13 (2008-09), Victoria - Estimated
Emergency department overhead cost	\$80	Overhead cost/diagnosis related group for 'mental health treatment (same day)'	National Hospital Cost Data Collection V5.2 Public Sector, Round 13 (2008-09), Victoria - Estimated
Total cost per Emergency Department presentation	\$454	Average total cost (direct and overhead costs) per hospital emergency department presentation for mental health category	National Hospital Cost Data Collection V5.2 Public Sector, Round 13 (2008-09), Victoria - Estimated
Percentage of total cases transported to a hospital emergency department (usual service provision in comparator site)	81.5 per cent	The percentage of total mental health transfers that were transported to a hospital emergency department under usual service provision in comparator site (81.5 per cent equates to 638 cases)	Victoria Police L42 Mental Disorder Transfer Forms
Percentage of total cases transported to a hospital emergency Department (PACER)	18.8 per cent	The percentage of total PACER cases that involved transportation to a hospital emergency department (18.8 per cent equates to 147 cases)	PACER activity sheets

Sources: Communication with Southern Health. Based on advice provided by Victoria Police; PACER Activity Sheets & L42 Mental Disorder Transfer Forms, Eastern Region, Victoria Police. National Hospital Cost Data Collection V5.2 Public Sector, Round 13 (2008-09) Victoria, accessed 11 July 2011 at http://www.health.gov.au/internet/main/publishing.nsf/Content/Round_13-cost-reports

Although the PACER project received in kind support from police achieved within existing budget, a cost effectiveness analysis of PACER should ideally include all expenses in relation to PACER's operations, at least to the extent of the opportunity cost of the police member in the PACER team and use of the car. This would increase the cost of the PACER project by approximately \$126,213. Other police in kind contributions such as office equipment, operating equipment incidentals, phones, computers etc. were excluded from this analysis due to insufficient data available to accurately quantify the costs.

The cost effectiveness analysis includes a number of scenarios. The first scenario excludes the cost of the police member of PACER and use of the police car, while the second scenario includes these costs. The third and fourth scenarios include sensitivity analysis.

The sensitivity analysis undertaken tests the impact of significant change to major cost drivers being:

- percentage of presentations to hospital emergency departments; and
- time taken for release of the first responder police unit.

The sensitivity analysis has only been undertaken to decrease the effective performance of PACER, which includes testing for a possible overstatement of the proportion of cases transported to emergency departments under usual service provision in the comparator site.

The cost effectiveness analysis of PACER compared to usual service provision in the comparator site is presented for four scenarios including two for the sensitivity analysis. The scenarios are described in Table 4.2.

Table 4.2

COST EFFECTIVENESS ANALYSIS: SCENARIOS

Scenario	Health			Police
	Mental Health	Hospital	Ambulance	
Scenario 1	PACER clinician	Emergency department	Transport service	First responder unit
Scenario 2	PACER clinician	Emergency department	Transport service	First responder unit PACER police member and PACER car
Scenario 3	Sensitivity analysis ¹ of Scenario 1 by applying the following assumptions: <ul style="list-style-type: none"> a 50 per cent increase in the percentage of total cases transported to a hospital emergency department under the PACER model (from 18.8 per cent to 28.2 per cent) a 50 per cent increase in the average first responder police time per case under the PACER model (from 0.7 hour to 1.1 hours) a 20 per cent decrease in the percentage of total cases transported to a hospital emergency department under usual service provision based on the comparator site (from 81.5 per cent to 65.2 per cent) 			
Scenario 4	Applying sensitivity analysis to Scenario 2 as for Scenario 3			

¹The sensitivity analysis undertaken tests the impact of significant change to major cost drivers being i) percentage of presentations to hospital emergency departments; and ii) time taken for release of the first responder police unit.

Table 4.3 - Table 4.6 below show the cost effectiveness analysis applied to the four scenarios. The results are summarised in Table 4.7. Note that in applying the findings of the Eastern Region to the Southern Region, a consistency of practice between regions has been assumed.

