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ORIGINAL ARTICLE

Cairns Mental Health Co-Responder Project: Essential elements and challenges to programme implementation

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ABSTRACT: *In Australia and internationally, co-responder models are becoming an increasingly common intervention to respond to police callouts where there is an assumed mental health-related component or crisis. This type of model involves a collaborative approach where trained police officers team with mental health clinicians to provide specialized responses in order to improve outcomes for persons with mental illness. However, there is limited understanding as to major elements required for implementation of the model. This study aims to identify the essential elements and challenges in implementation of the Mental Health Co-Responder Project in Cairns, Australia, where the team consists of a mental health nurse with demonstrated competencies in crisis intervention and a specially trained police officer. In 2016, 39 participants completed semi-structured interviews regarding knowledge and experience of the Cairns co-responder model. The participants represented first responders and community-based service providers who work with and support persons living with mental illness. Using a thematic analysis approach, key elements identified as essential to successful project implementation were as follows:*

- co-responder team characteristics,
- senior and project executive level support,
- collaborative project governance, and
- co-location of the team within a mental health setting.

The main perceived challenges to project implementation included the following: initial concerns regarding client confidentiality, lack of an evaluation plan, and adequate project resourcing. Governance through a vigorous joint agency operation committee and adequate resourcing is imperative to the sustainability of this model.

KEY WORDS: *co-responder model, law enforcement, mental health, police and mental health.*

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INTRODUCTION

Police and ambulance officers are frequently the first responders to mental health crises in the community. These instances have been defined as those where there are safety concerns for the person with mental illness (PMI) and/or members of the public. These safety concerns may be associated with significant confusion, depression, or functional decline for the PMI (Bonynge *et al.* 2005; Schwarzfeld *et al.* 2008). Interactions between police and PMI in these crises are recognized as having risks to both parties including the overuse of involuntary assessment orders (Meehan & Stedman, 2012), trauma for individuals in crisis, and their families, and more rarely, in use of lethal force by police if they are hampered by limited response options (Wood & Watson, 2017). Models for specialized responses have been developed by police to enhance community safety and improve outcomes for PMI. These include the use of Crisis Intervention Teams (CIT), also known as the Memphis model, comprised of police officers with special mental health training (Puntis *et al.* 2018; Watson *et al.* 2008; Watson & Fulambarker, 2012) or the collaborative co-responder model which combines the skills of specially trained police and mental health clinicians working together to provide a joint response to a mental health crisis situations (Kerr *et al.* 2010; Schwarzfeld *et al.* 2008; Shapiro *et al.* 2014). The co-responder model of mental health community triage takes two approaches: that where the mental health professional attends the incident with the police, or alternatively, provides assistance remotely from a police control (or communications) room (Puntis *et al* 2018).

Based on internationally recognized models of best practice (Reuland *et al* 2009; Schwarzfeld *et al.* 2008), the Australian Cairns Mental Health Co-responder Project (CMHCP) commenced in 2011 (Fitts & Robertson 2017). The project is a collaboration between Queensland Health (QH) and Queensland Police Service (QPS), supported by Queensland Ambulance Service (QAS). There are currently several co-responder approaches either under consideration, or in development or implementation phases in regional and urban settings across Australia (Fitts & Robertson 2017; Huppert & Griffiths 2015; Puntis *et al.* 2018; The Allen Consulting Group 2012). To inform these efforts, this paper reports on key elements perceived to be essential to successful implementation of the CMHCP. Additionally, we report on perceived challenges to project implementation and recommendations for improvement.

Context and background to the development of the service

Cairns is a regional centre, about 1700 km north of Brisbane, in the far north of the state of Queensland with a permanent population of 156 000. Approximately ten per cent of the Queensland population identifies as Aboriginal and/or Torres Strait Islander, compared with 2.8% of Australia's population (Australian Bureau of Statistics 2017). Authorised Mental Health Services, according to section 15 of Queensland's *Mental Health Act 2000* (Queensland Government 2000), repealed in March 2017, were primarily public hospitals and associated facilities. Authorised Mental Health Services in the Cairns region at the time of this study included inpatient and specialist mental health units at the city's base hospital.

