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Evaluation of the Assertive Community Child and Adolescent Mental Health Service Pilot in New South Wales

Final Report prepared for:
Mental Health and Drug and Alcohol Office, NSW Health

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Abbreviations

ACCAMHS	Assertive Community Child and Adolescent Mental Health Service
CALD	Culturally and linguistically diverse
CAMHS	Child and Adolescent Mental Health Service
CBT	Cognitive Behaviour Therapy
CGAS	Children's Global Assessment Scale
ED	Emergency Department
FTE	Full time equivalent
GP	General Practitioner
HDU	High Dependency Unit
HoNOSCA	Health of the Nation Outcome Scales for Children and Adolescents
HREC	Human Research Ethics Committee
ICU	Intensive Care Unit
IPU	Inpatient Unit
LHD	Local Health District
MH	Mental Health
MH-CCP	Mental Health Clinical Care and Prevention
NSW	New South Wales
PECC	Psychiatric Emergency Care Centre
SDQ-P	Strengths and Difficulties Questionnaire – Parent
SDQ-S	Strengths and Difficulties Questionnaire – Self
SPRC	Social Policy Research Centre
UNSW	University of New South Wales Australia

Executive Summary

This is the evaluation of the Assertive Community Child and Adolescent Mental Health Service (CAMHS) pilot which was run in three Local Health Districts (LHDs) in NSW. The evaluation involved qualitative in-depth interviews with a range of stakeholders as well as analysis of administrative data from NSW Health.

The overall findings of the evaluation were that the Assertive Community CAMHS model meets a clear need in service provision in NSW CAMHS. The main advantages of this model are that it provides a flexible service which can reach out to young people at risk of emergency department (ED) presentation or hospitalisation. The model works with the young people and their families as well as the service system, thus facilitating their engagement with service provision and support.

Where it was effectively implemented, the Assertive Community CAMHS model fitted well with other CAMHS services. Effective referral pathways were created between Assertive Community CAMHS and other parts of the service system.

The evaluation showed that there are indications that Assertive Community CAMHS may contribute to a reduction in ED presentations and in-patient stays in the LHDs in which it is implemented. The Assertive Community CAMHS model was found to be flexible and was adapted to meet the needs of the service environment in each of the three LHDs. In two of the LHDs the model has been through various iterations before a sustainable model was created.

Effective implementation was largely dependent on the leadership and commitment of senior and middle managers in the LHD. This included careful planning to fit the model into current service provision, recruitment and retention of well trained staff, and a good understanding of the model by Assertive Community CAMHS staff as well as the broader service system.

1 Introduction

1.1 Background

Studies in Australia and internationally confirm that although the prevalence of mental health difficulties amongst children and young people is high, the proportion of young people accessing services is low. The current child and adolescent mental health workforce in Australia is considered insufficient to be able to provide specialised programs based in secondary and tertiary settings (e.g. child and adolescent mental health outpatient and inpatients services) to all those in need. It has been recommended that alternative approaches be considered, including prevention and treatment programs that focus on addressing family, school or community systems (Sawyer et al., 2000).

According to the Mental Health and Drug & Alcohol Office (MHDAO) at the NSW Ministry of Health, approximately 17% of children and adolescents under 18 years (272,000 of 1.6 million) have mental health problems. The current CAMHS workforce cannot meet the needs of the NSW child and adolescent population and currently after-hours acute mental health services for children and adolescents are provided by over-stretched adult mental health community services. The current specialist child and adolescent ambulatory workforce has approximately 40% of the level of full time equivalent (FTE) positions recommended in the *NSW Health Mental Health – Clinical Care and Prevention (MH-CCP) Planning Model* (version 1.11) (NSW Ministry of Health, unpublished).The *Report of the Special Commission of Inquiry into Child Protection Services in NSW* (Wood, 2008) and the *Report of the Special Commission of Inquiry: Acute Care Services in NSW Public Hospitals* (Garling, 2008) both highlighted problems in accessing specialist child and adolescent mental health services for children and young people and their families in NSW.

Both in Australia and internationally, there has been a shift in child and adolescent mental health policy away from inpatient based service provision to community based service provision (World Health Organisation, 2001). The NSW State Plan, *NSW 2021: A plan to Make NSW Number One*, a 10 year plan that outlines the immediate priorities for action across the state, has identified the need to:

> Prevent hospital admissions by maintaining hospital avoidance programs under the Community Mental Health Strategy and develop models for strengthening community mental health response. (Strategy 2, Goal 11, Target: Improve outcomes in mental health)

This is in keeping with the *Mental Health Act 2007* (NSW) key principles of care and treatment which include:

> Consumers should receive the best possible care and treatment in the least restrictive environment enabling the care and treatment to be effectively given (Section 4A).

Given the shift in policy, there has been an increase in the introduction of alternative models of care for children and young people with severe mental health difficulties aimed at enabling the young person to be managed in the community. These models emphasise young people's strengths and focus on maximising their safety through the utilisation of family and local community supports. This is achieved through intensive, flexible and rapidly accessible care provided by specialist community-based Child and Adolescent Mental Health Services (CAMHS) (Simpson et al., 2009). In providing care within a community context it is hoped that support can be provided within a young person's local community, avoiding inpatient care and the associated negative impact on the young person and their family that occurs when a young person is removed from home (Simpson et al., 2009; Green & Jones, 1998).

2 The Assertive Community CAMHS pilot

Recurrent funding of $3.4 million was announced in the 2011 NSW State Budget to improve access to specialist child and adolescent mental health services within the community and provide better outreach services to families through the implementation of an assertive community CAMHS program.

2.1 Assertive Community CAMHS

Adult mental health services in NSW had successfully operated an assertive community response model of care for a number of years. Some Local Health Districts (LHDs) had attempted to stretch current funding to meet this need for children and adolescents; however, there was still a considerable gap in the provision of services to young people and few LHDs could provide such a service.

Mental Health – Children and Young People, at the NSW Ministry of Health, developed a service model for an Assertive Community CAMHS program to be piloted in three LHDs. The service model (see Section 2.2.2) was informed by similar assertive community CAMHS approaches in Australia and the United Kingdom. These included: the First BASE model in Queensland (Qld Health, unpublished); the Child and Adolescent Mental Health Intensive Treatment Service (ITS) in the United Kingdom (Duffy & Skeldon, 2012); and the Safety First Model in NSW (Bickerton et al., 2007). Each of these approaches had utilised a multidisciplinary team to provide timely, developmentally appropriate, and accessible community-based services to acute, high-risk children and/or young people and their families.

2.2 The NSW Assertive Community CAMHS pilot

2.2.1 Site selection

Three LHDs selected by MH – Children and Young People to receive recurrent funding to pilot the NSW Assertive Community CAMHS program. The LHDs were selected based on:

- the absence of CAMHS specific inpatient beds in the LHD
- low numbers of community CAMHS staff as identified by the MH-CCP planning model
- the absence of a CAMHS outreach service delivery model

2.2.2 Assertive Community CAMH Service Model

The service model outlined below was provided to each of the LHDs on commencement of the program.

The aim of the Assertive Community CAMHS program is to deliver mobile community acute mental health services that are consumer-sensitive, responsive and provide timely, effective and high quality care.

Target Group

The target group for this pilot is NSW children and adolescents under 18yrs who require an assertive community response mental health service. Services are provided for both individuals and their families.

Objectives

NSW is committed to improving access to CAMHS specific acute community services. The Assertive Community CAMHS Team can assist in reaching the following key objectives:

- Improve access to developmentally appropriate assessment and care
- Provide earlier access to specialist mental health care in the community for children, adolescents and families/carers
- Improve safety for young people, their families and service providers
- Provide care in settings more acceptable to young people and their families
- Reduce avoidable admissions to inpatient services and increase capacity for early discharge
- Reduce child and adolescent mental health emergency department presentations
- Improve coordination amongst service providers involved in emergency and acute mental health care of children and adolescents

Key Principles

The key principles on which the service model is based include:

- **Proactive:** The young person is given rapid appropriate treatment and support to prevent a crisis situation
- **Least amount of disruption:** Care should be provided as close to home as possible, reducing disruption to family, community supports and relationships
- **Minimise distress:** Responses are sensitive to the welfare of the child, young person and their family
- **Safety first:** Parents/carers can become actively empowered to keep their child safe

Components of the model

- Timely triage response
- Assertive approach to engagement: persistent approach with repeated attempts to make contact, including immediate follow-up of clients who did not attend
- Flexible approach: time and location of assessment and intervention(s) in community settings
- Planned intensive intervention: frequent clinical input (e.g. 3-5 contacts a week), and high staff to service user ratio until the need for intensive input is resolved
- Collaborative relationships: able to access other CAMHS professionals, and agencies as required in order to meet the needs of the young person and their family or carers

Service Delivery

The services these teams will provide include the assessment and assertive management of children and adolescents with acute mental health symptoms. The mobile CAMHS specialist assertive teams will be responsible for:

- triage
- initial assessments
- acute interventions
- brief interventions
- prompt child and adolescent psychiatric consultation
- intensive community care
- assertive early intervention through home-based treatment
- providing education and support to primary referrers including GPs, schools, police and community services to manage clients with acute needs
- linkages to physical health care

Staffing

The funded staff profile for the team includes 8.2 full time equivalent positions (7.2 clinical FTE and 1 non-clinical FTE), made up of the following professions:

- 1 FTE Clinical Nurse Consultant
- 2 FTE Clinical Nurse Specialists
- 1 FTE clinical psychologist
- 2 FTE allied health
- 0.4 FTE registrar
- 0.8 FTE staff specialist psychiatrist

Placement

The Assertive Community CAMHS Teams will be integrated into an existing CAMHS Community Team. This is imperative to ensure the smooth transition to longer term case management and clinical care for those who require it.

Partnerships

Teams will have important links to emergency services including acute inpatient units and Psychiatric Emergency Care Centres (PECCs); paediatric services; and after hours Mental Health response teams.

These partnerships will help to reduce avoidable hospital admissions and establish clear pathways to support better integration of services to provide intensive mental health care for children and adolescents requiring:

- prompt assessment and assertive acute stabilisation
- intensive short term follow-up following crises or relapse of their mental health condition
- assertive follow-up post discharge from mental health acute or non-acute inpatient units
- transition to alternate longer term community care if required

3 The Evaluation

This is the final report of the evaluation of the Assertive Community CAMHS pilot program. The Social Policy Research Centre (SPRC) at the University of New South Wales (UNSW Australia) was commissioned by the NSW Ministry of Health, Mental Health - Children and Young People, to conduct the evaluation.

3.1 Aims and objectives

The purpose of the evaluation was to assess:

- how well the program had been implemented
- how the introduction of the program had affected the provision of CAHMS services in the three LHDs in which the program was piloted: LHD A, LHD B, and LHD C
- the impact of the program on children and young people

Hence, the evaluation was comprised of both an implementation and impact evaluation.

3.2 Evaluation Questions

The main questions which formed the basis of the implementation evaluation were:

1. Was the program implemented according to the service model?
2. Did the program reach the intended target group?
3. How satisfied were stakeholders with the model of the program?
4. What impact did the program have on the service system and on the young people who participated?

The scope of the implementation evaluation included:

- the staff recruitment process to the Assertive Community CAMHS teams, including the level of recruitment, barriers and enablers to recruitment
- the role and function of the Assertive Community CAMHS teams, including whether there was a clearly defined role for the team within the broader CAMHS
- the delivery of the key components of the Assertive Community CAMHS model, including whether the triage response was timely, whether the response was assertive, whether the approach was flexible, whether the intervention was planned and intensive, and whether collaborative relationship were formed
- any barriers and enablers to establishing the Assertive Community CAMHS program

The main questions which formed the basis of the impact evaluation were:

1. What was the extent of the changes?
2. Did the introduction of the Assertive Community CAMHS Teams make a difference?
3. Were there any unintended outcomes?

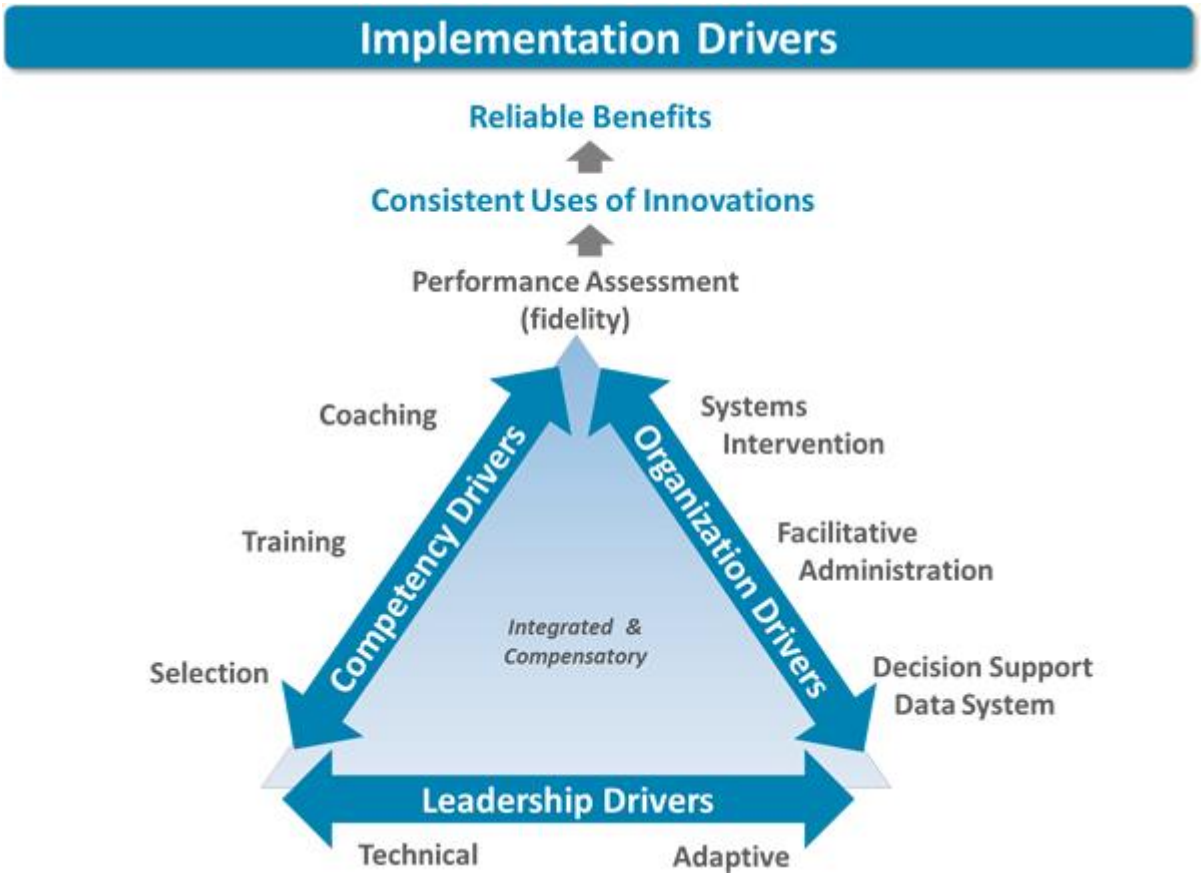
The scope of the impact evaluation included:

- whether there was change in response times
- whether there was an impact on hospital admission rates
- whether there was a change in capacity of broader CAMHS team to deliver other evidence-based treatments

3.3 Approach

The evaluation used quantitative and qualitative methodologies. As it was primarily an implementation evaluation, the theoretical framework for the project was based on implementation science (Fixsen et al, 2005), that has been developed in response to the increasing evidence indicating that evidence-based programs often lose much of their effectiveness due to implementation failures.