In scenario 1, the average cost per PACER case was \$660 compared to usual service provision, based on the comparator site, average cost per case of \$1,053, that is, just over one third less than the cost of usual service.

When the PACER model is costed to include the estimated salary equivalent of the in kind contribution for the police member and the police car (scenario 2), the average cost of a PACER case (\$822) compared to the estimated cost of usual service provision (\$1,053) continues to be below that of usual service by just under one quarter less the cost.

Finding

Applying sensitivity analysis (scenarios 3 and 4), which increases the overall estimate of PACER costs and reduces the estimated cost of usual service provision, PACER appears to be a more cost effective model for the most conservative scenario (PACER cost of \$910 per case compared to estimated usual service cost of \$979). However, these findings need to be interpreted in the context of the assumptions made to address the data limitations that make any firm conclusions about cost effectiveness difficult.

While the analysis accounts for reduced presentations and length of stay in emergency departments for PACER referrals, it does not account for other benefits of PACER such as:

- better outcomes for persons experiencing mental health crisis from the perspectives of human rights and access to treatment;
- the opportunity costs of avoiding inappropriate police transportation and hospital emergency department referrals;
- possible reduced use of force; and
- community benefit arising from first responder unit being available for other purposes.

Similarly, the analysis would benefit from a better understanding of such issues as the extent to which the PACER model duplicates existing service elements and the most efficient use of clinical resources

Table 4.3

COST EFFECTIVENESS ANALYSIS SCENARIO 1: SOUTHERN REGION WITHOUT PACER AND SOUTHERN REGION WITH PACER — EXCLUDING PACER POLICE MEMBER & CAR COSTS

	SOUTERN REGION – WITHOUT PACER				SOUTHERN REGION – WITH PACER			
	Avg. time per case	Cost per hour or per ED presentation	Cases	Total	Avg. time per case	Cost per hour or ED presentation	Cases	Total
PACER								
PACER mental health clinician	-	-	-	-	-	Fixed cost	783	\$267,707
Ambulance								
Ambulance transport cost	-	\$880	286	\$251,451	-	\$880	126	\$110,880
Hospital emergency department								
Direct and overhead costs	-	\$454	638	\$289,777	-	\$454	147	\$66,831
First responder unit								
First responder unit (2 x police members)	2.8 hours x 2	\$65.37	783	\$283,180	0.7 hour x 2	\$65.37	783	\$71,771
Total				\$824,408				\$517,088
Average cost per case			783	\$1,053			783	\$660

Source: ACG analysis

Table 4.4

COST EFFECTIVENESS ANALYSIS SCENARIO 2: SOUTHERN REGION WITHOUT PACER AND SOUTHERN REGION WITH PACER —INCLUDING PACER POLICE MEMBER & CAR COSTS

	SOUTHERN REGION – WITHOUT PACER				SOUTHERN REGION – WITH PACER			
	Avg. time per case	Cost per hour or per ED presentation	Cases	Total	Avg. time per case	Cost per hour or ED presentation	Cases	Total
PACER								
PACER mental health clinician	-	-	-	-	-	Fixed cost	783	\$267,707
PACER police member cost	-	-	-	-	-	Fixed cost	783	\$120,880
PACER car cost	-	-	-	-	-	Fixed cost	783	\$5,333
Ambulance								
Ambulance transport cost	-	\$880	286	\$251,451	-	\$880	126	\$110,880
Hospital emergency department								
Direct and overhead costs	-	\$454	638	\$289,777	-	\$454	147	\$66,831
First responder unit								
First responder unit (2 x police members)	2.8 hours x 2	\$65.37	783	\$283,180	0.7 hour x 2	\$65.37	783	\$71,771
Total				\$824,408				\$643,302
Average cost per case			783	\$1,053			783	\$822