The proposal to implement a co-responder model in Cairns arose from inter-agency discussions as part of an ongoing mental health strategy, the Queensland Mental Health Intervention Project (MHIP; Queensland Health 2014a). Commencing in 2006, MHIP represents a tri-agency partnership between QPS, QH, and QAS and utilizes Mental Health Collaboration Memoranda of Understanding designed to guide inter-agency collaboration. These formal collaborations aim to provide a more coordinated agency response to mental health crises, ideally resulting in harm prevention and safer crisis resolution (Meehan & Stedman 2012). Under this initiative, mental health crisis intervention training for first-response police officers commenced across the state and local inter-agency committees, or Operational Liaison Committees (OLCs), were developed (Queensland Health 2014b). Attended by senior management representing the partner agencies, the OLCs provide a forum to review incidents, identify local solutions, and discuss methods to improve collaborative protocols and processes. From the outset, the CMHCP has been directly managed by Cairns-based QH and QPS service representatives leading the ongoing OLC meetings.

The service area of the CMHCP extends ~25 km (17 miles) to the north and south of the city, with hours of operation limited to Monday to Friday from 8 am to 4.30 pm. The service is located within a QH Acute Care Team (ACT) for mental health. The CMHCP team is comprised of a co-located QH mental health nurse, also an Authorised Mental Health Practitioner (AMHP) drawn from the ACT, and a uniformed police officer. The team shares private office space, a police radio, and an unmarked vehicle, with a further

radio and dedicated phone provided by QAS. These resources enable an immediate and appropriate response to calls for assistance by emergency and other services attending people potentially in a mental health crisis in the community. Under the MHIP Memorandum of Understanding (MOU) between QPS and QH (Queensland Government 2011), individual QH and QPS databases are directly and separately accessed by the team members, in order to verbally share consumer information about the PMI permitting risk assessments of events they may attend. The team then provides assessment, treatment, and on-scene support as required. Intervention by the CMHCP may result in the use of alternatives to involuntary assessments in hospital Emergency Departments. Other CMHCP duties include preventative or training components, community networking, and intervention planning for high-risk PMI including transport to hospital or development of inter-agency care plans.

METHODS

Design

The original review framework included a combination of qualitative and quantitative methods to examine both the processes in the development and implementation of the model and its impacts (Fitts & Robertson 2017). This paper analyses and reports on the semi-structured interviews conducted with key stakeholders for the review. The review was guided by a Reference Group drawn from key stakeholders involved in the development and operation of the CMHCP. A pragmatic approach (Cherryholmes 1992) was taken by the review reference group in informing the development of principal domains to explore in the semi-structured stakeholder interviews. In order to inform improved project implementation, the domains reported here include essential project elements, challenges to project implementation, and recommended improvements.

Participants

Purposive recruitment ensured participants reflected a range of position levels within the project partner agencies and included representatives selected from a range of mental health, first responder, and social services currently engaged with the project. Interviews were sought with those who had longer term experience with the project. Mental health consumer advocacy group representatives were also included. Participants were recruited by the authors utilizing existing networks and acting on advice from Reference Group members. This purposive sampling was coupled with a snowball approach asking each participant at the end of the interview to recommend further participants. Interview participants from both QH and QPS were selected based on their knowledge of the CMHCP in order to capture information regarding the development and implementation of the CMHCP model. A range of hospital and community-based clinicians and operational managers represented QH mental health services. QPS staff included Executive Officers and Senior Non-commissioned Officers across Divisions. QAS staff included senior and executive level staff and one former paramedic. Other participants were selected from a range of social services that were currently engaged with the CMHCP. There were 39 participants participating in 32 interviews (Table 1).

Data collection

All interviews were conducted by authors JR and MF, with the majority of the interviews face-to-face and ten conducted by telephone. Three interviews were undertaken as focus groups at the request of service provider management in order to reduce impact on staff service time using the same domains used in interviews with individuals. Interviews were recorded and transcribed, except in one interview where the participant requested not to be recorded and instead, handwritten notes were taken by the interviewer. The de-identified handwritten and transcribed audio-taped interviews were imported into Nvivo 10, used to develop and manage a structured coding system (Bazely & Jackson 2013). Interviews were primarily participant-led, using exhaustive probing to generate rich qualitative data. An interview guide was used to ensure all topics were discussed. Interviewing stopped when authors JR and MF agreed that there were no new perspectives being generated.