Figure 1 Implementation drivers



Source: http://implementation.fpg.unc.edu/module-2/implementation-drivers

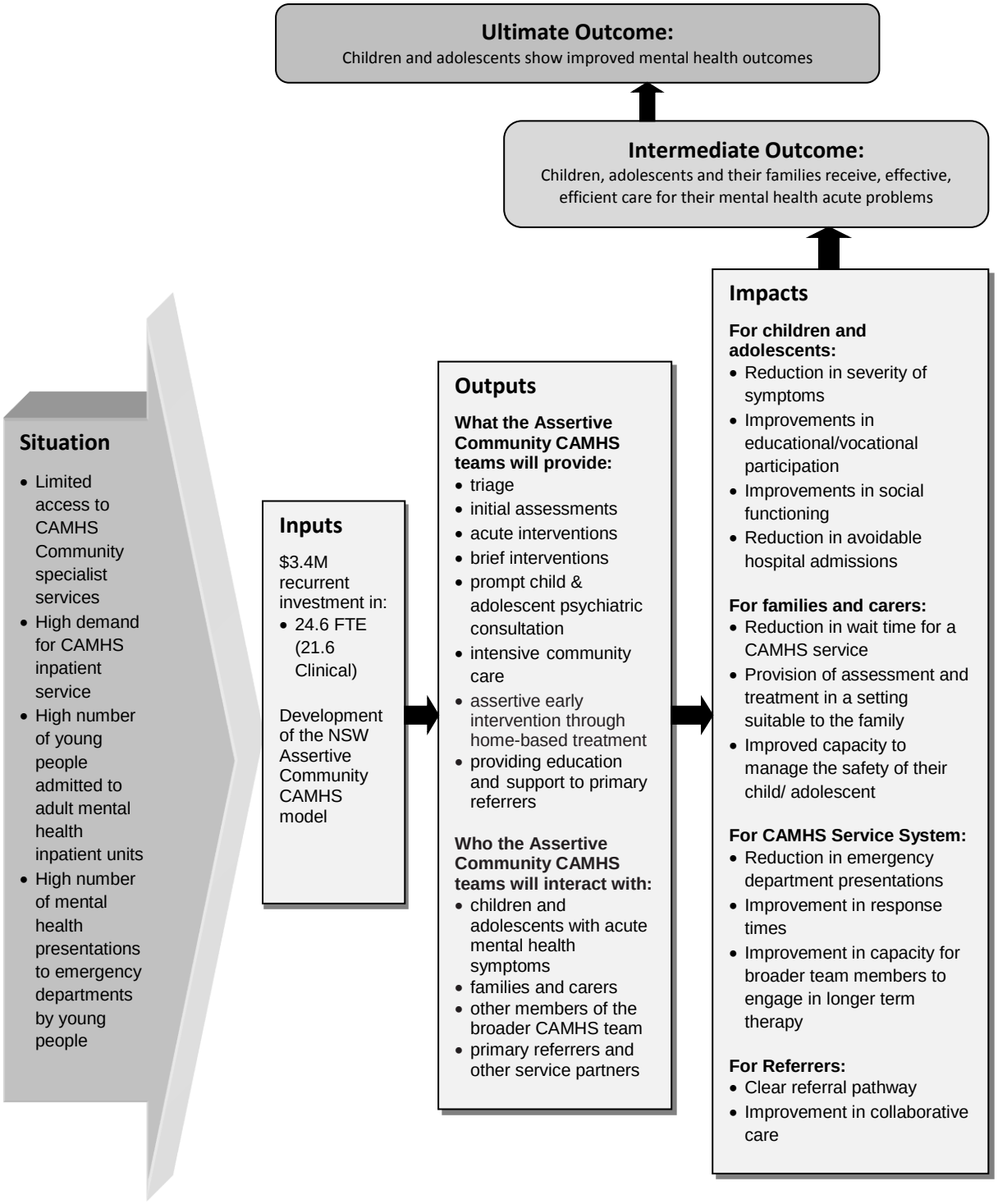
According to Blase, Kiser, and Van Dyke (2013) there are six contextual factors that are likely to affect whether an innovation is taken up and sustained in a particular site or organisation:

- **Needs of individuals:** how well the program or practice might meet identified needs
- **Fit with current initiatives**, priorities, structures and supports, and parent/community values
- **Resource availability** for training, staffing, technology supports, data systems and administration
- Evidence indicating the **outcomes that might be expected** if the program or practices are implemented well
- **Readiness for replication** of the program, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalised
- **Capacity to implement as intended** and to sustain and improve implementation over time

It was therefore important to focus on aspects of implementation such as the resourcing of the program; training and mentoring for program staff and other key stakeholders; preparation of other agencies to engage with the program; structural changes introduced including data collection, staff supervision, and workload allocation; as well as cultural change activity within key organisations to accommodate new ways of working.

The evaluation was also based on the program logic model for the Assertive Community CAMHS program as outlined in Figure 2 below, with the Outputs and Impacts forming the focus of the evaluation.

Figure 2 Assertive Community CAMHS program logic



3.4 Ethics approval

The project was approved by the UNSW Human Research Ethics Committee (HREC) on 18 December 2012 (Ref # HC12626). NSW Health advised that ethics approval would also need to be sought from an NSW Health approved HREC. The project was approved by NSW Population and Health HREC on 2 May 2014 (Ref # HREC/14/CIPHS/10). Site Specific Assessment (SSA) applications were then submitted to the Research Governance Offices at each of the three LHDs to authorise the commencement of the project. Authorisation was provided for each LHD.

4 Methodology

4.1 Interviews with stakeholders

Semi-structured qualitative interviews were conducted with 23 stakeholders associated with the NSW Assertive Community CAMHS pilot program. This included staff members and managers from CAMHS within the three participating LHDs. A total of nine interviews were conducted with stakeholders affiliated with LHD A, six from LHD B, and six from LHD C. A further two interviews were conducted with stakeholders associated with the Assertive Community CAMHS pilot but not affiliated with a specific LHD.

The interviews aimed to understand the process of implementing the Assertive Community CAMHS pilot program in each of the LHDs and the impact of the pilot program on the CAMHS service.

The interviews explored the following broad areas:

- participants' perception of the Assertive Community CAMHS program and its effectiveness
- participants' thoughts as to how the Assertive Community CAMHS program has integrated with other relevant services
- whether there had been any changes for CAMHS and other mental health services resulting from the introduction of the Assertive Community CAMHS program
- whether there had been a clearly defined role for the Assertive Community CAMHS team
- whether there were any barriers to the setup and implementation of the Assertive Community CAMHS team and program
- whether there were any factors that enabled the setup and implementation of the Assertive Community CAMHS team and program
- recommendations about how the program could be improved

The associate investigators from each LHD identified potential participants and sought their permission to provide contact details to the SPRC evaluation team. The SPRC evaluation team then contacted potential participants to arrange a time for a telephone interview. Each participant provided written consent and the interviews were recorded with the permission of the participant. Multiple attempts were made to contact potential participants; however, not all who were initially identified participated.

4.2 File review

A review of 59 randomly selected Assertive Community CAMHS client files was undertaken as part of the evaluation: 20 from LHD A, 20 from LHD B, and 19 from LHD C. The selection criteria for files included both current and discharged clients who had accessed the Assertive Community CAMHS program for a minimum of two weeks.

A review tool was developed and used to review each file (Appendix A). The review tool was designed to capture information relating to the characteristics and circumstances of children and young people accessing the Assertive Community CAMHS program. The review examined whether the Assertive Community CAMHS teams were delivering key components of the model, including: assertive response to engagement, flexible approach, planned intensive interventions and collaborative relationships.

Team members from each of the three Assertive Community CAMHS teams were involved in completing the reviews, with each team's files reviewed by two members of one of the other Assertive Community CAMHS teams. The completed reviews were then provided to the evaluation team for data entry and analysis.

The data were entered into KeySurvey (on online survey tool) by the evaluation team and the resulting files imported for analysis into the statistical analysis software SPSS 22. Given the small number of cases reviewed within each district and the even smaller number of responses within each site, limited statistical analysis was possible, and results were only reported when sample size permitted or did not violate statistical assumptions.

An aggregated summary of the file review information has been provided in the body of the report. Considering the large differences in the delivery of the model in each LHD, we refer to individual LHDs in reporting the results. The small cell sizes in each LHD mean that we cannot publish the individual tables for confidentiality reasons and have placed them in Appendix B which has not been published. Researchers who would like access to these data should contact the authors.

4.3 Analysis of administrative data

In addition to the file review, data were extracted from NSW State Health Information Exchange for analysis of the demographic profiles, service use, and outcomes data for all clients of Assertive Community CAMHS.

Once the data were provided to the research team, a number of issues seriously affecting the quality of the data were identified. Some items were addressed through a combination of data management or exclusion; however, some issues could not be resolved. Due to these

unresolved issues, much of the data provided to the evaluation team should not be considered to be a reliable summary of Assertive Community CAMHS as a whole, nor of the Assertive Community CAMHS at any of the three LHDs. As can be seen, there were often fewer responses to some questions in the NSW State Health Information Exchange output than there were in the file review data, which means the output can be contradictory to the file review data.

As per the file review data, an aggregated summary of the administrative data has been provided in the body of the report. Considering the large differences in the delivery of the model in each LHD, we refer to individual LHDs in reporting the results. The small cell sizes in each LHD mean that we cannot publish the individual tables for confidentiality reasons and have placed them in Appendix C which has not been published. Researchers who would like access to these data should contact the authors.

The issues affecting data identified included:

Critical issues

- As described Section 5.1.1, the staffing issues in LHD C meant that members of the Assertive Community CAMHS team were performing clinical cover to other services (e.g. mainstream Community CAMHS, adult mental health services). Unfortunately the Assertive Community CAMHS code was used to record this additional cover (i.e. to record the team's work even when it was not for Assertive Community CAMHS). This meant that it was impossible to distinguish in the data extracted between the clients that may have received an assertive response and those who received an alternative service. Part of the resulting issue was that data was received for hundreds of people in all age groups; however, removing those people aged 18 and older still left a large number of children and young people who did not access the Assertive Community CAMHS. Unfortunately due to these clients being recorded as Assertive Community CAMHS, the evaluation team was unable to disentangle the Assertive Community CAMHS clients from other clients. The data from this LHD should therefore not be used in any way to represent the Assertive Community CAMHS clients.
- No data could be extracted in LHD A for Assertive Community CAMHS clients who commenced services at the time the service first opened, as no specific data code had been set-up. The data therefore only represents a portion of the clients for this LHD. The evaluation team were advised that the data were missing for 26 clients; however, the information that was able to be extracted still had missing data and it remained unclear whether the extracted data was representative of the clients and cases in that LHD.

- The Assertive Community CAMHS in LHD B had relatively few clients during the observation period of the evaluation. For this reason, the data may not be representative of the client base when capacity and service maturity is reached.

Other data cleaning steps taken

- records with no person ID attached were removed prior to reporting
- children aged younger than 10 years were grouped
- adults aged 18 and over were removed prior to reporting
- unless otherwise indicated, all demographic information is taken from the client's first contact

4.4 Changes to the original evaluation framework

Given the delay resulting from additional ethics requirements (refer to Section 3.4) the proposed evaluation framework was amended to ensure the evaluation was completed in a timely manner. The original evaluation framework involved both a formative and summative evaluation, with two proposed phases of primary data collection. The first phase of data collection would establish a baseline and examine early implementation processes. The second phase of data collection would examine implementation and outcomes once the program had become more embedded. Due to project delays, the first phase of data collection and analysis did not occur.

It was also initially planned that staff who referred clients to the program would be surveyed about their experiences of Assertive Community CAMHS, its responsiveness, and their perceptions of how this program was different from mainstream Community CAMHS in terms of its impact on clients. However, this survey was not conducted due to the extensive delays caused by obtaining multiple ethics approvals, but also because of the slower than anticipated implementation of the program which meant that staff referring clients would be less likely to identify impacts or outcomes relating specifically to the program. The resources originally allocated to this component of the evaluation were reallocated to increase the number of stakeholders who were interviewed.

4.5 Limitations

Although quantitative data was presented for the program as a whole in the main report, the evaluation team provided district by district analysis in Appendix B and Appendix C. This decision was made because there were considerable differences in program uptake and in data quality between the three Local Health Districts (LHDs). In many cases, aggregating

this to the program level can be rather misleading, and where this was the case, it was identified in the report. As outlined in Section 4.3, the administrative data provided to the evaluation team was incomplete and should not be viewed as reliably representing the Assertive Community CAMHS program as a whole. Confidentiality requirements that ensure anonymity also meant that some elements of data could not be reported given relatively few participants. The file review sample was a genuine random sample and hence this is more reliable than the administrative data, particularly in the LHD C.

The evaluation team were not provided with client outcome data for CAMHS within the LHDs; hence the analysis cannot provide a comparison of outcomes for children in Assertive Community CAMHS or a comparison between Assertive Community CAMHS and mainstream Community CAMHS programs.

Participation in the qualitative interviews was voluntary. Efforts were made to arrange interviews with potential participants in each LHD. The number of interviews conducted was relatively low, particularly in LHD B and LHD C.

5 Implementation of the Model

MH – Children and Young People provided each of the three LHDs with the Assertive Community CAMHS model outlined in Section 2.2. Due to the organisational arrangements within NSW Health, each LHD was given responsibility for determining how the model would be best operationalised and implemented in their area. This arrangement exists, in part, due to the recognition of the uniqueness of each LHD and the overall policy of the NSW Ministry of Health to devolve as much authority as possible to LHDs. Performance agreements were established between the LHDs and MH – Children and Young People relating to the implementation of the Assertive Community CAMHS program.

Once the funding for the pilot program became available, MH – Children and Young People arranged a meeting with the Mental Health Directors and the CAMHS Directors from the three LHDs. The meeting aimed to provide the directors with an overview of how an Assertive Community CAMHS program could operate, and included presentations by experts of the First Base Model (Queensland Health, unpublished) and Safety First Model (Bickerton et al., 2007). MH – Children and Young People also provided support, training and resources to the Assertive Community CAMHS teams once they were established. This included: meeting with the three teams to clarify the service model, problem solve and review case presentations; the provision of detailed information on the Child and Adolescent Mental Health Intensive Treatment Service (ITS) in the United Kingdom (Duffy & Skeldon, 2012); the provision of resources on Behaviour Family Therapy; a workshop on personality disorders run through the Illawarra Health and Medical Research Institute; and a Risk of Violence course run through Justice Health and Forensic Mental Health Network.

A range of Assertive Community CAMHS approaches exist in Australia and internationally, but only a couple models of care have been specifically documented in academic literature (e.g. Bickerton et al., 2007; Witkon, 2012). Participants across each LHD commented on the difficulty experienced in operationalising and implementing the Assertive Community CAMHS model when there were limited prior examples available.

> I don't think there was any specific model of care developed. There was no team model of clinical care. It had to be operationalised potentially LHD-wide but how? And if there was no model of care then there is no specific training, there are no specific tools, so it is a massive ask [...] I don't actually say it to criticise NSW Health but this is what you are up against when you start up something as innovative as this team. Even if you started a new build of an adolescent inpatient unit, that is really hard as well, but at least there are other services to model your service on. (Community CAMHS, LHD B)

This quote illustrates the tensions inherent in rolling out a program such as Assertive Community CAMHS, in particular the tension between a top down model which clearly specifies what is required but does not take into account the local context, and a bottom up approach which provides limited central guidance but can accommodate local contextual variations.

Section 5.1 below outlines the approach to implementation taken by each of the LHDs, as summarised in Table 1, and the facilitators and barriers to implementation experienced within each LHD. As outlined in Section 3.3 there is increasing evidence indicating that evidence-based programs often lose much of their effectiveness due to implementation failures. It was therefore important for this evaluation to focus on the components, or implementation drivers, which influenced the implementation of the Assertive Community CAMHS model within the three LHDs.