Source: ACG analysis

Table 4.5

COST EFFECTIVENESS ANALYSIS SCENARIO 3: SENSITIVITY ANALYSIS OF SCENARIO 1

	SOUTHERN REGION – WITHOUT PACER				SOUTHERN REGION – WITH PACER			
	Avg. time per case	Cost per hour or per ED presentation	Cases	Total	Avg. time per case	Cost per hour or ED presentation	Cases	Total
PACER								
PACER mental health clinician	-	-	-	-	-	Fixed cost	783	\$267,707
Ambulance								
Ambulance transport cost	-	\$880	286	\$251,451	-	\$880	126	\$110,880
Hospital emergency department								
Direct and overhead costs	-	\$454	511 ^a	\$231,821	-	\$454	221 ^b	\$100,246
First responder unit								
First responder unit (2 x police members)	2.8 hours x 2	\$65.37	783	\$283,180	1.1 hour ^c x 2	\$65.37	783	\$107,656
Total				\$766,452				\$586,389
Average cost per case			783	\$979			783	\$749

^a A 20 per cent decrease in the percentage of total cases transported to a hospital emergency department under usual service provision based on the comparator site (from 81.5 per cent to 65.2 per cent).

^b A 50 per cent increase in the percentage of total cases transported to a hospital emergency department under the PACER model (from 18.8 per cent to 28.2 per cent).

^c A 50 per cent increase in the average frontline police time per case under the PACER model (from 0.7 hour to 1.1 hours).

Source: ACG analysis

Table 4.6

COST EFFECTIVENESS ANALYSIS SCENARIO 4: SENSITIVITY ANALYSIS OF SCENARIO 2

	SOUTHERN REGION – WITHOUT PACER				SOUTHERN REGION – WITH PACER			
	Avg. time per case	Cost per hour or per ED presentation	Cases	Total	Avg. time per case	Cost per hour or ED presentation	Cases	Total
PACER								
PACER mental health clinician	-	-	-	-	-	Fixed cost	783	\$267,707
PACER police member	-	-	-	-	-	Fixed cost	783	\$120,880
PACER car	-	-	-	-	-	Fixed cost	783	\$5,333
Ambulance								
Ambulance transport cost	-	\$880	286	\$251,451	-	\$880	126	\$110,880
Hospital emergency department								
Direct and overhead costs	-	\$454	511 ^a	\$231,821	-	\$454	221 ^b	\$100,246
First responder unit								
First responder unit (2 x police members)	2.8 hours x 2	\$65.37	783	\$283,180	1.1 hour ^c x 2	\$65.37	783	\$107,656
Total				\$766,452				\$712,602
Average cost per case			783	\$979			783	\$910

^a A 20 per cent decrease in the percentage of total cases transported to a hospital emergency department under usual service provision based on the comparator site (from 81.5 per cent to 65.2 per cent).

^b A 50 per cent increase in the percentage of total cases transported to a hospital emergency department under the PACER model (from 18.8 per cent to 28.2 per cent).

^c A 50 per cent increase in the average frontline police time per case under the PACER model (from 0.7 hour to 1.1 hours).
Source: ACG analysis

Table 4.7

SUMMARY OF RESULTS

Scenario	Without PACER	PACER
Scenario 1: Excluding PACER police member & car costs	\$1,053	\$660
Scenario 2: Including PACER police member & car costs	\$1,053	\$822
Scenario 3: Sensitivity analysis for scenario 1	\$979	\$749
Scenario 4: Sensitivity analysis for scenario 2	\$979	\$910

Source: ACG analysis

4.5 Summary of findings

- Length of stay in hospital emergency departments is lower for PACER compared to usual service provision in the comparator site demonstrating a more efficient use of health resources and possibly reflecting the increased availability of information about the referral at point of transfer.
- Capacity for PACER to release the first responder unit in a more timely manner results in a more efficient use of the first responder unit resource and their availability for other police duties.
- Based on the assumptions made about the data in the cost effectiveness analysis, the PACER model is less costly than usual service provision provided in the comparator site based on the calculated average cost per mental health crisis. — However, these findings need to be interpreted in the context of the assumptions made to address the data limitations that make any firm conclusions about cost effectiveness difficult. The study assumptions should be read in conjunction with the expanded commentary about data limitations under section 3.1 and the detailed breakdown of PACER activity data in section 2.3.