Data analysis

Data collection and analysis were conducted sequentially. Thematic analysis was undertaken applying the constant comparison method (Glaser 1965). Initially, authors JR and MF each coded the transcripts independently to develop provisional themes. Inductively derived codes were then generated as the analysis continued. Discussion of the coders' provisional coding schemes continued until agreement was reached on the primary codes. A more detailed hierarchical coding

scheme was developed on the basis of this initial analysis. During the coding, detailed code descriptors were developed and revised following further discussion. Regular meetings were also held between the research team (JR and MF) and the reference group members to discuss the themes arising. Recording and continually reflecting on the data and the development of the code descriptors ensured transparency in the process.

Ethics approvals

Approvals were obtained from Far North Queensland Human Ethics Committee, QPS Research Committee, and the Office of the Commissioner, QAS.

RESULTS

Results are presented according to the domains relating to project implementation set by the project review Reference Group, that is essential project elements, challenges to project implementation, and suggestions for project improvement. Below each of the domains is the major themes, arranged in descending frequency of mention below. The presented quotes from participants are those that typify and illustrate each theme. These direct quotes are followed by abbreviations denoting participant stakeholder service type: MH (Mental Health); HS (Homelessness Service); MHCA (Mental Health Consumer Advocacy); A (Ambulance); and P (Police).

Essential project elements

The four subthemes identified as essential elements to the CMHCP were: co-responder team characteristics, collaborative project governance, senior and executive level support, and co-location. Perceived challenges to project implementation included client confidentiality, lack of an evaluation plan, and resource priorities.

TABLE 1: *Stakeholder groups and services participating in individual and focus group interviews for the review of the Cairns Mental Health Co-responder Project*

Stakeholder group	Service type	Number of interviews	Number of participants
Health	Mental Health	7	8
	Ambulance	4	4
Law Enforcement	Police	10	11
Social Services	Mental Health Support	5	9
	Mental Health Consumer Advocacy	3	3
	Youth Services	1	1
	Homelessness	2	6
Total		32	39

Co-responder team characteristics

Team characteristics, including project personnel characteristics and competencies, were identified by participants as important contributors to project implementation. The most frequently mentioned characteristic was demonstrated competency in managing mental health crises in the community. As the following quotes illustrate, participants associated the co-responder model team's qualities and interest in mental health with the success of the model:

> We had the two right people [CMHCP team] who were both excellent and had the right skills and passion to make this work and devoted a lot of extra time in to support people and were allowed to do that. (HS)
> So with the Queensland Police Service it definitely has to be the right person, they, I guess they have to have a passion to work with this cohort. (HS)

Of equal frequency of mention were the personal experiences of members of the team regarding mental health crisis. As illustrated by the following quote, participants viewed the police officer's lived experience with a family member as imperative to how the team operates:

> But we got … [the police officer] and she's got a lived experience, not herself but she has family people who, she comes at it from a different perception. Her thinking is around 'if that was my family member, what would I want to see happen?' (MHCA)

Executive and senior level support across participating agencies

In this study, executive and senior level is defined as those service staff having high-level administrative, decision-making, and supervisory authority and includes those at senior operational management level across agencies. Participants noted the presence of strong drivers of the project at senior management level. As illustrated by the following quote, robust support from the executive levels of all collaborating agencies was perceived as crucial to successful implementation of the co-responder model:

> I think you have to have the buy in of command. The executive has got to be supportive of it to start with.' (P); 'If you have got senior people in each of the organisations that are promoting it [the CMHCP] then it's able to maintain a life. (MH)

Collaborative project governance

The collaborating agencies in this project, as described earlier, are police, mental health, and ambulance services. The platform which provided a face-to-face forum to manage the CMHCP was reported by participants to be the OLC meetings (see Fig. 1). While the OLC is not a dedicated planning committee for the CMHCP, the co-responder model project was reported by participants has having remained a regular agenda item in this forum which supported and strengthened the governance of the model:

> You have got to have a strong OLC to be able to govern it [the CMHCP], you know and to provide that direction and... and a good relationship between the manager of the police officer and the manager of the mental health clinician. (P)

Participants reported operational issues identified by front-line police, ambulance, and mental health staff responding to crises, including the CMHCP team, were bought to the notice of respective senior management attending OLC meetings. In this forum, issues were described as being swiftly and pragmatically addressed from the point of shared service perspectives:

> We [senior staff across QH, QPS and QAS] meet every six weeks... we solve problems with regards to, if there is an operational issue – police treated poorly at the ED, ambulance officers have got a complaint about the way police responded, whatever the case may be, then what it [the OLC] does, it allows us at that senior operational level to be able to resolve those issues and get the information back to staff involved. And it's been particularly, well, from my perspective, it's been particularly successful in that regard. (P)

Further, ongoing feedback regarding the CMHCP was returned from OLC meetings to executive staff in each service represented. These lines of communication described by participants are depicted in Figure 1. Further, participants reported that this forum has increased levels of trust between QH and QPS, perceived to be vital to the sharing of sensitive information covered by the state-wide Mental Health MOU from their own confidential service databases.