Table 1 Implementation of the Assertive Community CAMHS model in each LHD

	LHD A	LHD B	LHD C
Components of the model			
Timely triage response: rapid appropriate treatment	Not a crisis team. Provided a responsive planned approach to service provision aimed at addressing key stressors quickly and establishing safety of the child or young person in collaboration with other key people in their life.	Not a crisis team. Following an initial assessment a plan is formulated collaboratively with the family and other key stakeholders in the young person's life with a focus on establishing and maintaining safety for the young person.	If a crisis develops, intensity of the support provided is increased in an effort to work with the family to contain and settle the crisis, and maintain the safety of the young person.
Assertive approach to engagement	Assertive Community CAMHS staff members predominantly work in pairs which results in two staff members being available for the child or young person and their families.	Utilises elements of the Safety First Model which includes a short response time and frequent consultation and phone support.	Under review.
Flexible approach: within community setting	Outreach service with the capacity to complete visits to homes or schools as required. Team members work out of offices across the LHD.	Outreach when required. Most services provided within Community CAMHS offices or inpatient/ED settings.	Outreach when required. Most services provided within Community CAMHS offices.

	LHD A	LHD B	LHD C
Planned intensive intervention: frequent clinical input	Short-term intensive intervention provided although flexible with time limit for intervention. Decisions based on clinical need.	Short-term, intensive, time limited intervention – aim was for an intensive 6-week period of intervention.	Two separate streams of management for children and young people depending on clinical need.
Collaborative relationships	Family-based rather than individual-based approach to intervention. Work in partnership with other agencies (key partners) including GPs, private services, school, and non-government and government agencies	Family-based rather than individual-based approach to intervention. Identify and involve relevant stakeholders/ agencies.	Works with family to maintain and settle the crisis and maintain the safety of the child or young person.
Operational issues			
Referral criteria	Young person aged under 18 years where there is: – Increased thoughts/behaviour indicating increased risk of harm to self or others – Poor school attendance – Risk of family or placement breakdown. No formal mental health diagnosis required.	Young person under the age of 17 (or up to 18 if still at school) where one of the following is met: – Current Community CAMHS client who is rapidly deteriorating despite max intervention − ED presentation that does not require hospital admission.	Under review.
Provision of services within LHD	Provides services across the LHD.	Recently commenced provision of services across the LHD. Previously servicing one area only.	Provide services to two areas only.
Placement of ACCAMHS	The team operates primarily out of central offices; however a couple of clinicians primarily operate out of offices in other areas of the LHD. Operate as a stand-	Two clinicians work out each of the CAMHS offices, four days per week. Operate as a stand-alone team. Only recently co-located with mainstream	Operate from one Community CAMHS team office. Assertive Community CAMHS and mainstream Community CAMHS operate as a single

	LHD A	LHD B	LHD C
	alone team but co-located with mainstream Community CAMHS.	Community CAMHS teams.	team. This arrangement was under review.
Hours of operation	Standard business hours, Monday to Friday. Does not provide an after-hours service; this remains the responsibility of the adult acute care teams	Standard business hours, Monday to Friday. Previously provided after-hours service.	Standard business hours, Monday to Friday.
Staffing	Recently became fully staffed – time period for recruitment lengthy. Slight changes made to the staff profile outlined in the service model.	Team not fully staffed and numerous staff changes since commencement of Assertive Community CAMHS.	Limited staffing. No psychiatry staff specialist or registrar.

5.1 How the model was adapted in different contexts

5.1.1 Local Health District A

The Assertive Community CAMHS team in LHD A was a community-based multidisciplinary team. It provided services across the LHD, covering four Local Government Areas. The team operated primarily out of central offices and were co-located with other mental health services (both government and non-government); however, a couple of clinicians primarily operated out of offices based in other parts of the LHD during the week.

The Assertive Community CAMHS team was staffed by a 0.6 FTE specialist psychiatrist, one part-time registrar (hours of work in process of being reconsidered), one Clinical Nurse Consultant (CNC), one Clinical Nurse Specialist (CNS), one clinical psychologist and two allied health professionals. The team was an outreach service, so it worked in the geographical area in which the referrals arise, and had capacity to complete visits to homes and/or schools as required. A number of participants, both managers and clinical staff, spoke about the ability to offer outreach services as being a key point of difference to the mainstream Community CAMHS teams.

> It has been really helpful that [the Assertive Community CAMHS team] are able to work geographically in the area in which the referrals come from. This would be a challenge for the mainstream Community CAMHS team, as they are more centre-based. Children and young people who have been unable to access CAMHS have been able to receive a service through the [Assertive Community CAMHS] team, where previously it might have been a difficult process for them to actually get to a centre. So it could be that they present more to hospital [...] a number of the clients do not leave the house, so that is when you start seeing emergency services getting involved; ambulance, police, emergency departments. The [Assertive Community CAMHS] team can see them in their homes, support them in their local community, and build systems of safety with their local services. (Community CAMHS, LHD A)

The Assertive Community CAMHS team provided a service to children and young people, aged less than 18 years, where there is increased concern about their safety and wellbeing. This included increased risk of harm to themselves or others, poor school attendance, or the risk of family or placement breakdown. Support was provided to children or young people and their families regardless of whether the young person has a formal mental health diagnosis. The young person may be experiencing acute mental health or behavioural problems, and the aim of the Assertive Community CAMHS team was to provide short-term intensive management in order to contain the crisis and either minimise the need for hospital admission or facilitate earlier discharge.

A number of participants, both managers and clinicians, stressed that the team was not a crisis team; rather, it provided a responsive planned approach to service provision aimed at addressing key stressors quickly and establishing safety for the child or young person in collaboration with key people in the young person's life. The team did not provide an after-hours service; this remained the responsibility of the adult acute care teams. A couple of participants spoke about this service model working successfully thus far, with families able to accommodate the teams hours of work, and few, if any, referrals to the after-hours acute care team have been required.

> They are a specialist service and what they are doing is they are settling and containing the current crisis and then meeting with all key partners, including parents and carers, and pulling together and coordinating what services need to be involved. [..] When setting up the team we made it very clear from the beginning that this is not an adolescent access team, providing 24 hour care, rather the model is a good example of how important it is to say that this is an 8.30am to 5.00pm job. (Community CAMHS, LHD A)

> I think it has been important to say that it is a team that is based in the community and is not just about stamping out fires and responding to crisis. The therapeutic component is as important as taking on risky clients in a non-hospital setting. I think there has been an expectation of it being a consultation service or a 'drop everything and go and see them in hospital' crisis team and I'm not sure that would have been as useful. It would have allayed people's anxieties but I don't think it would be really useful to families. (Community CAMHS, LHD A)

The Assertive Community CAMHS team used a family-based rather than individual-based approach, assisting families to understand the issues, and working alongside parents and carers to establish a system of safety for the young person.

> I think it wouldn't work if it weren't a systemic approach – a family systems approach. I don't think I can think of any young person who wasn't completely connected to everything else that was going on around them. And we were lucky to have a strong skill base in family therapy in the team. (Community CAMHS, LHD A)

The team initially planned to offer time-limited service support and intervention for up to six weeks. However, this evolved over time to the idea of providing four phases of support and intervention: assessment, key partners meeting, therapy, and discharge. The phases were time-limited but able to accommodate the needs of the young person and their family, with some families requiring shorter or longer phases.

People could not refer directly to the Assertive Community CAMHS team; instead referrals were made to the Child and Youth Mental Health Service via the state-wide Mental Health Access Line. If a referral was forwarded to the Assertive Community CAMHS team for consideration, the whole team would review the referral and determine whether the person would benefit from the service. The team's clinical lead was instrumental in establishing a Family Skills Clinic with a member of the mainstream Community CAMHS team. The Family Skills Clinic sometimes formed part of the Assertive Community CAMHS assessment process, particularly if a member of the mainstream Community CAMHS team had a client who they considered potentially appropriate for the Assertive Community CAMHS program. The child or young person and their family attended the Family Skills Clinic and this could form part of the intake assessment for the Assertive Community CAMHS team. Alternatively, the clinic provided an opportunity for the Assertive Community CAMHS team to offer advice if a referral to the team was deemed unnecessary.

The Assertive Community CAMHS team members predominantly worked in pairs, although participants acknowledged that the team was still determining the parameters around when it was useful to work in pairs and when the work can be done individually. Identified benefits of

working in pairs included being able to offer safety to clinicians, so that clinicians do not feel solely responsible for managing a client and family at a time of high-risk, and consistency of care to the young person and their family if one of the pair was absent.

> One of the [mainstream Community CAMHS] clinicians initially remarked 'who would want that job, dealing with crisis all the time' but it doesn't feel like that. There is a core clinician on the [Assertive Community CAMHS] team but everybody on the team knows about that young person and that family, and there is usually a second clinician who is the backup. And so it feels quite contained. And of course it has to be because that is the sort of model we want to reflect to the families we are working with, there's a confidence about what we are doing. There is backup and support. So it is not surprising for them to meet every single person on the [Assertive Community CAMHS] team at some point. (Community CAMHS, LHD A)

Establishing a system of safety also involved other key people in the child or young person's life. Collaborating early with services external to the Child and Adolescent Mental Health Service was central to the operation of the Assertive Community CAMHS team. Key partners included teachers, school counsellors, police youth liaison officers, emergency services, youth services, and youth refuges. The Assertive Community CAMHS team arranged and coordinated key partners meetings with the various stakeholders.

> Outside of health, [Assertive Community CAMHS] have been fairly quick in establishing what is referred to as key partners meetings. So as soon as we receive a referral for a young person and we have consent from the family, we are on to the school fairly quickly [...] And the police, the police youth liaison officers are very familiar with us. We invite them to the key partners meeting, as well as other agencies, anyone who has been significant in that young person's life. It could be senior staff from the local hospital, a non-government organisation, and we are able to come around a table and develop a system of safety for that young person. (Community CAMHS, LHD A)

The team had a strong commitment to governance. The management of children or young people and their families who access the service was discussed frequently and the staff specialist psychiatrist maintains clinical oversight. The team had weekly case review meetings in which each client was discussed and a management plan formulated. The team also used reflective team processes, particularly when a team member required advice on the management of a complex client or situation.

5.1.2 Local Health District B

The Assertive Community CAMHS team in LHD B was responsible for providing intensive, short-term interventions to children and adolescents with mental health issues, and their families. The specific aim of the team was to prevent avoidable emergency department presentations and hospital admissions and to reduce the length of stay if a child or young person was admitted.

The Assertive Community CAMHS team was a multidisciplinary team consisting of 0.8 FTE staff specialist psychiatrist, a part-time psychiatry registrar, an administration officer, two clinical psychologists (one was the team leader), one allied health professional (psychologist), two Clinical Nurse Specialists (one vacant position), and one Clinical Nurse Consultant.

As of March 2014, the team provided services across the LHD, with two clinicians operating out of three of the four Community CAMHS offices. The psychiatrist had responsibility for all children and young people accessing the Assertive Community CAMHS team across the LHD. Prior to March 2014, the Assertive Community CAMHS team had been providing services within two of the Community CAMHS areas only in order to pilot the service.

The Assertive Community CAMHS team provided a service to children and young people under the age of 17 years, or up to 18 years if still at school, who had at least one nominated parent or carer. Children and young people could be referred to the Assertive Community CAMHS team if there was increased concern about their safety and wellbeing. This could include a presentation at an emergency department following self-harm or suicide attempt, being identified as high risk on initial mental health assessment, or when there was significant carer issue leading to uncertainty about risk. Children and young people who were receiving services through CAMHS could also be referred to the Assertive Community CAMHS team if they were rapidly deteriorating despite maximum mainstream Community CAMHS intervention.

The Assertive Community CAMHS team had recently, at the time of the evaluation, commenced operating within the framework of the Safety First Model. The Assertive Community CAMHS team aimed to support parents, carers, or families to maximise the safety of the young person and avoid the need for a hospital admission. This was to be achieved through the provision of a responsive, intensive, time limited service, with outreach as required. The Assertive Community CAMHS team was not a crisis service and operated within normal business hours. Initial assessments were conducted by at least two members of the Assertive Community CAMHS team and involved the whole family. A plan was then formulated collaboratively with the family and other key stakeholders in the young person's life, focused on establishing and maintaining safety for the young person.

5.1.3 Local Health District C

In LHD C the Assertive Community CAMHS team was set up to provide services alongside one of the existing Community CAMHS teams. A number of participants, both managers and clinical staff, spoke about mainstream Community CAMHS already operating, to a certain extent, in a responsive or assertive framework. A range of different factors were cited for this, including reduced staffing levels, governance issues, and limited access to specialised inpatient facilities.

> We actually work in an assertive model in our normal CAMHS team, we don't have ready access to adolescent beds [...] so the kids that we would normally manage in the community are one that perhaps would, if we had ready access or greater access, may well have been in hospital. (Community CAMHS, LHD C)

At the time of the evaluation, the Assertive Community CAMHS model was in the process of being redeveloped within LHD C. It had been decided that the initial proposed model was not working effectively, due to a range of factors including the staffing skill mix and the culture and capacity of the existing Community CAMHS. The team was operating under an interim model, which they were planning to refine further.

> [The team is] looking at reviewing the model that was put up [to MH-Children and Young People], so the model that is in place at the moment is going to be reviewed and may not be the model that we use in the future […] Some of the change is around staffing issues and also being quite clear about being able to provide an assertive service and actually thinking about it in terms of being an assertive service. (Community CAMHS, LHD C)

Under the interim model, participants explained that there was no distinction between the roles of the Assertive Community CAMHS clinicians and the Community CAMHS clinicians. From an operational perspective, the two teams operated as a single team, although clinicians continued to identify as either an Assertive Community CAMHS or mainstream Community CAMHS clinician. There were conflicting opinions voiced by participants as to whether this approach was ideal, with arguments for and against voiced during the evaluation. It was acknowledged that this arrangement would need further consideration as part of the redevelopment of the Assertive Community CAMHS model.

According to several participants, one of the advantages of operating as a single team was that it offered greater continuity of care, as children and young people and their families did not have to transition from one team to another. However, in contrast, not having a team dedicated to working with high risk children or young people meant that all clinicians carried high caseloads which limited their flexibility and ability to provide a truly assertive service.

In terms of referral to the Assertive Community CAMHS team, people could not refer directly to the team. All referrals went through the state-wide Mental Health Access Line, and then the Community CAMHS team reviewed each referral. Wherever possible, clinicians completed initial assessments in pairs and decisions were then made as to whether the young person and their family require an assertive management approach or not.

Despite making no distinction between the Assertive Community CAMHS and mainstream Community CAMHS teams, several participants explained that there are two separate streams of management for children and young people, depending on need.

> They are not like two discreet services; they are kind of working as one service at the moment. We certainly will provide a more assertive intervention to kids that need it, but that is kind of what everyone is doing across the two teams at the moment. (Community CAMHS, LHD C)

If a change in clinical management was required due to a change in the circumstances of the child or young person, the clinicians would adjust the management approach accordingly. For example, if a crisis started to develop for a young person, the intensity of the support provided would increase in an effort to work with the family to contain and settle the crisis, and maintain the safety of the young person. The young person and their family were not required to change clinicians or teams during this period. Several participants spoke positively about this management approach providing continuity of care for young people and their families.

5.2 Challenges to implementation and how these were addressed

All three LHDs faced significant challenges implementing the Assertive Community CAMHS model; some challenges were common, others unique to each LHD. Implementing this model in the context of broader organisational re-structures appears to have created a significant challenge in two of the three LHDs. Personnel issues within the team, and between the team and others, also emerged as a significant challenge. The ideal structure of the Assertive Community CAMHS team, and how this fitted within the broader CAMHS structure (e.g. in relation to co-location, geographical coverage and operational protocols), appeared to be very difficult to predict, and each of the teams has had to experiment with different configurations. This section outlines the challenges experienced during implementation and indicates the implementation driver (Fixen et al., 2005) to which these relate.

5.2.1 Local Health District A

Organisational drivers

A number of participants spoke about the lack of detail in the written information provided by MH – Children and Young People about the Assertive Community CAMHS model and how it might operate in practice. It was noted that the written information contained a set of key principles but did not provide a specific model for the program.