Chapter 5

Transferability of PACER model

5.1 Enablers to implementation of the PACER model

At each of the consultations and interviews, questions were asked of participants of the enablers to implementing the PACER model in other regions of Victoria. Discussion of the particular implications of replicating PACER or elements of PACER in rural areas also occurred. Dominant themes to emerge through the consultations included:

- improving inter-agency collaboration;
- system reform to make best use of resources;
- more effective management of consumer outcomes;
- clear roles and governance; and
- improving workforce skills in managing mental health crises.

Each of these themes is explored below, with particular consideration given to the perspectives of participants from different professions, as well as their current involvement or ownership of the PACER project.

Collaboration

Discussion with clinical staff and managers from a range of different AMHS found varying levels of knowledge of the PACER project. AMHS participants all reflected upon the importance of collaboration between mental health staff and police members, and there was strong interest across the AMHS in forging better relationships between the two professions. Whilst rural AMHS did comment on the applicability of the PACER model to regional areas, there were comments on the benefits of co locating or embedding senior clinicians with police.

Ambulance Victoria staff also felt that PACER could facilitate better collaboration with mental health staff and hospitals and expressed interest in exploring the model further.

Consultations with police were overwhelmingly positive on the potential of the PACER model in furthering collaboration between the two services, and there was strong interest from a range of senior police in expanding the current trial. A senior police member described PACER as being vital to the business of policing, and commented on the high level of support for the pilot amongst frontline police.

Feedback from senior police members also suggested that PACER has had an impact on changing attitudes amongst police of mental health clinicians and vice versa. It was felt that working together has exposed the two professions to their respective activities and helped develop respect and trust. PACER was viewed as enabling police to better respond to the needs of people who are experiencing mental health issues.

Both regional and metropolitan AMHS staff corroborated these views during consultation, citing examples of what can be achieved at a local level when there are strong local partnerships between police and clinicians. Further, some AMHS staff reflected on experiences where relationships were poor and highlighted the potential impact this could have on quality of the mental health response and consumer outcomes.

In focus groups with clinicians and police involved in the PACER project, there were frequent comments on the value of improved information sharing between police and clinicians. Both stressed the need for clinicians involved in the model to be both highly experienced and qualified.

System reform to make best use of resources

During consultations, both police and AMHS staff commented on the desire to work better and smarter.

AMHS clinical staff in non-PACER areas were interested in examining ways of improving how they responded to consumers. They acknowledged the demand on hospital emergency departments and CATT clinicians, and reflected on the subsequent diminishing capacity for assessment and treatment in the community.

Some participants noted that change and innovation needs to be tied to demonstrated efficiencies in work practices.

Senior police consulted were uniformly supportive of the PACER model and concept and indicated a readiness to adopt, and adapt, the model in other areas outside the current operational area. Of particular interest to police was ensuring practice and knowledge from PACER were translated and promulgated to more general police practice.

Common to the consultations was a desire to develop better relationships at the local level between police and clinicians. This interest at a local level is potentially a strong enabler for change and is consistent with the driving force for the PACER model, which emerged as a collaborative solution to local problems.

More effective management of consumer outcomes

Delivering services that enable better outcomes for consumers was a consistent theme common to all consultations.

There was recognition from police, ambulance and AMHS staff about the benefits of timely diagnosis in the community, of the potentially negative impact that presentations to hospital emergency departments under s10 can have on consumers, and of the desirability of avoiding unnecessary presentations to emergency departments. Different services enjoy other benefits from reducing compulsory transportation to emergency departments, such as the freeing up of resources, but significantly, each profession cited better response and care for consumers as a key priority.

Improved information sharing was seen by police, ambulance officers and AMHS staff as critical to enabling improved outcomes for consumers. It was perceived that being able to access the accumulated knowledge about particular consumers lead to better informed decision making and assessment. The PACER police and clinicians presented a similar view, and explicitly linked better information sharing with a reduced need for hospital emergency department presentations.