Co-location

Co-location in this instance refers not only to the sharing of office space by the CMHP team members who are employed by two separate services, but also to their placement within the premises of the mental health Acute Care Team.

Co-location was reported to have multiple benefits for the team members. It provided reciprocal learning opportunities between QH and QPS staff as the following quote illustrates:

> ...the information we gain here is the vital stuff...the important part of the co-location is learning, that really fast learning of how to talk to people on their level in their language, and also a lot of my role is translation, I translate mental health to police and I translate police to mental health. (P)

Being base specifically at QH was considered to provide additional supports to project staff that they may not receive at a QPS location including clinical support and supervision as illustrated by the following quote:

> I think it is a lot more efficient to have them [the CMHCP team] sitting in the position with the ACT. They can come back and forth if they have got a clinical concern we have got set meetings where they can come to talk about if they need some [clinical] supervision so that's difficult if you are off site...If you are onsite you just sort of have a working relationship that you lose once you are in a different building. (MH)

The co-location with QH also reduced operational challenges that could have been associated with locating the team within police premises compared with co-location on police premises:

> We ended up sticking with the police officer being embedded in Queensland Health because I think it provided a better level of interaction...I don't know that it would have worked as well because of police operations in general, so you have got all these activities going on and you are going to try and embed a civilian in the middle of that. (P)

Challenges to project implementation

The subthemes related to challenges to project implementation included the following: client confidentiality, lack of an evaluation plan, and resource priorities.

Client confidentiality

Participants reported there were initial concerns regarding potential compromise of client confidentiality through sharing of sensitive information between police and mental health staff:

> Always [concerns] around people's reluctance about well, what's, you know, the privacy of clients and what information can be shared. (MH)