> The initial documentation was not very clear. We couldn't always work out what we were supposed to do. It was almost like it was a description for two or three different things. So we were a bit in the dark. But then we got a fair bit of guidance from the [Child and Adolescent Mental Health Service] team leader and from MH-Children and Young People and that was helpful to be able to clarify. (Community CAMHS, LHD A)

In the absence of a specific model for the program, the development of the Assertive Community CAMHS program was described as needing to be an iterative process. Systems and processes, such referral pathways, referral criteria, length of intervention, needed to be trialled and modified over time. Several participants acknowledged that reaching team consensus created some challenges for the team, and also some confusion for other services in terms of understanding the parameters of the service.

Another challenge raised by several participants was the task of managing expectations of the broader health service within LHD A. Due to the LHD not having a specialist inpatient child and adolescent mental health service, participants explained that there were some expectations that the Assertive Community CAMHS team would assist inpatient services. This included an expectation that the team would attend an emergency department if a young person had presented with acute mental health issues. Several participants spoke about needing to reinforce to colleagues that the Assertive Community CAMHS team was a community-based team.

> Within the broader mental health field, there has been a struggle with wanting more of a hospital-based service rather than a community-based service. The team can provide consultation to the hospital but does not go into the hospital. We don't actually have a child and adolescent mental health unit within our area, but there are already systems in place to support young people when they are in hospital. The [Assertive Community CAMHS] team do meet young people prior to being discharged home but the team remains a community-based service. It provides a service from the moment the young person leaves hospital. And that is the most risky time for children and young people. It's when they are leaving hospital, when they are going into the community. (Community CAMHS, LHD A)

Several participants also raised human resource issues, namely recruitment of staff, as a barrier to implementing the Assertive Community CAMHS program. The team had only recently become fully staffed at the time of the evaluation – 18 months after becoming operational. The initial three positions were filled by secondment from other teams within Community CAMHS; however, subsequent positions had been challenging to fill. One participant explained that initially when positions were advertised, no applications were received. The participant hypothesised that this might have been due to it being a new and unfamiliar service model. The delay in recruitment led to capacity issues for the team, who initially provided a service within one Local Government Area only. However, the recruitment delay also led to benefits for the team as described in Section 5.3 .

5.2.2 Local Health District B

Leadership drivers

Participants spoke of a number of challenges encountered when implementing the Assertive Community CAMHS model within LHD B. CAMHS in LHD B underwent a period of significant change around the time that the funding for Assertive Community CAMHS program was released. This involved an influx of new services into the district, including a new CAMHS inpatient unit, the Assertive Community CAMHS team, and additional *headspace* services. CAMHS subsequently underwent a restructure to accommodate the additional services and staffing. This had implications for the Assertive Community CAMHS team which had numerous changes in direct-line senior management. According to a couple of participants this had led to disruption in the development and implementation of the program.

> Not having a strong management presence and everyone just winging it and not knowing how to do this. [The team] are all clinicians primarily, not managers. It has just been trial and error and I think too much trial and error, with limited assistance from someone who had done this before, someone who has set up an entirely new service. (Community CAMHS, LHD B)

> There were a lot of challenges about the way the initial group were functioning and I could see that they were in need of significant senior management support to get the basic structure and organisational processes in place, even human resource practices, and I think given the massive task at hand within the directorate, with all the changes occurring, I'm not sure this was really possible. (CAMHS, LHD B)

The Assertive Community CAMHS team reportedly did not experience significant difficulty recruiting into the staff profile for the service; however, only two members of the initial team remained at the time of the evaluation. Several participants indicated that there were a

number of issues related to the functioning of the team that led to the resignation of a significant proportion of the team within the first 12 months. During the initial team recruitment, no arrangements had been made to recruit a team leader. With the team fully staffed, a member from within the team needed to fill this role. The process of assigning a team leader after the team was formed reportedly resulted in a breakdown in some team relationships and subsequently undermined team cohesion. A number of participants reflected that in setting up a new team it was important to recruit a team leader first, and then build the team.

Organisation drivers

Given the context of changing senior management and staffing of the team, several participants described how the proposed model of care for the Assertive Community CAMHS program had undergone various iterations. This resulted in a lack of clarity for both the team and the broader mental health services as the referral criteria, service characteristics, and hours of work of the team shifted leading to some confusion and/or frustration. At the time of the evaluation, the team were operating under the framework of the Safety First Model (Bickerton et al., 2007), although one participant noted that the team was yet to reach consensus as to whether this was the most appropriate approach.

Several participants also spoke of the size of the team as being insufficient to provide the type of service required across the LHD, given the size of the population. The Assertive Community CAMHS program was initially piloted within two community CAMHS areas, with the expectation that it would become a district-wide service. The expansion to servicing the whole LHD required the team to once again change how it operated.

> There was an expectation that it would be a district-wide service but it started in just one sector of the LHD for the first six to eight months. So there was a level of service developed in that area that was not going to be sustainable once it went district-wide. And this was very difficult and confusing. (Community CAMHS, LHD B)

In expanding to provide a service across the LHD, the decision was made that members of the team would be co-located with existing Community CAMHS teams in three different locations within the LHD. Prior to this, the Assertive Community CAMHS team had not been co-located with a Community CAMHS team; a number of participants commented that this arrangement had been quite isolating for the team and made it more challenging to integrate successfully with existing Community CAMHS services.

> I think the concern from funding bodies is that if you don't separate out the teams, then they will just get dragged in to existing services. But I think it would have benefitted from being better integrated from the start. There's more support, there's

> more professional development, and there is just a bigger team available to support staff. Co-location will make this better but the CAMHS service is under reconstruction so it is hard to know what the final structure will look like. (Community CAMHS, LHD B)

5.2.3 Local Health District C

Organisational drivers

A number of participants from LHD C raised specific issues they felt needed to be considered when setting up the Assertive Community CAMHS team in a regional area. One key consideration raised by all participants related to workforce capacity, in particular the challenge of recruiting within a rural context. At the time of the evaluation, the Assertive Community CAMHS team consisted of three psychologists. Participants spoke of considerable difficulties recruiting into the funded staff profile for the team, particularly for the psychiatry and nursing positions.

> Well, we've got three staff members now, and there's been up to five, but we haven't been able to ever have the team fully recruited. We've had various people doing bits and pieces but it's very difficult. The ability to attract psychiatry, and then there is a registrar position attached as well, there's no way known that we would have been able to provide the level of psychiatry that would meet the College's requirements for a registrar position [...] we have an adult psychiatrist one day a week and a child and adolescent psychiatrist one day a fortnight. Registrars are meant to have a minimum of three days contact a week with a psychiatrist for the registrar program [...] and we can't attract a psychiatrist to the team. (CAMHS, LHD C)

This participant suggested that it might be more feasible from a recruitment perspective to set up two separate Assertive Community CAMHS teams across the LHD, rather than have the team attached to a single Community CAMHS.

Another key workforce issue, according to several participants, was that the mental health workforce in LHD C underwent significant change shortly after the funding was provided to implement the Assertive Community CAMHS program. This involved a service restructure, including a restructure of management, which resulted in one single team manager becoming responsible for each of the three mental health services: Child and Adolescent Mental Health, Adult Mental Health, and Older Persons Mental Health. This newly created management position reportedly remained vacant for a period of time. In addition, LHD C mental health services, especially the adult mental health service, experienced a sudden decrease in staffing during the period of restructure.

> Nineteen people left, mainly from the adult team but also from CAMHS […] So the whole mental health team is in crisis because to replace the staff it will take a very long time […] and it is also a human resource issue. I don't know if it is LHD C or the whole of NSW Health, but it can take up to four months just to recruit somebody. (Community CAMHS, LHD C)

Concerns regarding the delays with recruitment across the mental health service in LHD C were raised by a number of participants. The changed staffing levels across in LHD C had direct consequences for the Assertive Community CAMHS team as the team were required to provide crucial clinical support to both the CAMHS and adult mental health teams. This left limited opportunity to plan for and implement the Assertive Community CAMHS program.

> Unfortunately, when the Assertive Community CAMHS team was initially set up, the mainstream Community CAMHS positions were fully occupied. Then there were a couple who left the mainstream Community CAMHS team, which then put pressure on the Assertive Community CAMHS team [...] the program was just expected to fall into place without sufficient time for planning [...] and then when clinicians started leaving, it became even more difficult because the caseloads just got even heavier. (Community CAMHS, LHD C)

Leadership drivers

A number of participants, both managers and clinical staff, also spoke of there being a shift in focus of community mental health services across the LHD to a more assertive framework of service provision, as discussed in Section 5.1. This was explained as being due in part to the mental health service having such limited staffing resources and therefore needing to make decisions as to how best to utilise these resources. However, the understanding of what constituted an assertive framework appeared to differ between participants, with some participants describing the management of clients in crisis when they referred to an assertive framework.

The difficulty this posed when implementing an Assertive Community CAMHS model within the LHD, was that support for the model from within the mental health service, at both a management and clinical level, was variable. There were mixed opinions voiced by participants as to whether the Assertive Community CAMHS program would add value to the existing service. This conflict in opinion presented a significant additional barrier to developing and operationalising the model within LHD C.

Competency drivers

The final workforce issue raised by participants related to opportunity for training and skill development. One of the key principals of the Assertive Community CAMHS model is to actively empower parents and carers to maintain the safety of the young person. As participants acknowledged, this involves working intensively with families, which requires a specific skill set and adequate resources.

> Creating systems of safety is fine, but doing intensive family work is challenging, and you need to draw skills from different therapy approaches. (Community CAMHS, LHD C)

> There was an idea of doing the family therapy approach but you would need a lot of training in that. And that could be effective but you'd really need to have the full amount of staff and commitment to do that. And unless there is commitment from management then it's not going to be workable. Because you would need to do it in the home and it would be intensive. (Community CAMHS, LHD C)

The Assertive Community CAMHS team had, at the time of the evaluation, started to receive clinical supervision in family therapy through the Children's Hospital at Westmead, which was seen as very beneficial.

5.3 Facilitators to implementing Assertive Community CAMHS

5.3.1 Local Health District A

Competency drivers

Participants, both internal and external to the Assertive Community CAMHS team in LHD A, identified some key factors that assisted the implementation of the program within the LHD. One factor was that experienced senior clinicians from within the Child and Adolescent Mental Health Service were seconded into the team when it was first established. According to participants, these clinicians had an established therapeutic working relationship, an existing relationship with the Child and Adolescent Mental Health Service and Team Leader, and a shared interest and expertise in family therapy. These factors were considered beneficial in terms of developing and implementing the new Assertive Community CAMHS model.

> The team had an incredible richness to start with, of experience, of strong relationships, as well as a shared framework for thinking about these complex families. So that was very noticeable. (CAMHS, LHD A)

Additional recruitment into the team was reportedly slow, and while this limited the capacity of the team to offer a service across the LHD, a couple of participants spoke about the delay having been beneficial for the team in some respects. One of the benefits was that the team, when it did recruit, recruited experienced clinicians and took the opportunity to carefully consider the composition and skill-mix of the team during the recruitment selection process.

> The people recruited into the service are experienced clinicians and we have been quite clear about that, and I think that has been an important part of forming a team. You need to be selective. And I think that is one of the balances you have, getting the skill-mix, the experience-level and the multidisciplinary-mix right, against the pressure for a service like this to be up and running and reporting activity. (CAMHS, LHD A)

The Assertive Community CAMHS team were provided with external supervision from a senior child and adolescent psychiatrist during the initial 18 months of implementation. The psychiatrist had been instrumental in the development of the Safety First Model (Bickerton et al., 2007) and hence was able to share with the Assertive Community CAMHS team the Safety First Model, how this had been developed and implemented. Participants noted that while they had not directly adopted the Safety First Model, the advice and guidance provided during supervision sessions, the opportunity to discuss an existing model and reflect on how best to adapt such a model to their own context, and preferences for clinical practice, had been invaluable.

Organisation drivers

The other identified benefit of the delay in recruitment was that, given the small size of the initial team, the team conducted their assessments and interventions as a whole team during the initial implementation phase. This helped the team to develop common assessment and intervention processes, and a shared understanding of how best to implement the Assertive Community CAMHS model within the LHD.

Leadership drivers

Another key facilitating factor, identified by most participants, both managers and clinical staff, was the consistent support the team received to develop and implement the Assertive Community CAMHS model within LHD A. It was noted that all levels of management within the mental health service were supportive, including the Mental Health Service Director, the

former Child and Adolescent Mental Health Service Director, and the Child and Adolescent Mental Health Team Leader.

> The Team Leader and the former Director of the Child and Adolescent Mental Health Service had a very clear vision around the [Assertive Community CAMHS] model and a very clear concept of how it was going to work. They had to stick to that concept, whilst not being rigid or inflexible, but at the same time were under the pressure of providing services to emergency departments and inpatient services. They had to be really clear what the role was and to be protective of that. So I think that management leadership was critical. (CAMHS, LHD A)

In addition to the support from management, the clinical lead on the Assertive Community CAMHS team, the psychiatry staff specialist, was noted to have provided strong clinical leadership, both in the development and operation of the program. The clinical lead and the other initial team members were given time for service planning and to develop a model that would add value to existing mental health services. This included looking at research and literature, consulting with existing CAMHS services and identifying service gaps, meeting with consumer and carer organisations to identify what was important for these organisations when accessing mental health services, and collaborating with key partners within government and non-government sectors. Participants noted the benefit of being provided with sufficient time for planning, especially given the client population.

> I think it was really useful to have a lot of thinking time initially about the service [...] what their framework is and what ideas they are going to draw on. Because once the work starts, particularly working with people in crisis, it can be very reactive. And I think they wanted to set it up so that it was a responsive team that can actually be really thoughtful and can calm things down, settle things within the family and within the system as a whole. And to do that in a way that is responsive rather than reactive. Because when you are dealing with kids where there are high-risk issues, and there is a lot of anxiety around the possibility of suicide or self-harm, that creates an enormous amount of stress. There is an enormous amount of reactivity. So having a service that is responsive and calm is really necessary. (Community CAMHS, LHD A)

5.3.2 Local Health District B

Organisation drivers

The development of the service description for the Assertive Community CAMHS team (Appendix D), which had been recently implemented at the time of the evaluation, was described by a few participants, predominantly clinical staff, as being beneficial; there were

now clear guidelines as to the lines of responsibility between the Assertive Community CAMHS team and mainstream Community CAMHS teams, and effective communication pathways had been established. A factor identified by the team as facilitating program implementation was receiving leadership in developing the service description, which had not been consistently present during initial implementation.

With the team shifting to being co-located with mainstream Community CAMHS in various offices across the LHD, decisions had been made about how best the team would communicate with each other. It had been identified that the team would engage in daily morning handovers, and one day per week the team would meet face-to-face to discuss caseloads and clinical management issues.

Competency drivers

For the past 12 months, the Assertive Community CAMHS team had also been receiving monthly clinical supervision meetings from a senior child and adolescent psychiatrist. One participant had noted the benefits of having clinical supervision and the opportunity to further discuss the Safety First Model and how to best operationalise the model within the context of LHD B.

5.3.3 Local Health District C

Competency drivers

A couple of participants from LHD C spoke of the benefit in meeting with a representative from MH – Children and Young People to further discuss the Assertive Community CAMHS model, to clarify what was expected and identify potential training needs.

> We really were sort of flying in the dark as far as what the actual model was. I mean we had the funding agreement from Mental Health and Drug and Alcohol Office which gives a little bit of background to what we had to do but I don't really think that anybody knew [...] So I think, from an enabling point of view, when [the MH – Children and Young People representative] came, I felt a little less concerned, reassured that we were on the right track. (Community CAMHS, LHD C)

The participants also reported finding it beneficial to meet with the Assertive Community CAMHS teams in LHDs A and B, in terms of discussing how each team was implementing the model. And as mentioned in Section 5.1.1, the team had started to receive clinical supervision in family therapy through the Children's Hospital at Westmead.