Clear roles and governance arrangements

Both rural and metropolitan AMHS staff felt that good management and appropriate resourcing would be central to supporting the PACER program. This would mean strong supervision and engagement from senior clinical and management staff.

Police feedback emphasised the importance of organisational will in driving and sustaining the PACER project. There was also commentary from senior police on the devolved structure of regional police command enabling the development and delivery of the PACER model. This was contrasted with the more centralised decision-making structure of the Department of Health, which could potentially inhibit local organisational support for PACER.

Stakeholders with a knowledge of PACER believed that in its current form, there is a clear understanding across the different PACER participants on respective roles and governance arrangements. Clinicians and police are well briefed, and there is also a clear understanding of the differences between roles, responsibilities and functions of first responders and the secondary PACER response.

The recognised need to develop better data management systems, referrals, training and development is driving police efforts outside of the PACER trial area to explore PACER like models in other metropolitan areas.

Improving workforce skills in managing mental health crises

The need for adequate training regimes to equip first responders with the skills to respond to people experiencing an episode of severe mental illness was cited by some consultation participants.

Ambulance paramedics considered that they would benefit from greater awareness and guidance on how to respond effectively to mental health patients. This is notwithstanding inclusion of information in paramedic training and clinical practice guidelines, for example.

The experience of police involved in the PACER project demonstrates the impact of developing a small cadre of specially trained staff and having pathways or networks for their knowledge and experience to be promulgated throughout an agency.

From the focus group with PACER police members there was general discussion around the limited mental health training in place for police. The current regime involves information and training to recognise if a person is displaying mental illness and developing an understanding of the options available for police to respond. These options are quite limited—essentially involving s10—and were described by PACER police as not sufficient for dealing with mental health crises.

The PACER training regime for police has provided officers with higher level of skills in engaging with people experiencing mental health crises, which is enabling them to support other police more generally in their understanding of mental health issues.

5.2 Challenges to implementation of the PACER model

Challenges and barriers to implementing the PACER model in other regions were also widely discussed through the consultations and focus groups. The emerging themes were:

- funding and resource constraints;
- cultural and organisational differences between participating agencies;
- geographic realities; and
- workforce constraints.

These themes are explored in further detail below, again with particular consideration to the differing perspectives of participants.

Funding, resourcing and workforce constraints

Funding, resource and workforce constraints within AMHS were consistently listed as the key challenges to exploring transferability of the PACER model.

This was particularly the case for rural AMHS where a clinician's roles and circumstances differ to that of clinicians working in the PACER project and in metropolitan regions more generally. It was considered that expanding the roles of clinicians in the rural and region AMHS who are already at capacity may not be an option for many services without an expansion of clinical staffing. Support in the form of non-recurrent funds would pose a problem in recruiting to the position.

Workforce issues and rostering availability was also cited as a constraint on exploring transferability of PACER. Some AMHS staff questioned the current rostering practices of the PACER pilot—between 3–11pm—as the most appropriate for their particular catchments. Similarly a sufficient number and spread of clinicians would need to be available to provide the service.

Investment from the Department of Health was seen by AMHS as central to creating the capacity to explore the transferability of PACER.

Senior police commented on the current practice of funding the PACER model from internal and in kind inputs. They also confirmed a willingness to explore similar in kind contributions for expansion on the basis of efficiencies they feel they are generating through PACER. They also felt that a similar argument—of benefits outweighing imposts—could be made by the Department of Health, principally through efficiencies generated through less hospital emergency department presentations and de-escalation of potential violence or disturbances in hospital settings.

Cultural and organisational differences

Cultural and organisational differences between agencies but also within agencies were identified as inhibiting the transferability of PACER to other regions.

Organisationally, police services, health networks and AMHS do not share common boundaries and areas. This can blur responsibilities and make difficult the effective mapping of providers, and coordination and delivery of integrated services. This can also confuse ownership and direction of programs.

How agencies view each other is also important. Police commented on how a centralised organisational structure views particular programs and initiatives within narrow confines. Whereas PACER is seen as an initiative closely identified and aligned with the views and aspirations of the local police division that it operates within, police felt that CATT services are viewed by the Department of Health as just one of a wide range of services that they fund and provide.