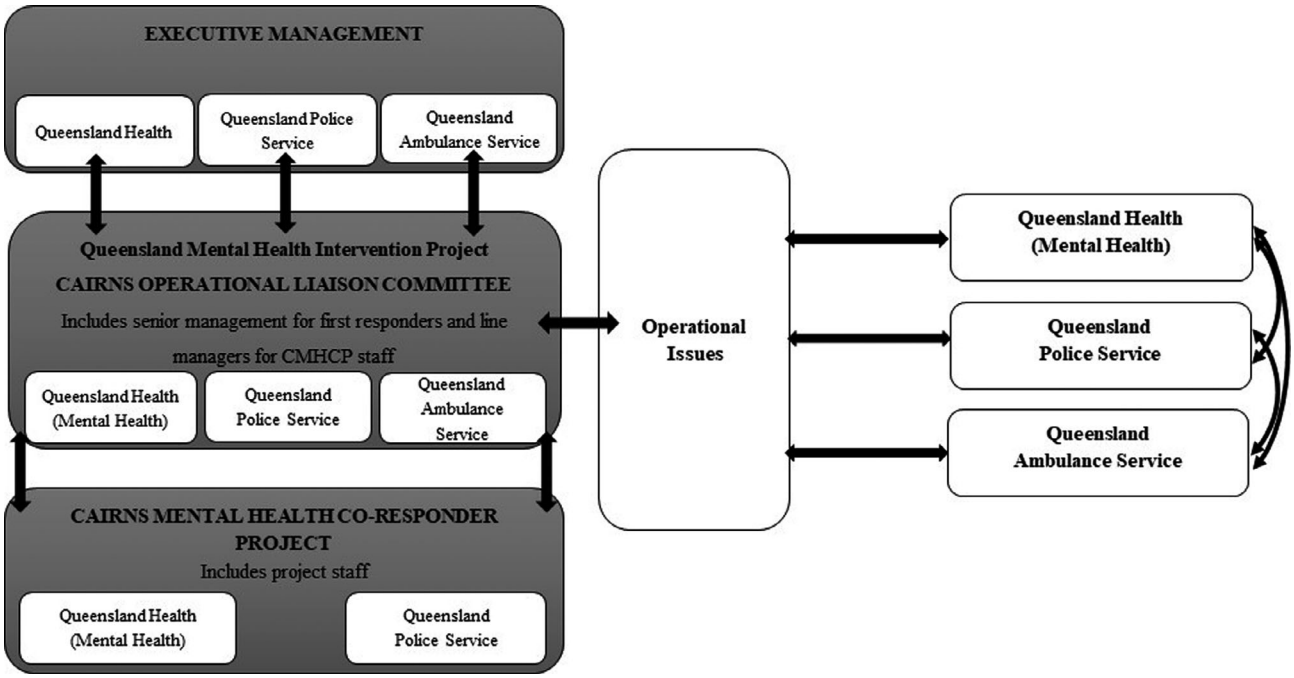

FIG. 1: *Lines of communication (indicated by black arrows) between the Cairns Operational Liaison Committee, first responders including Cairn Mental Health Co-responder Project staff and executive management of participating service providers.*

> And also there was a big adjustment about confidentiality issues and why we are using, why are we having police go to talk to mental health patients. (P)

These concerns were reported to have been overcome by the co-location of project staff in a private office, where exchange of information was verbal and related to risk assessment only and the building of trusting relationships between police and mental health staff. This was further strengthened as improved client outcomes were demonstrated:

> It was a period of trust building and to show that it really was useful, it was useful to them and it helped and in the end actual people got help which we would probably would never have been able to have helped in the past'. (P)

Lack of an evaluation plan

While participants advised Queensland Health had undertaken a multiple method quality audit of the project at the completion of the initial six-month trial period, a major challenge identified was the lack of an evaluation plan from the outset: *'I think the challenge the whole way along has, I think when it was set up it was set up without any real idea of how to evaluate it down the track'.* (MH) Further, participants reported existing data systems, including shared and service-specific indicators, did not adequately reflect the activities and outcomes of the project. This was thought to be partly due to system changes across services over the life of the project and also lack of consistent data entry. However, there was agreement between police and mental health service participants that the number of EEO's generated by the police and ambulance was accessible data *'. . .there is data freely available around that, the number of EEOs that, as you do an Emergency Examination Order, well the Police do, or Ambulance, . . . and there is data for any available in Mental Health Directors Report about those numbers'.* (MH).

The number of EEO's generated in the region was identified by participants as reflecting the impact of the co-responder project in both a reduction of overall numbers for Cairns and the amount of work saved for police: *'. . . out of all of the EEOs [the CMHCP team] were doing a third of those, . . ., a third of the effort of that whole patrol group was being done by one crew. Now that's, that changes a little bit, it goes up and down, but that was a key, indicator'.* (P).

Resource priorities

A further identified challenge has been the lack of adequate resourcing for the project staff. Participants advised the mental health clinician is currently funded

by MHIP, and leave is covered by members of the multi-disciplinary ACT. However, at the time of the review, the police officer was a position on loan from another division: *'The challenge we have got at the moment is there is no funded [police] position for the job. So as I said we are taking an officer from somewhere else'.* (P) This was reported to have resulted in difficulties in provision of cover for leave and mandatory training, at times leaving the project short-staffed and unable to respond to crisis events.

Suggestions for project improvement

The chief recommendation reported by almost half the participants across services was an extension of hours of operation, in order to cover peak times of need: *'I don't think you could improve on it because what they are gold…I think the only thing we can do is grow it and replicate it…we need it available more hours of the day and I think from the ambulance point of view given the growth of mental health and the growth in suicide and the growth in ice addiction'.* (A) Several participants noted the need for a core QPS position at a rank that recognizes the high level of risk and responsibility, and sufficiently resourced to provide access to further mental health training. Further suggestions included rotation of other interested police officers through the CMHCP in order to have a larger recruitment pool for project cover.

DISCUSSION AND RECOMMENDATIONS

In keeping with international and Australian evidence regarding co-responder models, the review of the CMHCP reported positive outcomes for PMI including improved experiences with both police and mental health service staff, reduced trauma and stigmatization, and less use of force. The CMHCP resulted in de-escalation and prevention of crisis situations including potential siege situations and a reduction in use of involuntary assessment procedures (Fitts & Robertson 2017). Of economic value reported in both the CMHCP review and similar programmes in Victoria (The Allen Consulting Group 2012) and south-east Queensland (Meehan *et al.* 2019) was the substantial number of man-hours saved for first responders and Emergency Department staff through the diversion of PMI from hospital. This was largely due to a reduction in use of EEOs (now Emergency Examination Authorities due to changes in the legislative framework (Queensland Health 2005) as a result of the provision of alternatives by the CMHCP team following their triage in the community. Conversely, as with the Victorian model, funding and workforce constraints remain a challenge. The lack of specified and recurrent funding hampers further recruitment and implementation of the project in other regions. Limited to operating within business hours, the CMHCP cannot currently cover all peak hours of need, although plans are in place to change hours of operation between 12 midday and 10 pm seven days per week, enabled by planned provision of two CMHCP teams, with police components drawn from a pool of officers who have completed mental health crisis intervention training.