5.4 How the model was operationalised

5.4.1 Referral criteria

Local Health District A

As outlined in Section 5.1, the Assertive Community CAMHS team in LHD A were seeing children and young people aged less than 18 years, where there were increased concerns about safety and wellbeing. This could include an increased risk of harm to themselves or others, poor school attendance, or the risk of family or placement breakdown. The primary focus was on children or young people who had presented, or were at risk of presenting, to emergency departments and other hospital settings, or who had been admitted to an inpatient ward, such as a Psychiatric Emergency Care Centre (PECC) or a specialist child and adolescent inpatient mental health facility. An additional focus was children or young people who already accessed mainstream Community CAMHS but who required intense intervention due to a change in circumstances.

> The [Assertive Community CAMHS] team have quite a broad definition, they talk about a referral being appropriate if it is creating enormous anxiety within the system, so a young person or child creating a lot of stress within the hospital system, or if they are creating enormous stress for the school, or if they are creating enormous stress for a therapist from the [Community CAMHS] team. It is quite broad, but if a young person is creating large amounts of stress then the [Assertive Community CAMHS] team would consider the referral. Because they can step in fast and intensively [...] and that is really critical when a kid is in crisis and there is a lot of anxiety around them. And there is a confidence that the team can help contain the anxiety. (Community CAMHS, LHD A)

One key decision made by the Assertive Community CAMHS team when developing their referral criteria was to not limit the service to children or young people with a formal mental health diagnosis. Several participants spoke about the importance of this decision in being able to offer a service to children and young people in need who may otherwise 'fall through the gaps' in the health service.

> Not having the mental health diagnostic focus has enabled young people who have not been able to access other mental health services to get a mental health service. They are the ones that fall through the gaps – children with autism who have extreme behaviour or homeless children with child protection issues and drug and alcohol issues – but they have been able to be referred and receive some really good family

> work and referral to other services. They wouldn't normally fit within the standard CAMHS referral criteria. (Community CAMHS, LHD A)

Local Health District B

As outlined in Section 5.1 , the referral criteria for Assertive Community CAMHS team included children and young people under the age of 17 years, or up to 18 years if still at school, who had at least one nominated parent or carer. Children and young people could be referred to the Assertive Community CAMHS team if there was a high level of concern about their safety and wellbeing. This could include a presentation at an emergency department following self-harm or suicide attempt, being identified as high risk on initial mental health assessment, or when there was a significant carer issue leading to uncertainty about risk. Children and young people who were receiving services through Community CAMHS could also be referred to the Assertive Community CAMHS team if they were rapidly deteriorating despite maximum mainstream Community CAMHS intervention.

Several participants noted that the referral criteria for the Assertive Community CAMHS team had changed numerous times since the program was first implemented. There were mixed views voiced as to whether the current criteria were useful. A couple of participants expressed the opinion that the current criteria ensured the Assertive Community CAMHS team provided a service to the children and young people who were truly high risk.

> The cases they tend to deal with are the most complicated ones: the ones who have the most difficulty making any therapy gains. [Assertive Community CAMHS] deal with the more challenging end; clients where there is a greater level of family dysfunction, mental health problems are often chronic, and there are a lot of co-morbidities. (Community CAMHS, LHD B)

However, another participant expressed the view that the referral criteria were too restrictive and the model of care for the Assertive Community CAMHS program meant that the program was no longer providing a service that best meets the needs of the target group. The referral criteria, the reduction in outreach service provision, and the time-limited 6-week intensive service provision, were all factors cited by this participant as reasons why the Assertive Community CAMHS program was no longer filling existing service gaps within CAMHS. The participant argued that an earlier model had been better.

As the referral criteria, model of care and service arrangements at the time of the evaluation had only recently been implemented, a review by the CAMHS Director, CAMHS Executive and the Assertive Community CAMHS team was planned after a six month trial.

Local Health District C

As outlined in Section 5.1, participants described the Assertive Community CAMHS program within LHD C as focusing on children or young people at high risk of being admitted to hospital due to the acute nature of their mental health difficulties. For these identified children and young people, the Assertive Community CAMHS team provided intensive individual and family input, on a daily basis if required, in order to establish safety.

> The aim is to keep young people out of inpatient units, particularly in our area because the closest inpatient unit is an adult unit in [regional centre within LHD], and then the child units are in [metro centre outside of LHD] and then Sydney. So there is a real lack of child and adolescent units here. So the aim was to provide a service where you could be an inpatient unit in the community and get in and work intensively with family systems around safety, to try and ensure that the child could remain in the community, rather than being contained in a unit [...] to maintain the safety of these young people, whether this is harm to themselves or others, and also to up-skill the family to be able to manage these young people in the community. (Community CAMHS, LHD C)

5.4.2 Referral pathway

As outlined in Section 5.1, people could not refer directly to the Assertive Community CAMHS team in any of the three LHDs. All referrals were made via the state-wide Mental Health Access Line. However, as outlined below, the referral pathways from the Mental Health Access Line to the Assertive Community CAMHS teams differed slightly in each LHD.

Analysis of the administrative data provided the ability to examine the recorded source of referral. Across the three LHDs, the administrative data showed that the most common referral sources were public mental health services in and outside of the area, family and friends and specialist adolescent services. Within each LHD (tables shown in Appendix C), LHD C recorded the fewest referrals, which is unusual given the large numbers of clients recorded in the program data for that LHD. However, given that people could not refer directly to the service, it was unclear whether the lower numbers were due to data quality issues or structural issues. LHD A recorded the largest proportion of referrals.

Table 2 Referrals to Assertive Community CAMHS

	N referrals	% all referrals
Public Mental Health service in Area	374	32.1
Family/friend	257	22.1
Specialist Adolescent Service	137	11.8
Public Mental Health service in other area	102	8.8
Emergency Department	54	4.6
Education Service	29	2.5
GP	21	1.8
Self	19	1.6
Other health service	13	1.1
Criminal Justice Service	12	1.0
Law Enforcement Service	11	0.9
Private Psychiatrist	10	0.9
Other specialist Clinician	10	0.9
Other specialist Medical Officer	5	0.4
Public Inpatient service	5	0.4
Community Health	4	0.3
NGO	4	0.3
Specialist Child and Family Service	3	0.3
Boarding house	1	0.1
DoCS Service	1	0.1
Other	13	1.1
Unknown/not stated	80	6.9
Total	1165	100.0

Source: NSW State Health Information Exchange
Note: This is a count of all referrals not just those at the start of a service episode, a client may have multiple referrals.

Local Health District A

Within LHD A, referrals were made to the Child and Youth Mental Health Service via the state-wide Mental Health Access Line. If a referral was forwarded to the Assertive Community CAMHS team for consideration, the whole team would review the referral and determine whether the person would benefit from the service. The administration data indicated that the most common source of referral was family and friends or public mental health services both within and outside the LHD (Appendix C).

A number of participants commented that there remained some confusion for people outside of the Assertive Community CAMHS team as to the referral process and criteria for the service, although this had started to change as the team had become more established. The Assertive Community CAMHS team was co-located with both government and non-government mental health services, so it was acknowledged that these two teams may have a greater understanding of the referral process and criteria than other key referral partners,

such as schools, other non-government organisations (NGOs) or the NSW Department of Family and Community Services.

> I think there are always challenges in setting up a new service and working out the referral criteria and procedures. I think it might be easier for the [mainstream Community CAMHS] team to get access to [Assertive Community CAMHS] than external providers, and possibly this is just the nature of our services where all referrals go through a central intake. This can create some confusion for services. If someone wants to refer to [Assertive Community CAMHS], like a refuge or the hospital, they still have to come through the Access Line, and then it comes here and is talked about and discussed which team might be best to respond. So I think there is still some confusion around what the [Assertive Community CAMHS] team does and how to refer. (Community CAMHS, LHD A)

> They have been a little under the radar with some of our referral partners. This has started to change, with some of our referring doctors from the emergency departments. They are now aware of [Assertive Community CAMHS] and are starting to refer some of those kids to us, the tricky kids who require a service. (Community CAMHS, LHD A)

One advantage for the Assertive Community CAMHS team, identified by a couple of participants, was that the team's staff specialist psychiatrist also worked part-time at the inpatient mental health facility for children and young people within the neighbouring Local Health District. This made it easier for the Assertive Community CAMHS team to build links with this inpatient service.

> A link which is invaluable, as so often young people in inpatient settings have had no prior contact with mental health services, so they are not linked anywhere, and the psychiatrist has to alert the [Assertive Community CAMHS] team that there is an appropriate person to refer so contact can be made promptly. (Community CAMHS, LHD A)

One participant acknowledged that had this not been the case, building this relationship would have been a priority for the Assertive Community CAMHS team in order to be able to successfully coordinate between inpatient and community services.

Local Health District B

Within LHD B, referrals were forwarded from the state-wide Mental Health Access Line to the LHD B CAMHS intake teams. It was then determined which team would be most appropriate to manage the referral. The administration data indicated that the most common sources of

referral to Assertive Community CAMHS were public mental health services within LHD B and specialist adolescent services (Appendix C).

This is consistent with the feedback from a number of participants who indicated that referrals to Assertive Community CAMHS came from two primary sources: the mainstream Community CAMHS teams, when there was concern that the safety and wellbeing of a mainstream Community CAMHS client was deteriorating and they were in need of intensive management; and inpatient facilities, when it was thought that Assertive Community CAMHS program may benefit a child or young person to transition out of an inpatient setting and assist in preventing readmission. However, one participant explained that with the recent change in referral criteria, Assertive Community CAMHS would accept referrals from emergency departments but were no longer accepting referrals from inpatient facilities. The process of transitioning a young person out of inpatient units had reverted back to being the responsibility of mainstream Community CAMHS teams.

Local Health District C

Within LHD C, referrals were forwarded from the state-wide Mental Health Access Line to the Community CAMHS team, where mainstream Community CAMHS and Assertive Community CAMHS clinicians would review each referral to determine which service was most appropriate. The administration data indicated that the most common sources of referral to Assertive Community CAMHS in LHD C were family and friends and emergency departments (Appendix C).

A number of participants spoke of the need to further promote the Assertive Community CAMHS in the local area, as children and young people were often referred too late during a period of crisis for the Assertive Community CAMHS to effectively intervene.

> There is still the challenge of finding the young people early enough, and I think that child protection and juvenile justice might have a role to play […] the challenge is getting referrals at an appropriate time. We are often just seeing people at a crisis point, when they have already presented to an emergency department. So referral processes are one thing that makes things challenging. (Community CAMHS, LHD C)

Staff shortages had prevented greater engagement with external services as due to time constraints. A couple of participants also perceived a level of reluctance within the LHD's Mental Health Service for greater engagement to occur because the Community CAMHS team was already stretched and would not be able to manage a potential influx of new referrals.

5.4.3 Delivery of care

The following section presents summaries of the time in the program, and the time from referral to service, the care setting, and people involved in care.

Amongst clients in the file review data, the average time between referral and commencement of service was 6.3 days, although there was a very wide distribution, with a median time of three days and maximum of 38 days between referral and service (Table 3). Evidence from the qualitative interviews suggests that the longer delays may be due to clients being in an inpatient setting at the time of their first referral and this may explain the delay. However, the file review data does not provide enough detail to provide confirmation.

On average, amongst those that had a transfer/discharge date, clients received a service for 106 days or just less than three and a half months. Again this has a very wide range with a median of 96.5 and a maximum of 306 days.

Table 3 Timing points

	Days from referral to appointment	Days from appointment to transfer
	N	N
Valid N	54	38
Mean	6.3	106.1
SD	8.6	68.8
Min	0.0	7.0
Median	3.0	96.5
Max	38.0	306.0

Source: Assertive Community CAMHS file review data

There was evidence of care planning (Table 4) for the majority of clients across the Assertive Community CAMHS services, with risk assessments completed for all but six cases at the time of the file review. Most clients had documented goals, care plans and safety plans present in their file. Less common were evidence that the young person or family had copies of the plans – only two clients had evidence of this. It appears generally that client and family involvement in services could be increased as illustrated by the lack of detail in the case files. Within the three LHDs, it appeared that LHD B had the highest recorded engagement with clients and their families. LHD C had the fewest cases with care plans present (only 10 of the 19 clients had a care plan present) and generally speaking, the fewest clients with any items that indicate other aspects of care planning. Tables for each region are available in Appendix B.

Table 4 Evidence of care planning

	N	% of valid N
Mental health clinical documentation risk assessment completed	53	89.8
Are there documented goals?	49	83.1
Is a care plan present?	44	74.6
Is safety planning part of the care plan?	42	71.2
Does the care plan detail interventions aligned to the goals?	40	67.8
Evidence of young person involvement in the development of the care plan	32	54.2
Evidence of care plan review	28	47.5
Evidence of family involvement in the development of the care plan	27	45.8
Evidence of other service providers' involvement in the care plan	17	28.8
Evidence that the young person has received a copy of the care plan	2	3.4
Evidence that the family have received a copy of the care plan	2	3.4
Valid N	59	

Source: Assertive Community CAMHS file review data

Each stage of care has been grouped in Table 5 below. Aside from community health centres, client homes appeared to be utilised for care, treatment, and transfer planning. Schools were used for case conferences and hospitals appeared to be the most common setting for initial assessments. Care setting is where there were most differences between sites, as shown in Appendix B. LHD C had the majority of missing data so it is unclear where care took place in that LHD. LHD B appeared to be the main source of hospital interactions. LHD A had a variety of care settings.

Table 5 Care setting

	Community health centre	Home	School	Hospital	Missing	Valid N
Initial assessment	30	9	1	20	5	54
Care planning	32	15	8	6	17	42
Case conference	14	6	12	4	30	29
Treatment	43	22	6	2	9	50
Review	30	8	4	2	21	38
Transfer planning	29	11	1	4	25	24

Source: Assertive Community CAMHS file review data
Note: Multiple response. Valid N is the number of cases with any valid care setting recorded.

Although Table 4 indicated that there appeared to be little involvement with family and clients when care planning, there does seem to be engagement in the case as a whole as shown below in Table 6, with around half of the clients/families in the file review data recorded as being involved in care. Mainstream community CAMHS services appeared to be frequently

involved as well. Other than that, the file review data contain very little information about the involvement of others in care.

Table 6 Involvement in care outside of mental health services

	Client	Family /Carer	CAMHS IPU	CAMHS Comm.	Other MH IPU	Other MH Comm.	PECC	Missing	Total
Initial Assessment	27	25	2	28	1	2	2	14	45
Care planning	36	36	1	13	0	1	1	16	44
Case conference	15	17	2	10	1	0	0	36	23
Treatment	33	29	1	18	2	0	0	13	46
Review	18	19	1	13	2	1	0	28	31
Transfer planning	23	24	2	13	3	0	0	25	34

Source: Assertive Community CAMHS file review data
Note: Multiple response. Valid N is the number of cases with any valid care setting recorded.

Parents or carers were most likely to be involved in family sessions. Sixteen clients also had siblings involved in family sessions (Table 7). There did not appear to be any major differences between LHDs.

Table 7 Who was involved in family sessions

	N	%
Parents/step parents	49	19
Siblings	16	9
Extended family e.g. grandparents	6	3

Source: Assertive Community CAMHS file review data
Note: Multiple response.

Very few clients had information completed about the psychosocial or psychological interventions either delivered or in their care plan. Table 26 below shows the interventions that were delivered. The planned interventions were sparser and are not summarised here but are attached in Appendix B. Overall, the most common delivered intervention was psycho-education, followed by cognitive behaviour therapy (CBT), and distress tolerance. LHD A had the widest range of intervention types; LHD C had the least amount of information recorded.