Within the structure of AMHS the level of engagement and ownership by senior staff was also seen as central to enabling PACER or PACER like components.

Police also commented on difficulties in engaging with hospitals in the development of integrated models between police and clinicians.

Geographic realities

There was a general view from stakeholders about the appropriateness of the PACER model for rural and regional areas. The geographic realities of rural AMHS are markedly different to their urban counterparts. Catchment areas for rural AMHS can be vast, and the logistics of deploying scarce police and clinical resources together makes a PACER model as it currently operates, potentially problematic.

Modelled as it was on joint response in Los Angeles, PACER in its current form sits comfortably within a context of an urban population with dense service availability and networks.

However, both rural AMHS and police were open to exploring the concept of PACER and the transferability of particular components of it to a rural and regional setting. As identified earlier, one particular view from a rural AMHS was for a clinician to be embedded with police, offering scope for additional secondary consultation over the phone and greater collaboration and information sharing between the two services.

Police were open to exploring ideas of coordinating with local mental health services an integrated on site response rather than deploying a PACER team in its current form, as an option for rural and regional areas.

5.3 Findings

The findings from the consultations clearly indicate interest from all participants for innovation and collaboration between the different service agencies. The benefits for consumers through more informed and timely assessments were recognised by participants from PACER and non-PACER areas alike.

The principal outcome from greater collaboration was better information sharing to enable more informed clinical and risk assessments of consumers in the community. The current provisions within non-PACER areas were best described by a senior police officer as 'like we're both sitting around the table holding our cards from each other'.

Police clearly see the PACER model as the appropriate vehicle to facilitate this collaboration. PACER was seen as complementing police skills and helping them deliver on core police duties and responsibilities within the community. It has broadened the range of choices available to police to respond to people experiencing a mental health crisis, and helped improve frontline police perceptions of mental illness more generally.

The view from mental health staff not involved in the PACER model is less clear. Whilst the interest in innovation is evident, whether PACER is the appropriate model requires further exploring. Some AMHS staff were only very generally aware of PACER and its aims and objectives, and were therefore wary of potential developments that could lead to further demand and pressure on existing resources and capacity.

The applicability of PACER in its current form to areas outside the pilot area, particularly to rural and regional environments, is clearly an issue to explore further. Particular components of the PACER model that resonated with AMHS included embedding specialist mental health staff with police, and enhanced mental health telephone and support for first responders.

Developing a model that is tailored to the specific needs of consumers in particular areas and that aligns with the existing service networks and partnerships is another key enabler to expanding PACER or PACER components. Strong ownership of the current PACER project by local police and clinicians demonstrates the value of local police, clinicians and services driving the development and operation of a PACER or similar integrated police and clinical programs model.

The view from ambulance staff is of a far greater need for awareness and understanding of mental illness more generally through the service. The benefits of PACER in developing understanding and responsiveness of police to mental illness in the trial area could potentially guide improved engagement and involvement of Ambulance.

Chapter 6

Conclusions

The policy and legislative context for emergency response to mental health crises in the community provides clear direction for government priorities in giving effect to policy. Priorities for Victorians with severe mental health problems include:

- access to timely, high quality care and support to live successfully in the community;
- early intervention to avoid escalation and minimise harm to the individual, their family, carers and the wider community;
- consumer centred service provision;
- access to a stepped range of care options providing the least intrusive care and including emergency response when required;
- streamlining service access and emergency responses; and
- minimised restrictions on liberty and interference with rights, dignity and self-respect.

These priorities accord with consumer and carer perspectives on the needs of people experiencing a mental health problem. There is strong support for a response to severe mental illness that promotes consumer:

- participation in decision making;
- timely access to treatment and referral; and
- alternatives to compulsory sectioning or hospitalisation.

From the literature, consumers and carers also express high levels of satisfaction with their experience of integrated models of police and mental health crisis response. What consumers cite as being important to their recovery from a mental health crisis closely aligns to the objectives of dual police and mental health secondary response programs.