Identified elements crucial to underpinning the design and implementation of these specialized response programmes include the following: collaborative planning and implementation, specialized training for project team members; information exchange and confidentiality, treatment, support and connection with appropriate community-based services; and organizational support and programme evaluation and sustainability. (Schwarzfeld *et al.* 2008).

Collaborative planning and implementation by the partner agencies was perceived to also be key to the programme's achievements. Factors identified as crucial to successful inter-agency collaborations include relationships based on trust, mutual benefit, and aims. Further factors include governance structures that permit innovation, and governance structures that allow for joint decision-making, resourcing and the development of appropriate performance indicators (Australian Research Alliance for Children & Youth 2013). The sustained activities of the pro-active Cairns OLC provided an opportunity for senior level joint decision-making and coordinated intervention. The long-standing professional relationships reported between representatives of participating agencies in Cairns, with an established willingness to collaborate, are likely to be a factor in the success of this forum. As noted by a witness in a 2017 State Coroner's inquest into police shootings of five people with known or suspected mental illness: 'the progress of the MHIP relies primarily on the goodwill of those who operate within it' (Queensland Coroners Court 2017). Recommendations from this inquest included a call 'to revitalise MHIP but embedded in a sustainable way in those agencies' (Queensland Coroners Court 2017). The results of this study indicate that a vigorous OLC provides opportunity to develop and guide successful collaborative programmes with positive outcomes for PMI and related service providers. Additionally, the efficient information

feedback loop (Figure 1) between front-line staff and senior and executive management contributed to the rapid resolution of operational issues. Inter-agency commitment to the CMHCP has been demonstrated by ongoing approvals for the re-allocation of existing resources to the project by QPS. In 2014, QAS strengthened commitment to more effectively utilize the project.

While high-level support for the CMHP project was identified as a crucial element of effective project implementation, a further consideration is the immediate support of the project staff working constantly within a crisis intervention environment. The current literature demonstrates that effective clinical supervision for mental health nurses plays a vital role in improving job satisfaction and reducing stress and burnout (Edward *et al.* 2006; Hyrkas 2005). The CMHCP team members interviewed acknowledged that co-location of the project within an ACT ensured easy access to this essential supervision as well as ongoing reciprocal learning opportunities. Further, given the importance of consistency of staffing accorded by interview participants, specific measures to prevent staff burnout and frequent turnover should be considered during project planning.

A recent review of crisis resolution teams recommends that team characteristics include the capacity to communicate and integrate with other mental health services; provide treatment at home; limit the number of different staff visiting the PMI; and provide a rapid crisis response (Wheeler *et al.* 2015). The CMHCP co-location of the team in an ACT and strong inter-agency networking initiatives contributed to effective referral and follow-up systems. The AMPH on the team is a mental health nurse drawn from the Cairns ACT, with the required demonstrated competencies as stated in the Chief Psychiatrist's Policy under the Mental Health Act of Queensland to assess and refer a person suspected of having a mental illness for examination by a psychiatrist (Queensland Health 2016). The police officer had undertaken crisis intervention training. At the time of the 2017 project review, both team members contributed to ongoing crisis intervention training to police officers and other service providers. Not only do the combined skills of the CMHCP team directly contribute to improved outcomes for PMI and saved man-hours for service providers but their training efforts also ensure capacity building among first responders in the region. This ongoing crisis intervention training ensures that police will have a larger pool of appropriately trained officers to draw on to staff proposed extensions of the CMHCP.