Table 8 Psychosocial or psychological interventions delivered

	N
Solution focused family intervention	10
Psycho-education	27
CBT techniques	15
Behavioural techniques	10
Skills training	0
Mindfulness	4
Interpersonal effectiveness	2
Emotion regulation	10
Distress tolerance	13
Motivational interviewing	2
Behaviour family therapy	10
Other psychosocial or psychological treatment	29

Source: Assertive Community CAMHS file review
Note: A person may have multiple intervention types

Although the intention of the Assertive Community CAMHS program was to reduce hospital admissions, there was no benchmark with which a comparison could be made (Table 9). The most common hospital presentation was to emergency departments, with 17 clients admitted a combined total of 32 times during the course of their documented Assertive Community CAMHS intervention. Very few clients had presentations to other hospital settings although this varied by LHD, and was most likely dependent on what inpatient services were available in each LHD. For instance, LHD B accounted for the majority of emergency department presentations – this may be because clients were referred to the service whilst in an emergency department, but the file review information did not provide sufficient information to clarify; all of the adult Mental Health Inpatient Unit (MH IPU) presentations were in LHD C; and all of the paediatric and Psychiatric Emergency Care Centre (PECC) presentations were in LHD B.

Table 9 Unplanned hospital presentations

		Combined
Emergency Department	N children with any presentations	17
	Total presentations	32
CAMHS IPU	N children with any presentations	3
	Total presentations	4
Adult MH IPU	N children with any presentations	4
	Total presentations	4
Paediatric ward	N children with any presentations	6
	Total presentations	7
PECC	N children with any presentations	3
	Total presentations	5

General Hospital	N children with any presentations	2
	Total presentations	5

Source: Assertive Community CAMHS file review
Note: A person may have multiple presentations
Valid N = 44

The final part of the file review analysis relates to client discharge from Assertive Community CAMHS. We see below that overall, 40 of the 59 cases had an indication that they were discharged; however, only 14 cases had any information recorded about the discharge. Table 10 indicates that of the few cases recorded, the discharge details were provided to the client's general practitioner (GP). The remaining details were spread across a wide range of stakeholders.

Table 10 Discharge details

	Combined
N discharged case files	40
N discharged with any discharge details recorded	14
N discharged with no discharge details recorded (missing)	26
Client	2
Family/Carer	2
CAMHS Community	2
Other MH Inpatient	1
Other MH Community	2
GP	8
Private MH provider	1
Education	1
NGO	1
Community services	1

Source: Assertive Community CAMHS file review
Note: Discharged clients with any details recorded may have multiple entries

5.4.4 Assertive Community CAMHS client profile

The target group for the Assertive Community CAMHS program, as outlined in the service model (Section 2.2.2), is children and adolescents under 18 years who require an assertive community response. Each of the LHDs outlined in their referral criteria that there needed to be a high level of concern about the safety and wellbeing of the child or young person and that they had presented, or were at risk of presenting, to emergency department or other hospital setting (Section 5.4.1).

A review of 59 randomly selected Assertive Community CAMHS client files was undertaken as part of the evaluation: 20 from LHD A, 20 from LHD B, and 19 from LHD C. The following tables present a summary of the data from client file review for the three LHDs combined. This is followed by analysis. These provide an overview of the types of clients accessing the Assertive Community CAMHS services. As mentioned in Section 5.1 , there were significant differences between the implementation of the service in each LHD and the combined totals obscure these differences. Tables outlining the data from each individual LHD can be found in Appendix B.

Table 11 shows that the sample in the file review had a higher percentage of females (57.6%) to males (40.7%), and only a very small number of Aboriginal clients.[1] The majority of clients for the file review were born in Australia (84.7%) and spoke English at home (83.1%).

Table 11 Demographics, file review cohort

		N	%
Gender	Male	24	40.7
	Female	34	57.6
	Missing	1	1.7
	Total	59	100.0
Aboriginal or Torres Strait Islander?	Yes	4	6.8
	No	39	66.1
	Missing	16	27.1
	Total	59	100.0
Country of birth	Australia	50	84.7
	Other	3	5.1
	Missing	6	10.2
	Total	59	100.0
English spoken at home	Yes	49	83.1
	No	10	16.9
	Missing	0	0.0
	Total	59	100.0

Source: Assertive Community CAMHS file review data

On average, clients in the file review were aged 14 on entry to Assertive Community CAMHS, with a median age of 14.5 years. In LHD C, clients in the file review appeared to be older on average (data in Appendix B); however, it is unclear whether this is due to an anomaly in the data, as discussed in Section 4.3, or if the clients were genuinely older than the other two LHDs.

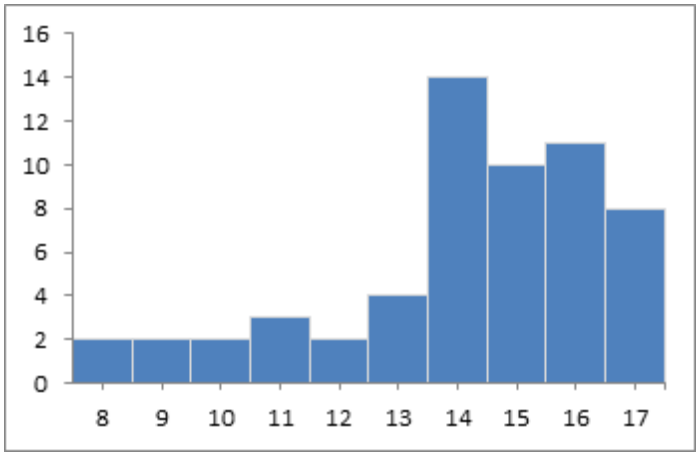
[1] Almost a third of clients did not have Aboriginal status recorded

Table 12 Client age at initial appointment, file review cohort

	All sites
Valid N	58
Mean (years)	14.16
SD	2.36
Min (years)	8
Median (years)	14.5
Max (years)	18

Source: Assertive Community CAMHS file review data
Note: Referral dates substituted for missing initial assessment dates.

Figure 3 Client age distribution, file review cohort



Source: Assertive Community CAMHS file review data
Note: Referral dates substituted for missing initial assessment dates.

Table 13 indicates that almost half of the clients in the file review who had a diagnosis on entry were diagnosed with depression (43.2%). A third of clients in the file review were diagnosed with anxiety (34.1%) and suicidal ideation (27.3%). Unfortunately a third of the clients in the file review data did not have a diagnosis recorded. The profile for clients in the file review in each LHD was very different (shown in Appendix B). LHD B and C both had a number of cases of depression, suicidal ideation and anxiety. LHD A had a greater spread of diagnoses; however, this region also had the most clients with no diagnosis recorded in their files. This may be due to the decision by LHD A to not limit the service to children or young people with a formal mental health diagnosis.

Table 13 Diagnosis on entry to Assertive Community CAMHS, file review cohort

	N	% of valid cases
Depression	19	43.2
Anxiety	15	34.1
Suicidal ideation	12	27.3
Deliberate Self harm	7	15.9
Major depressive disorder	7	15.9
Generalised anxiety disorder	5	11.4
Oppositional defiant disorder	4	9.1
Post-traumatic stress disorder	4	9.1
ADHD	3	6.8
Autism spectrum disorder	2	4.5
Borderline Personality Disorder	2	4.5
Obsessive-compulsive disorder	1	2.3
Missing (no diagnosis listed)	15	34.1
Valid N	**44**	

Source: Assertive Community CAMHS file review data
Note: A person may have multiple diagnoses. Valid N is the number of cases with any valid diagnosis recorded.

The following tables present a summary of the psychometric scores of clients on or close to entry into the program. Unlike the tables above, these data have been extracted from the NSW State Health Information Exchange and therefore represent all program users. As outlined in Section 4.3 there are serious data quality concerns relating to this data. Given these concerns, the following analysis should be interpreted with caution. It is likely that the scores do not reflect a fully operationalised Assertive Community CAMHS; however, they do provide an indication of the scores of a small group of clients on entry and will assist in targeting improvements in data quality. In particular, the information collected by LHD C appeared to include mainstream Community CAMHS clients, and therefore many more clients were included than would have been the case if only the information relating to Assertive Community CAMHS clients had been recorded. The scores for the mainstream Community CAMHS clients are likely to have influenced the results. More information about the implications of the data extract is presented in Appendix C.

Table 14 shows the Children's Global Assessment Scale (CGAS) for Assertive Community CAMHS from the three LHDs combined. The CGAS is recorded when a client first enters the Assertive Community CAMHS program. The combined mean CGAS score was 59.2; the CGAS Rating Guide indicates that, on average, Assertive Community CAMHS clients could be described as having "some noticeable problems". The CGAS Rating Guide outlines that a score of between 51 and 60 indicates client behaviour of "variable functioning with sporadic difficulties or symptoms in several but not all social areas. Disturbance would be apparent to

those who encounter the child in a dysfunctional setting or time but not to those who see the child in other settings" (Shaffer et al., 1983).

Table 14 CGAS scores on entry

	NSW	ACAMHS
N	13,121	72
Mean	57.1	59.2
SD	12.1	11.8
Min	N/A	10.0
Median	57.0	60.0
Max	N/A	88.0

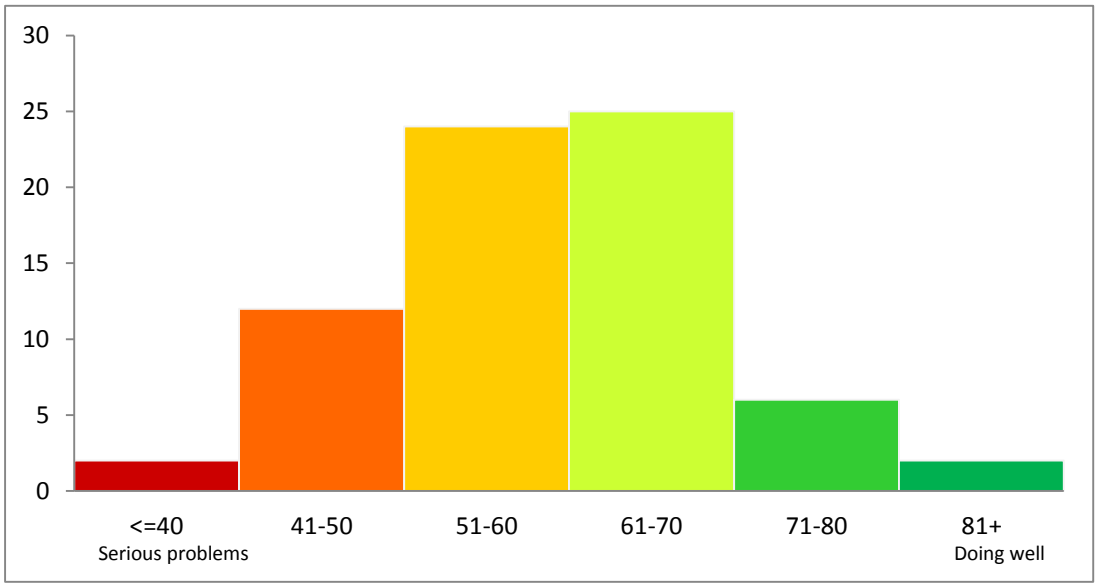
Source: NSW State Health Information Exchange
Note: NSW scores calculated at wdst.amhocn.org admission scores for ambulatory children and adolescents in NSW over the 2010-2013 financial years.
Criteria for selection include:
Score must be complete and valid
Client must have an admission date
Must be the first entry score only (a very small number of cases had >1 entry score recorded)
Must be the first admission to the program (although it was relatively common to have more than one admission date, there were very few cases with more than one admission and more than one admission score)
Must be collected within 30 days of admission date (very small number had collection date after then), or no earlier than 7 days prior to admission date (very small number had collection date earlier than that).

Table 15 below shows the ratings that NSW Health use to assess CGAS scores. According to this rating scale, the distribution of CGAS scores for the Assertive Community CAMHS programs combined (as illustrated in Figure 4) indicates that half of the clients either experienced 'some difficulty in a single area but generally functioning pretty well' or were managing better than that. In addition, the Assertive Community CAMHS clients also appear to have slightly better CGAS scores than the average for children and young people accessing mental health services in NSW (Table 14).

Table 15 Rating on the Children's Global Assessment Scale (CGAS)

1-10 Needs constant supervision
11-20 Needs considerable supervision
21-30 Unable to function in almost all areas
31-40 Major impairment of functioning in several areas and unable to function in one of these areas
41-50 Moderate
51-60 Variable functioning with sporadic difficulties or symptoms in several but not all social areas
61-70 Some difficulty in a single area but generally functioning pretty well
71-80 No more than slight impairments in functioning
81-90 Good functioning in all areas
91-100 Superior functioning

Figure 4 ACAMHS CGAS distribution on entry



Source: NSW State Health Information Exchange extract. N = 71
Note: NSW scores calculated at wdst.amhocn.org admission scores for ambulatory children and adolescents in NSW over the 2010-2013 financial years.
Criteria for selection include:

- Score must be complete and valid
- Client must have an admission date
- Must be the first entry score (very small number of cases had 1+ entry scores)
- Must be the first admission to the program (although it was relatively common to have more than one admission date, there were very few cases with more than one admission and more than one admission score)
- Must be collected within 30 days of admission date (very small number had collection date after then), or no earlier than 7 days prior to admission date (very small number had collection date earlier than that.

Looking at the CGAS scores for each individual LHD (shown in Appendix C) LHD C had almost twice as many clients with CGAS scores than the other two. Clients in LHD C had a CGAS score that was higher on average than both the other LHDs, and higher than the NSW average. This might be explained by the issues with the data collection and the fact that mainstream Community CAMHS clients were recorded using the Assertive Community CAMHS code (Section 4.3 However, it is unclear whether mainstream Community CAMHS clients were expected to have better entry scores as no benchmark for comparison was provided to the evaluation team.

Although these are tentative results, it does appear to show that clients entering the Assertive Community CAMHS program are generally doing better than would be expected for similar intensive services for high-risk young people in the mental health system, such as the Fife Intensive Therapy Team in the United Kingdom who generally only accept clients with scores lower than 50 on the CGAS, i.e. clients with moderate impairment at best (Simpson et al., 2009).

The Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA) is a collection of 15 scales designed to capture information regarding the severity of problems for

clients in 15 common areas. The same data limitations apply with the HoNOSCA scores as the CGAS scores. The HoNOSCA scores are summarised below. These scores can range between 0 and 52, with higher scores indicating more severe problems.

As with the CGAS, the HoNOSCA scores for the Assertive Community CAMHS clients (summarised in Table 16) appear to show that the client group are not presenting with severe problems on entry to the Assertive Community CAMHS program. The average scores across the three sites is 15.3, indicating that the clients accessing the program have slightly worse problems compared to the NSW state average at 14.0.

Table 16 HoNOSCA scores on entry to the program compared with rest of NSW

	NSW	ACAMHS
N	13,790	73
Mean	14.0	15.3
SD	6.9	7.2
Min	N/A	1.0
Median	13.0	15.0
Max	N/A	36.0

Source: NSW State Health Information Exchange
Note: NSW scores calculated at wdst.amhocn.org admission scores for ambulatory children and adolescents in NSW over the 2010-2013 financial years.
Criteria for selection include:

- Must be complete and valid
- Client must have an admission date
- Must be the first entry score (very small number of cases had 1+ entry scores)
- Must be the first admission to the program (although it was relatively common to have more than one admission date, there were very few cases with more than one admission and more than one admission score)
- Must be collected within 30 days of admission date (very small number had collection date after then), or no earlier than 7 days prior to admission date (very small number had collection date earlier than that.

As with the CGAS scores, the HoNOSCA scores were dominated by clients from LHD C, with three times as many (45) client scores than either of the other LHDs. The scores in LHD C were substantially lower with an average of 13.2 whereas LHD A and LHD B had higher scores of 19.1 and 18.4 respectively. Again this indicates that there were either data collection issues with LHD C, or the clients had higher levels of wellbeing. The HoNOSCA scores for the Assertive Community CAMHS program in the other two LHDs were more consistent with expected client scores.