The current trial of the PACER project commenced in August 2009 and operates as a trial limited to the Southern Health region of metropolitan Melbourne and the corresponding police zones of the Southern Metropolitan Region. The project is a secondary response to mental health crises in the community attended by police. PACER is a dedicated service delivered by a police member and a mental health clinician drawn from their respective agencies to provide a daily service targeted to times of high demand.

When compared to usual service provision in the comparator site, it was found that the PACER project:

- provided more timely access to mental health assessment for the person in crisis reducing time to assessment on average from three hours to one hour;

- released the police first responder unit more quickly in about one third of the time usually taken enabling them to be available to meet other community requests for assistance;
- demonstrated a more streamlined approach to emergency response with information sharing of police and mental health databases and networks informing PACER advice to police, patient assessment and referrals, and updates to police and mental health case histories;
- utilised ambulance services more often than police transport where patient transport was required, giving effect to the protocol for transport of mental health patients and consistent with the least restrictive method;
- achieved fewer referrals to hospital emergency departments with about one quarter of the proportion of usual referrals presenting to emergency departments, showing the increased options and more tailored response available through the earlier intervention provided by PACER;
- showed a reduced length of stay in hospital emergency departments for mental health patients of two hours on average suggesting that information available to emergency departments on transfer has facilitated assessment and treatment; and
- was cost effective based on the assumptions that underpinned the data analysis and notwithstanding the data limitations discussed in the report.

In considering the broader application of the lessons learned from the PACER pilot, feedback from all stakeholders supports:

- improved arrangements for management of mental health crises in the community that will result in the more appropriate use of police, mental health and health resources to achieve better outcomes for persons in crisis;
- adaptation of any new collaborative arrangements to take account of local differences in demand for services, service arrangements, existing inter-agency arrangements and distances;
- changes that benefit sharing of information and improved understanding of agency roles and responsibilities; and
- systematic and ongoing workforce development to better support police and ambulance responses generally to mental health crises.

A more robust evaluation of the PACER project would be assisted by:

- a consistent definition across emergency services datasets of mental health crisis;
- information about total police call outs for mental health crises;
- a comprehensive police dataset to align incidents that would meet PACER call out criteria;
- mental health triage data about the frequency, nature and outcome of assistance sought from police and ambulance services;

- more comprehensive ambulance data to include identification of patients referred by PACER as well as incidents meeting the mental health criteria that had some police involvement;
- investigation of police use of force data detailing the nature of force used;
- capacity to better understand the repeat nature of call outs to mental health crises, the extent to which they are potentially avoidable and to map patient outcomes beyond hospital emergency departments; and
- ability to canvass the views and experiences of Victorian consumers and carers.

While outside the scope of this report, it is noted that a large number of ambulance transports of people with a mental health problem and with no police involvement recorded is captured in Ambulance Victoria data. In the 16 month period of this analysis, ambulance transport to hospital emergency departments (without police involvement) totalled 2,070 in Eastern Health and 1,978 in Southern Health. As a reduction in the need for transport generally is associated with PACER, which also affects the demand on ambulance transport, there may be value in exploring the extent to which earlier access to mental health advice (either improved use of existing supports or a tailored intervention) could benefit the use of ambulance resources.

As referenced in the Victorian Auditor-General's Report (VAGO 2009), it is noted that Victoria Police is undertaking:

- analysis of all police transfers of persons to health facilities under s10 including method of transport, assessment sites used and wait times for services; and
- analysis of use of force information and the relationship to persons with mental illness.

In addition, Ambulance Victoria and Victoria Police have collaborated with Monash University on the development of a training DVD and materials on the joint service response to a person in mental health crisis that will be used in paramedic and police training.

Further work is suggested by the findings of this evaluation, on how the PACER model might be adapted to meet local community needs, service configurations, existing collaborations and resources. Generally, there is a high level of frustration about current arrangements in responding to mental health crises in the community and a recognition that improved inter-agency collaboration can contribute to better outcomes for persons requiring mental health support.