A major perceived challenge to CMHCP implementation has been the lack of an evaluation plan. While there has been an increase of the co-responder model in the United States, Canada, UK, and Australia, there remains a lack of rigorous research on the effectiveness of the model, particularly with regard to health outcomes (Parker *et al.* 2018; Puntis *et al.* 2018). CMHCP activities are logged by police and mental health team members into the respective data systems of health and police services, neither of which accurately reflect the total outputs of the CMHCP, particularly non-crisis-related activities, thereby hampering any quality improvement efforts. Project outputs common across police, mental health, and ambulance services have, to date, been limited to capturing numbers of EEOs. Annual EEO presentations to Queensland hospitals that are AMHS's between 2011 and 2015 demonstrate an upward trend in the majority of hospitals (Queensland Health 2012, 2014c, 2015 . Cairns is one of the four Queensland hospitals showing a downward trend in this time-frame, which support participant comments regarding a decrease in the use of EEO's due to the work of the CMHCP. However, there is a demonstrated need for the development of further shared project performance indicators across participating agencies.

Based on the findings reported here and the literature relevant to specialized policing models, the following recommendations are made for the development of collaborative specialized responses to mental health crises in regional settings.

1. All collaborating agencies strengthen commitment to the tri-agency approach between health, police, and ambulance services including regular participation in existing local operational committees.
2. To ensure long-term sustainability, models should be adequately resourced with designated positions from lead agencies sufficient to cover hours of peak demand.
3. Consideration of placement of the project staff within an acute care mental health team is recommended in order to improve access to clinical supervision and provide further reciprocal learning opportunities.
4. Programme performance indicators that can both accurately reflect project outputs and be shared across participating agencies should be developed collaboratively to ensure appropriate evaluations can be undertaken.

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REFERENCES

Australian Bureau of Statistics. (2017). Census of population and housing: Aboriginal and Torres Strait Islander peoples profile, Australia, 2016 (cat 2002.0) [Cited27 January 2019]. Available from: URL: https://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/2002.0?OpenDocument

Australian Research Alliance for Children and Youth (ARACY). (2013). Key Elements of Collaboration. Fact Sheet 5. Available from: URL: https://www.aracy.org.au/publications-resources/command/download_file/id/234/filename/Advancing_Collaboration_Practice_-_Fact_Sheet_5_-_Key_elements_of_collaboration.pdf

Bazely, P. & Jackson, K. (2013). *Qualitative Data Analysis with NVIVO*, 2nd edn. Los Angeles: Sage Publications.

Bonynge, E. R., Lee, R. G. & Thurber, S. (2005). A profile of mental health crisis response in a rural setting. *Community Mental Health Journal*, *41*, 675–685.

Cherryholmes, C. (1992). Notes on pragmatism and scientific realism. *Educational Researcher*, *21*, 13–27.

Edwards, D., Burnard, P., Hannigan, B. *et al*. (2006) Clinical supervision and burnout: the influence of clinical supervision for community mental health nurses. *Journal of Clinical Nursing*, *15*, 1007–1015.

Fitts, M. & Robertson, J. (2017). Review of the Cairns mental health co-responder Project. Cairns, Queensland: Centacare FNQ. [Cited 27 January 2019]. Available from: URL: https://www.centacarefnq.org/fileadmin/user_upload/Co-Responder_Review_Website_Version_2017.pdf

Glaser, B. G. (1965). The constant comparative method of qualitative data analysis. *Social Problems*, *12*, 436–445.

Huppert, D. & Griffiths, M. (2015). Police Mental Health Partnership project: Police Ambulance Crisis Emergency Response (PACER) model development. *Australasian Psychiatry*, *23*, 520–523.

Hyrkas, K. (2005). Clinical supervision, burnout and job satisfaction among mental health and psychiatric nurses in Finland. *Issues in Mental Health Nursing*, *26*, 531–556.

Kerr, A., Morabito, M. & Watson, A. C. (2010). Police encounters, mental illness and Injury: An exploratory investigation. *Journal of Police Crisis Negotiations*, *10*, 116–132.

Meehan, T. & Stedman, T. (2012). Trends in the use of Emergency Examination orders in Queensland since the implementation of the Mental health intervention Project. *Australasian Psychiatry*, *20*, 287–90.

Meehan, T., Brack, J., Mansfield, Y. & Stedman, T. (2019). Do police–mental health co-responder programmes reduce emergency department presentations or simply delay the inevitable? *Australasian Psychiatry*, *27*, 18–20.

Parker, A., Scantlebury, A., Booth, A. *et al*. (2018). Interagency collaboration models for people with mental ill health in contact with the police: A systematic scoping review. *British Medical Journal Open*, *8*, e019312.

Puntis, S., Perfect, D., Kirubarajan, A. *et al*. (2018). A systematic review of co-responder models of police mental health 'street' triage. *BMC Psychiatry*, *18*, 256–11.