A very small number of clients and parents completed the Strengths and Difficulties Questionnaire on entering the Assertive Community CAMHS program (six from LHD A, seven from LHD B, and 34 from LHD C). Given the small numbers in the LHD A and LHD B, and the data issues with LHD C, the evaluation team feel it would be inappropriate to summarise the overall scores for this outcome measure as it will be heavily biased towards

LHD C whose data also includes mainstream Community CAMHS clients. The tables for each of the three LHDs are found in Appendix C.

5.5 Challenges to operationalising Assertive Community CAMHS

5.5.1 Challenges reaching the target population

Local Health District A

Several participants spoke about service capacity issues creating the greatest challenge to reaching the target population. The issues included the geography of the LHD and the travel times required in order to provide a service as close to home as possible for a young person and their family. This in turn contributed to clinicians carrying smaller caseloads, usually three to four clients per clinician.

> Need to acknowledge that due to the geography and the level of acuity, we will have smaller caseloads. And that if there is a request for us to be more in the community then staffing levels may need to be reviewed. Because I think the geography we are covering is quite large. And many of our referrals struggle to get to a larger centre. (Community CAMHS, LHD A)

The other capacity issue that a couple of participants raised related to discharge processes, in particular, having available services in the community to which they could refer young people and their families once a crisis had been contained. As outlined in Section 5.1 , the Assertive Community CAMHS team made the decision not to limit the service only to children or young people with a formal mental health diagnosis. The challenge the team then faced was finding appropriate services to which they could refer children or young people who did not have a formal mental health diagnosis, particularly young people with disability:

> It is hard to hand them over to other services so we tend to stay linked in with them for a longer period of time then would be ideal – five to six months because there isn't anyone to hand them over. It then makes the transfer harder because they have formed a therapeutic relationship with us. There is a particular gap with kids with developmental disabilities; we've really struggled to find places to hand those kids over. It would be good to work out how we can discharge clients a little more quickly once they are stable. I think it is something that we are still working through – how do we hand them over in a timelier manner? (Community CAMHS, LHD A)

Local Health District B

A number of participants expressed the opinion that the size of the Assertive Community CAMHS team was insufficient to provide the expected service across the LHD. As participants explained:

> If it is going to sit separately from existing CAMHS teams then there needs to be sufficient staffing for it to actually run properly. (Community CAMHS, LHD B)

> It is a very small team and is being stretched with the resources to be able to see some quantitative changes and reduced rate of admissions to hospitals and presentations of young people to hospital. […] I think the overall aims are quite bold with having such a small team to facilitate the intensive support for young people. (Community CAMHS, LHD B)

Local Health District C

Several participants spoke of the need to build greater links with other services within the local area. These participants spoke of the Assertive Community CAMHS team receiving referrals to see children or young people during the height of a crisis, often when they presented to an emergency department or inpatient facility. For some of these young people, their situation was so acute at the time of referral to Assertive Community CAMHS that a hospital admission was the most appropriate course of action.

> Sometimes there are kids who just need to go to hospital. They are not known to us, and the first point of contact we have is pretty much when they need to go to hospital. We need to do more work around how we get to those kids earlier before they get to that point because, if we haven't known them before and the first contact is an assessment and they are so unwell, it ends up being 'we can't manage you in the community at this level of acuity, you obviously need to go to hospital'. (Community CAMHS, LHD C)

Another participant advocated for improving links in the community in an attempt to reach children and young people before they experience a severe crisis that results in hospital admission. This participant expressed concern that the community mental health services were so stretched due to staffing limitations, they did not have sufficient time to establish vital community links.

> We don't really know what is going on in the community. Which is not good. We don't really know what the resources are out there. No one is communicating with us because we don't promote ourselves [...]. It would be useful to get a good grasp of the community, to connect with services and work in a more preventative basis. And

provide more therapeutic groups to assist families […]. Unless there is significant consultation with the community, and identify the actual needs of the community, you just can't shuffle money and say this will be the model we use. (Community CAMHS, LHD C)

6 Impact on services

As outlined in the Assertive Community CAMHS Service Model (Section 2.2.2 key principles of the model were to provide a service which: was proactive and ensured the child or young person received rapid and appropriate treatment in order to prevent a crisis situation; and caused the least amount of disruption to the child or young person, their family, community supports and relationships. It was anticipated that the Assertive Community CAMHS team would be integrated within existing Community CAMHS teams and would build partnerships with emergency mental health services, inpatient services, and external community-based organisations, to ensure the provision of a service that best meets the needs of the young person and their family/carers.

It was acknowledged by participants across the three LHDs that the families who required intensive support had previously utilised a large amount of mainstream Community CAMHS resources. Therefore, having a team which was dedicated to providing an assertive and intensive service, and who had the capacity to provide outreach, added value to the existing CAMHS.

6.1 How the model fitted within the overall CAMHS and with other mental health services

One of the key purposes of Assertive Community CAMHS was to provide a service to a group of clients who take up significant resources for mainstream CAMHS teams. The intention was to relieve the CAMHS and enable them to better serve their core clientele.

Local Health District A

According to participants, after the funding was released to implement the Assertive Community CAMHS team within LHD A, the Child and Adolescent Mental Health Service Team Leader and the initial Assertive Community CAMHS team members, including the clinical lead, spent time planning how best to operationalise and implement the service model. This included considering service gaps in the existing Child and Adolescent Mental Health Service, and consulting with internal and external stakeholders about how best the Assertive Community CAMHS team could enhance existing services to meet the needs of children and young people experiencing acute mental health difficulties. The opportunity to have an outreach team, who could intensively manage young people at times of crisis and provide support to their families, was viewed by participants as a necessary and positive enhancement of the existing service.

> The Assertive Community CAMHS team had an opportunity to work with a client group who were already accessing the mainstream Community CAMHS. And the [mainstream Community CAMHS] team were going to be provided with a team who could work intensively with a client group who were taking an enormous amount of time for the [mainstream Community CAMHS] team. So the Assertive Community CAMHS team was value adding to our service and providing something new. (Community CAMHS, LHD A)

> It is a great team and a really innovative model of care and it is really different to what else is already out there, it is really non-pathologising; it's about what is happening in the family and how can we work to address these issues. Often in child mental health or just mental health, it is really easy to think 'ok, what is the problem with this young person?', whereas this team has that systemic lens, looking at what is contributing to the issue, what are the dynamics within the family, and how can adjustments be made so that things change. (Community CAMHS, LHD A)

The Assertive Community CAMHS team and the mainstream Community CAMHS team within the LHD A operated as two distinct teams. The mainstream Community CAMHS clinicians could refer a client to the Assertive Community CAMHS team when they became concerned about the safety of a child or young person. According to a couple of participants, the extent to which a mainstream Community CAMHS clinician remains involved once a referral has been accepted by the Assertive Community CAMHS team could vary; this had been a point of discussion and negotiation between the teams. There remained some flexibility around the collaboration between the two teams so that the individual needs of the child or young person and their family could be best served.

> If someone from the [mainstream Community CAMHS] team is really concerned about a child or young person, they can consult with [the Assertive Community CAMHS team] and make a referral […]. And the therapist on the [mainstream Community CAMHS] team making the referral is walking alongside us, so we can individualise the intervention. So sometimes the clinician walks alongside us, sometimes they are part of the intervention; sometimes they step back, but step back in towards the end. And this is a really good fit for families, that we are able to individualise it to meet families' needs. (Community CAMHS, LHD A)

Participants consistently spoke about the positive impact the introduction of the Assertive Community CAMHS program had on the wider Child and Adolescent Mental Health Service. As one participant explained, the introduction of this team was the first substantive enhancement in staffing the service had received in close to a decade, and the additional

support and new service model had been very positive and enabled the service to deliver a range of programs rather than focusing all resources on acutely unwell clients:

> The [mainstream community CAMHS] team have said that the introduction of the Assertive Community CAMHS team has kept them afloat. Things were blowing out, people had been on waiting lists for six months, and the crisis driven clients just kept taking the spare therapy spots. It shifted from feeling completely overwhelmed, to now the [mainstream Community CAMHS] team, who were really struggling to get involved in programs, now they are leaders in the [dialectical behaviour therapy] program and run school-based programs [...]. It didn't happen overnight, but it's come together. (Community CAMHS, LHD A)

Collaborating early with services external to the Child and Adolescent Mental Health Service was also viewed as central to the operation of the Assertive Community CAMHS team. This collaboration was considered by participants to be a core component of establishing a system of safety for the child or young person at risk. As outlined in Section 5.1 , the Assertive Community CAMHS team arranged and coordinated key partners meetings with various stakeholders, including teachers, school counsellors, police, police youth liaison officers, emergency services, youth services or youth refuges. Key partners were also viewed as important in assisting with the transition following discharge from the Assertive Community CAMHS teams as not all children and young people were viewed as suitable, or requiring, mainstream Community CAMHS intervention following discharge from the Assertive Community CAMHS team.

> You work with the services that are involved with the client, so that you can transfer duty of care back when appropriate, once things have settled. It is beneficial to work closely with other services – they are a joint client. (Community CAMHS, LHD A)

Local Health District C

A number of participants acknowledged that, at the time of the evaluation, the introduction of the Assertive Community CAMHS team had limited impact on CAMHS within the pilot area. This was in part due to reduced resources, with the high number of staffing vacancies on both the Assertive Community CAMHS and mainstream Community CAMHS teams resulting in the teams operating as a single team in much the same manner as the mainstream Community CAMHS team had previously operated. The size of the merged teams remained similar to the allocated size of the mainstream Community CAMHS team when fully staffed. Participants on both teams expressed some frustration with the lack of delineation between the teams and the need to simultaneously manage both acute and longer-term clients, while carrying caseloads of between15 and 20 clients per clinician.

Despite making no distinction between the two teams, participants reported that there were two separate streams of management that children and young people and their families may receive, depending on their needs. One stream involved intensive clinical management over a short time period and the other involved longer-term, less intensive management. Clinicians from both teams managed young people in either stream. At the time of the evaluation, most participants did not consider this arrangement to be different to the way mainstream Community CAMHS usually operated, and subsequently the operationalisation of the Assertive Community CAMHS model within LHD C was under review.

In terms of interaction with external services, one participant described the Assertive Community CAMHS program as operating like a service 'gateway': a team that provided intensive support during an acute situation, helped to establish safety and stability, and then discussed with the young person and their family what service might be most appropriate for longer-term management. Local services identified in the area included *headspace* and private psychologists/therapists. However, one participant expressed concern that there were insufficient local services within the area to which children and young people could be referred. The lack of appropriate services to which referrals could be made had direct implications for how effectively the Assertive Community CAMHS model may be able to operate within the area in the future.

Local Health District B

As outlined in Section 5.1 , the Assertive Community CAMHS team began providing a service across LHD B in March 2014. Prior to this, the team had been piloting the service within only one of the LHD's Community CAMHS teams. In September 2014, the Assertive Community CAMHS team became co-located with existing mainstream Community CAMHS teams for the first time. Two clinicians from the team commenced operating out of offices within three of the four CAMHS sectors. The psychiatrist maintained responsibility for all children and young people accessing the Assertive Community CAMHS team across the LHD.

According to a couple of participants, each Community CAMHS sector had been provided with a quota of four clients that the Assertive Community CAMHS team would manage. The quota system was to ensure that the Assertive Community CAMHS team provided services equitably across the LHD, although the team maintained the authority to transfer staff between sectors to meet service demands. There were mixed views voiced by participants as to how successful splitting up the team across the LHD would be in terms of running an effective Assertive Community CAMHS program, with concern raised that the service may become too stretched. There was a plan within CAMHS B to review the service model after six months of operation.

A number of participants spoke positively about the opportunity for the mainstream Community CAMHS to have a team who could provide outreach, particularly the capacity to conduct home visits, as this filled a gap in the mainstream Community CAMHS services. This was noted by a couple of participants to have been particularly useful with high risk young people and their families who were challenging to engage in services. The fact that the Assertive Community CAMHS team had more comprehensive psychiatry cover than mainstream Community CAMHS was also viewed by one participant as a distinct advantage when providing a service to high-risk children and young people.

However, the difficulty that participants consistently raised, in terms of how the Assertive Community CAMHS team integrated with existing services, was the lack of clarity about their role. This had existed for an extended period of time, with the changes in service model and referral criteria, and the subsequent confusion this had caused (refer to Section 5.1.1). A number of participants did acknowledge that this had improved more recently.

> There is a lot more clarity now around the role of the [Assertive Community CAMHS] team. They have developed documents that clarify their role and the limits of their involvement, and their inclusion criteria and exclusion criteria. And that took some time, for them to be clear about their role and what their criteria would be, and even their hours of work, because initially we thought they might be doing after hours work or weekend work. But all of that has been clarified now and people are much clearer about what is an appropriate referral. (Community CAMHS, LHD B)

However, not all participants were completely satisfied with the current Assertive Community CAMHS service model. Concern was raised by a couple of participants that with the service model changes, the Assertive Community CAMHS team had become increasingly centre-based and were no longer offering a service that was sufficiently differentiated from existing services. It was noted that mainstream Community CAMHS in LHD B had experienced a significant change in the type of client to whom they provided services, with an increase in clients with moderate to severe mental health issues. This had resulted in an increase in intensity of support provided to clients by mainstream Community CAMHS. The concern raised regarding the current iteration of the Assertive Community CAMHS model was that it no longer filled important service gaps for high-risk children and young people.

> We have a high level of engagement with CAMHS clients, where clients are seeing us at least twice a week, and then we are supposed to refer them to another service where they will be seen for 6 weeks and they are no longer doing things after-hours, they are no longer trying to capture families after hours and they are also not doing outreach. […] I think the model needs to look at doing something different from what [mainstream Community] CAMHS is doing. Because really what they are offering is

> the same as what we are offering, actually probably less than what we are offering because [...] they are only providing a service for six weeks. (Community CAMHS, LHD B)

However, it should be noted that the current Assertive Community CAMHS service model had only recently been implemented at the time of the evaluation and hence possibly required a greater period of time before the potential service impact could be fully determined.

Another area in which participants expressed mixed views was managing the transfer of care between the Assertive Community CAMHS and mainstream Community CAMHS teams. One participant provided a successful example in which there had been a clear agreed plan between the teams as to how to best manage the transition between services to ensure continuity of care for the young person and their family. Whereas, a couple of participants were critical of how the transition from Assertive Community CAMHS to mainstream Community CAMHS was managed. Part of the criticism centred on the decision to restrict the duration of care provided by Assertive Community CAMHS (generally a six-week intervention period). The participants expressed concern that the reduced flexibility in service provision did not always result in the needs of the child or young person being met.

> I think there needs to be more thought about how to manage the transfer of clients, so if a client is likely to be discharged from hospital to Assertive Community CAMHS and then eventually to Community CAMHS, I think that transition needs to be managed better. If they are a high risk client, often they are the hardest to engage and so it creates an extra challenge for the client if they have to engage with Assertive Community CAMHS for a couple of months before getting transferred on. [...] So if it was done more in terms of clinical need rather than having to be based on having so many weeks with Assertive Community CAMHS before they get transferred on – considering the client's needs a little more in the process would be beneficial. (Community CAMHS, LHD B)

A number of participants also noted hesitancy on the part of the Assertive Community CAMHS team to engage with stakeholders external to mainstream Community CAMHS. Inter-agency work was viewed by these participants as being increasingly critical when working with high risk young people and their families. It was acknowledged that the Assertive Community CAMHS team may start working more with other agencies once the newly developed service model becomes more established.