Appendix A

Stakeholders consulted

Table A.1

STAKEHOLDER CONSULTATIONS

Agency	Input	Participant
Area Mental Health Service	Transferability of PACER model	Michael Bruce, Manager Consultation, Crisis and Liaison Services, Inner West AMHS
		Marty Andison, Assistant Director of Nursing, Bendigo Health, Loddon AMHS
		Donal Twomey, Manger CATT, Mid West AMHS
		Alan Carlow, Peninsula AMHS
		Georgina Gioskos, CATT Manager, Inner East AMHS
		Kathryn Henderson, CATT Manager, Alfred Hospital, Inner South AMHS
		Bronwyn Lawman, Central East & Outer East AMHS
		Andrew Quayle & Stefan Anderson, North East Hume AMHS
Victoria Police	PACER operation, strengths & weaknesses	Dr David Huppert, Dr Jeremy Sheppard, Michael Rogers, Tracey Morgan, Southern Health
	Transferability of PACER	Acting Deputy Commissioner Lucinda Nolan Assistant Commissioner Luke Cornelius Superintendent Kevin Casey
	PACER operations, strength & weaknesses	Paul Campbell, Senior Sergeant, Moorabbin Police Station Peter Jarvis, Dominic Loughman, Moorabbin Police Station
	Frontline police issues & impact of PACER	Shaun O'Donnell, Rachel Dunn, Moorabbin Police Station
Ambulance Victoria	Paramedics challenges, PACER impact, agency collaboration	Kevin Dowie, Glenn Stevens, Metropolitan Melbourne Richard Newton, Wayne Howat, Regional Victoria (Ballarat)
	PACER strengths & weaknesses, transferability	Tony Armour, Clinical Support Officer Carmel Rogers, Paramedic Team Manager Bayside

Table A.2

DISCUSSIONS WITH DATA MANAGERS/AGENCY LIAISON PERSON

Agency	Contact
Department of Health	Tracey Burgess, Manager Information, Analysis and Reporting unit
Victoria Police	Eva Perez, Manager, Mental Health Strategy project
Ambulance Victoria	Kevin Masci, Executive Manager Operational Quality and Improvement Dr Karen Smith, Manager Research and Evaluation

Table A.3

PACER EVALUATION PROJECT REFERENCE GROUP

Name	Position
Alison Fraser	Senior Policy Manager, Housing & Community building, Department of Human Services
Eva Perez	Manager, Victoria Police Mental Health Strategy project
Karen Bourke Fin	A/Manager Triage, Consultation & Liaison, Court Liaison and Brief Intervention Program, Barwon Health
Kevin Masci	Executive Manager, Operational quality and Improvement, Ambulance Victoria
Paul Leyden	Associate Program Director, Director of Nursing, Eastern Health
Robyn Lidston	Senior Project Officer, Ambulance and Emergency Programs, Department of Health (DH)
Susan Adam	Mental Health Carers Network – Carer Representative
Tony Salter	Victorian Mental Illness Awareness Council – Consumer Representative
Jenny E Collins	Manager, Adult & Older Persons Mental Health, DH
Basia Sudbury	A/Project Manager, Adult & Older Persons Mental Health, DH

Table A.4

PACER EVALUATION PROJECT MANAGEMENT GROUP

Name	Position
Jenny E Collins	Manager, Adult & Older Persons Mental Health, Mental Health, Drugs and Regions (MHDR) Division, DH
Molly McCarthy	Senior Policy Officer (Evaluation), Mental Health Reform Strategy Team, MHDR Division, DH
Usha Mudaliar	Senior Project Manager, Child & Youth Mental Health, MHDR Division, DH
Bill MacDonald	Manager, Child & Youth Mental Health, MHDR Division, DH
Bee Mitchell-Dawson	Senior Clinical Advisor, Office of the Chief Psychiatrist, MHDR Division, DH
Basia Sudbury	A/Program Manager, Adult & Older Persons Mental Health, MHDR Division, DH

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