Queensland Coroners Court. (2017). *Recommendations from Inquest: Inquest into the deaths of Anthony William Young; Shaun Basil Kumeroa; Edward Wayne Logan; Laval Donovan Zimmer; and Troy Martin Foster*. Brisbane, QLD: Queensland Courts. [Cited 31 March 2019]. Available from: URL: https://www.courts.qld.gov.au/__data/assets/pdf_file/0005/540590/cif-recommendationspoliceshootings-20171020.pdf

Queensland Government. (2000). *Mental Health Act 2000: Brief guide to the Act*. Brisbane, QLD: Queensland Government.

Queensland Government. (2011). *Memorandum of Understanding between the State of Queensland through Queensland Health and the State of Queensland through the Queensland Police Service Mental Health Collaboration*. Brisbane, QLD: Queensland Government.

Queensland Health. (2005). *Public Health Act 2005 Fact Sheet: Emergency Examination Authorities*. Available from: URL: https://www.health.qld.gov.au/_data/assets/pdf_file/0029/444980/emergency-examination-auth-fact.pdf

Queensland Health. (2012). Annual Report of the Director of Mental Health 2011–2012. Brisbane, Queensland: Queensland Government. [Cited 31 March 2019]. Available from: URL:https://www.police.qld.gov.au/corporatedocs/reportsPublications/statisticalReview/Documents/StatReview2011-2012.pdf

Queensland Health. (2014a). *Safe transport of people with a mental illness: Queensland interagency agreement*. Brisbane, Queensland: State of Queensland.

Queensland Health. (2014b). *Mental Health Intervention Coordinator*. Brisbane, QLD: Queensland Health. [Cited 14 January 2019]. Available from: URL: https://www.health.qld.gov.au/publications/clinical-practice/guidelines-procedures/clinical-staff/mental-health/reports/annual-report-2014.pdf

Queensland Health. (2014c). *Annual Report of the Director of Mental Health*. Brisbane, QLD: State of Queensland. [Cited 14 January 2019]. Available from: URL: https://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2014/5414T6701.pdf

Queensland Health. (2015). *Annual Report of the Director of Mental Health*. Brisbane, QLD: State of Queensland [Cited 27 January 2019]. Available from: URL: https://www.health.qld.gov.au/publications/clinical-practice/guidelines-procedures/clinical-staff/mental-health/reports/annual-report-2015.pdf.

Queensland Health. (2016). *Appointment of Authorised Doctors and Authorised mental Health Practitioner*. Brisbane, QLD: Queensland Government. [Cited 31 March 2019]. Available from: URL: https://www.health.qld.gov.au/__data/assets/pdf_file/0032/636854/cpp_appointment_ad_amhp.pdf.

Reuland, M., Schwarzfeld, M. & Draper, L. (2009). *Law Enforcement Responses to People with Mental Illnesses*. New York: Council of State Governments Justice Centre.

Schwarzfeld, M., Reuland, M. & Plotkin, M. (2008). *Improving Responses to People with Mental Illnesses the Essential Elements of a Specialized Law Enforcement-Based Program*. New York: Council of State Governments and Bureau of Justice Assistance.

Shapiro, G. K., Cusi, A., Kirst, M., O'Camp, P., Nakhost, A. & Stergiopoulos, V. (2014). Co-responding police-mental health programs: A review. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*, 606–620.

The Allen Consulting Group (2012). *Police, Ambulance and Clinical Early Response (PACER) Evaluation*. Melbourne, Vic.: Victorian Department of Health and Human Services.

Watson, A. G. & Fulambarker, A. (2012). The Crisis Intervention team model of police response to mental health crises: A primer for mental health practitioners. *Best Practice Mental Health*, *8*, 71.

Wheeler, C., Lloyd-Evans, B., Chuchard, A. *et al*. (2015). Implementation of the Crisis Resolution Team model in adult mental health settings: a systematic review. *BMC Psychiatry*, *15*, 74.

Watson, A. C., Morabito, M. S., Draine, J. & Ottati, V. (2008). Improving police response to persons with mental illness: A multi-level conceptualization of CIT. *International Journal of Law Psychiatry*, *31* (4), 359–368.

Wood, J. D. & Watson, A. C. (2017). Improving police interventions during mental health-related encounters: Past, present and future. *Policing and Society*, *27*, 289–299.