> Some of our young people live in refuges and attend special schools and that kind of thing, and I'm not entirely sure how much of that outreach they are doing. Again it is

all about resources, but having that capacity to support the community who are managing those very complex young people would help to sustain them in their placements, both at school and at refuges. (Community CAMHS, LHD B)

6.2 Evidence of reductions in hospital admissions, particularly Psychiatric Emergency Care Centre (PECC) admissions and admissions to adult psychiatric wards

6.2.1 Population-level changes in admission rates

The following information outlines the population-level changes to inpatient admissions for two age groups, 10-14 and 15-18 years old[2], amongst the three Local Health Districts (LHDs) that have piloted Assertive Community CAMHS and compares these to the remaining LHDs in NSW. Data for this analysis was provided by NSW Health and covered admissions to paediatric units and adult inpatient units between 2003 and the end of 2013. The analysis has been completed at child-level and not admission level. That is, each child was counted once per year in each data source regardless of the number of admissions they had.[3] This was done to align with the child-level intervention that Assertive Community CAMHS represents. The evaluation team analysed the overall number of children admitted (not shown below but available on request) and then the prevalence of admissions by using the rate per 1000 children in each age group in each LHD.[4]

Between 2003 and 2013 the population of children increased for LHD B more than the other two LHDs in the pilot, and more than the remaining LHDs on average. The child population in the LHD A and LHD C remained fairly steady across these years. For admissions to paediatric units during this time period (Figure 5), the average rate of admissions in LHDs without Assertive Community CAMHS for children aged 10-14 years was higher than the LHDs in which Assertive Community CAMHS was operating. From 2009, the rate of admissions climbed to a peak of 0.6 children per 1000 in 2013, after slightly levelling off in 2012. The rate for the older age group was lower but on average still higher in LHDs without Assertive Community CAMHS than the LHDs with Assertive Community CAMHS. The rate of

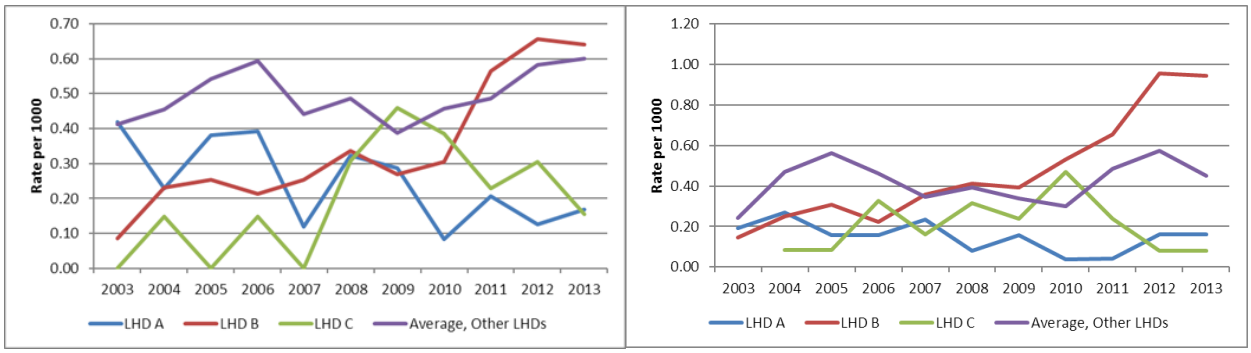
[2] Data and output for children younger than 10 is not shown in this report due to the very small number of admissions. This data is available on request.
[3] A small number of admissions contained no child ID. These were retained in the analysis and considered to represent individual children.
[4] Population estimates were obtained from NSW Health Statistics. Unfortunately the age breakdowns for the oldest age group include people who are 19 years of age. Due to this, the rate will be slightly inaccurate; however, this is consistent across each of the LHDs and represents the current best available approach to looking at trends over time.

admissions peaked and then dropped from 2005, and then peaked again in 2012 then dropped in 2013 to 0.45 children per 1000.

The rate of admissions to paediatric units in LHD B was substantially higher than the remaining LHDs across NSW from 2010 onwards for both age groups. This climbed to a peak in 2012 and then levelled off in 2013. LHD A experienced a quite variable but general decline in admissions for the 10-14 age group over time, with a steadying between 2011 and 2013 and a very slight increase between 2012 and 2013. For the older age group we see a low in 2010 and 2011, followed by an increase in admissions to 2012 and a levelling between 2012 and 2013. Finally, LHD C showed the lowest prevalence amongst children 10-14 until 2007 when the rate substantially increased to a peak of 0.46 children admitted per 1000 in 2009. This was followed by a similarly sharp decline in the rate, which dropped substantially between 2012 and 2013 and slightly increased again in 2013. A similar but dampened pattern is observed for the older age group, with a spike in 2010 followed by a sharp decrease and levelling off between 2012 and 2013.

Figure 5 Number of children admitted to paediatric units per 1000 children, 2003-2013

Children aged 10-14 Young people aged 15-18



Source: NSW Health
Notes: Rate per 1000 children aged 15-18 is derived using the population of young people 15-19. No data is available at LHD level for the population between 15-18

For children 10-14 years, it appears that there was no consistent pattern that would clearly indicate Assertive Community CAMHS had a measurable impact upon admissions to paediatric units. The largest decrease between 2011 and 2013 for this age group was in LHD C; however, this appeared to form part of a larger downward trend that commenced in 2009. Given that LHD B experienced the largest increase in admissions prevalence during the observation period, any indication that this increase was slowing is a good sign; however, there were other LHDs that either levelled off or demonstrated the same decline during the same period. Amongst the LHDs with rates that lowered over this period, a LHD which was not part of the Assertive Community CAMHS pilot had similar high absolute numbers of entries and a similar large drop in both the rate and the absolute number of admissions. It is

therefore difficult to attribute the entire change to the introduction of Assertive Community CAMHS.

Amongst the young people aged 15-18, a clear levelling off in admissions was evident between 2012 and 2013 for the three LHDs piloting Assertive Community CAMHS; however, there was a decline in the average rate for the same time period amongst the other NSW LHDs. The levelling off in admissions to paediatric units between 2012 and 2013 for both age groups is a positive sign; however, more observation time is required to see whether this trend continues, and to determine whether the trend is stronger in the pilot LHDs compared to other areas.

Figure 6 illustrates the rate of children per 1000 admitted to both Psychiatric Emergency Care Centres (PECCs), and to adult inpatient units, intensive care units (ICUs), and high dependency units (HDUs) over time. As with the admissions to paediatric units, the evaluation team has omitted the youngest age group of 0-9, although this is available on request. Similarly to the above analysis, child-level analysis has been completed so that it aligns with the child-focused intervention.

For PECC admissions within the LHDs without Assertive Community CAMHS, there was, on average, a gradual increase in the rate of children admitted over time for both the younger and older age groups. The rates for both age groups peaked in 2013, with rates of 0.44 and 1.46 children per 1000 respectively.

As with the paediatric admissions, LHD B showed a substantially higher rate of PECCs admissions than the average LHD without Assertive Community CAMHS for both age groups. Amongst children aged 10-14, the rate of children admitted to PECC units experienced a sharp rise between 2011 and 2012 and then dropped from 0.89 to 0.72 children per 1000 between 2012 and 2013. Amongst the older age group, there was a stronger increase from the start of the data in 2006 and overall a much higher rate compared to the younger age group. The rate for children aged 15-18 reached a peak in 2012 and remained stable between 2012 and 2013 at 3.49 children per 1000.

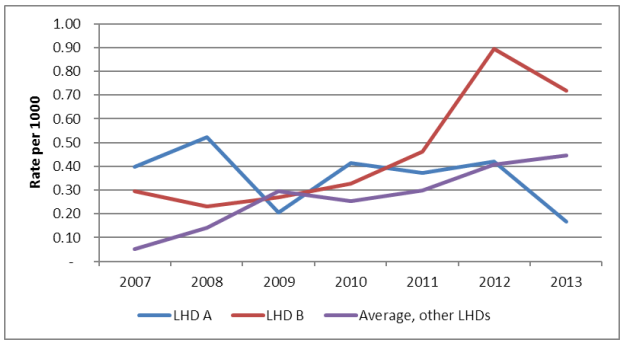
Child admissions to adult PECC units in LHD A appeared more erratic for children 10-14 years, with a peak in 2006 followed by a somewhat variable next few years that hovered around the 0.4 child per 1000 mark. Between 2012 and 2013, however, there was a sharp drop off for this age group from 0.42 to 0.17 children admitted per 1000, with 2013 being the lowest recorded rate for this LHD. The admission rate for young people aged between 15 and 18 years was consistently high with a slight increase over time from the first data in 2007. Between 2012 and 2013, however, the rate declined from 2.46 to 2.22 children admitted per 1000.

LHD C does not have a PECC unit so no data for this group is shown below.

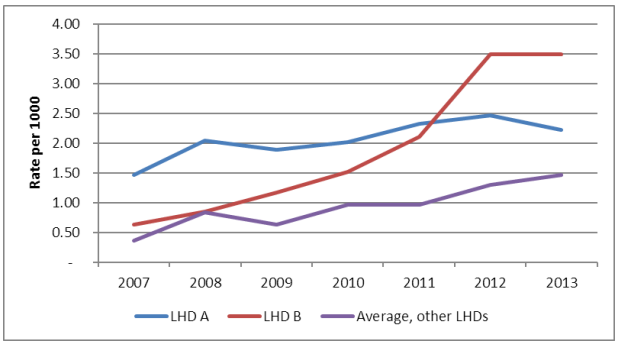
As with the admission rates to paediatric units, there was consistent slowing or decline in the rate of admissions to adult PECCs between 2012 and 2013. However, unlike the paediatric admission rates, the average rate for LHDs without Assertive Community CAMHS continued to increase during 2013. This may indicate that Assertive Community CAMHS was having an effect. However, more time would be needed to determine whether this trend continues. Out of the three groups of population admissions data, the PECC admissions information showed the greatest indication of a slowing or decline in the rate of children admitted per 1000 children in the population.

Figure 6 Number of children admitted to adult PECC units per 1000 children, 2003-2013

Children aged 10-14



Young people aged 15-18



Source: NSW Health
Notes: Rate per 1000 children aged 15-18 is derived using the population of young people 15-19. No data is available at LHD level for the population between 15-18.
Data missing and assumed unavailable for years between 2003 and 2007 dependent on LHD – years included to align with other data displayed in this section.

Finally, Figure 7 shows the change in the rate per 1000 children entering adult units, intensive care units (ICUs), or high dependency units (HDUs) over time. Amongst the younger group aged 10-14, the rates are generally very low for the LHDs without Assertive Community CAMHS, and higher with a decline over time for the 15-18 year olds.

Both LHD A and LHD B showed very small rates of admissions amongst the 10-14 year olds, with a slight increase for LHD B between 2012 and 2013. A similar pattern is observed for the 15-18 year olds, with LHD A showing higher rates than LHD B, although both decrease over time.

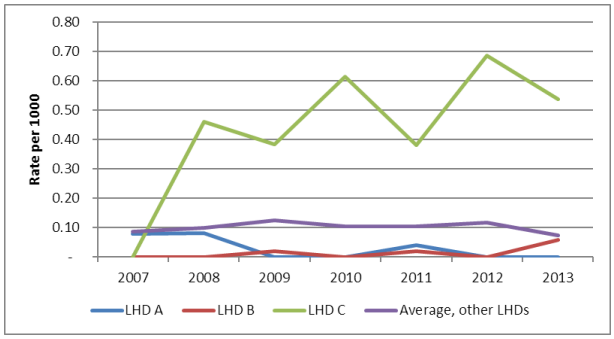
LHD C shows a very sharp contrast to the remaining LHDs, with rates that are substantially higher in both the 10-14 age group and the 15-18 age group. This may be due to the absence of a PECC unit in this region. For children in the 10-14 age group in this LHD, the rates show a very sharp increase from 2007, after which there was a variable increasing

trend over time. The rate showed a decline between 2012 and 2013 from 0.69 to 0.54 children per 1000 entering these wards. The rate of children in the 15-18 age group was also very high compared to both the other LHDs piloting Assertive Community CMAHS and the average rate for the LHDs without Assertive Community CAMHS. It showed a similar trend to the younger age group in that the rate sharply rose after 2007. It declined slightly after 2009 and then showed a sharp increase between 2012 and 2013, from 2.75 to 3.78 children admitted per 1000 in the population.

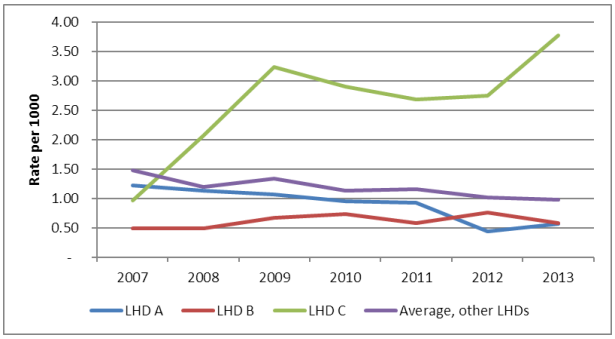
The data related to the adult unit, intensive care unit or high dependency unit admissions showed the least change over time on average, with low rates and unclear results for LHD A and LHD B. In LHD C, the admission rates for the younger age group declined in the most recent year; however, the rate was highly variable for the 10-14 age group, so the pattern may not be attributable to Assertive Community CAMHS. A longer observation time would be needed to confirm whether there was a general downward trend. In LHD B, for young people 15-18 years, there was a substantial increase in the rate of children admitted per 1000 children in the population.

Figure 7 Number of children admitted to Adult/ICU/HDU units per 1000 children, 2003-2013

Children aged 10-14



Young people aged 15-18



Source: NSW Health
Notes: Rate per 1000 children aged 15-18 is derived using the population of young people 15-19. No data is available at LHD level for the population between 15-18.

In summary, it appears that there was no consistent pattern that would clearly indicate Assertive Community CAMHS was having a substantial impact upon admissions to paediatric units or adult units, intensive care units or high dependency units. However, there were some promising signs that entries to adult PECC units decreased or stabilised between 2012 and 2013. This was encouraging given the only other LHD with a substantial decline in the same time period was the Central Coast LHD.[5] If this trend persists over a longer period it may be possible to attribute this change to Assertive Community CAMHS program assuming no other significant changes occur within the mental health services.

[5] Individual LHDs not shown in the above output but available on request.

6.2.2 Qualitative findings relating to the impact of Assertive Community CAMHS on reducing hospital presentations and/or admissions

As outlined in the Assertive Community CAMHS Service Model (Section 2.2.2 key objectives of the service included: providing care in settings more acceptable to young people, their families and service providers; reducing avoidable admissions to inpatient services and increasing the capacity for early discharge; and reducing child and adolescent presentations to emergency departments. Across the three LHDs it was acknowledged that certain barriers existed that made it difficult to substantially reduce hospital presentations and/or admissions of high risk children or young people. However, the introduction of the Assertive Community CAAMHS service model had resulted in a positive outcome in some individual situations.

Local Health District A

It was acknowledged by a number of participants that, despite all attempts to work with families and other key stakeholders to establish safety for a child or young person, there are instances in which a child or young person requires an inpatient admission. LHD A did not have a specialist child and adolescent inpatient mental health facility. As outlined in Section 5.2.2, a team member from the Assertive Community CAMHS team had an existing relationship with the inpatient facility in the neighbouring LHD which had made it easier for the Assertive Community CAMHS team to build links with this inpatient service. However, access to beds within the inpatient facility remained limited, and young people continued to present at emergency departments at hospitals across LHD A.

Participants spoke about being unsure as to whether the introduction of the Assertive Community CAMHS team had reduced admissions of children and young people to inpatient units; however, anecdotally it was felt that the team had been instrumental in reducing the length of admission for some young people.

> I don't know what the numbers are in terms of how many young people have been prevented from going to hospital, but even if they have gone to hospital I think the [Assertive Community CAMHS] team have been able to do that really great support work in terms of getting young people out faster, keeping the stay shorter, but also addressing the major issues in their life so that they are more stable more quickly when they come out. (Community CAMHS, LHD A)

Another participant noted that by reducing the length of admission, this made more inpatient places available for the children and young people who require an admission.

Local Health District B

A couple of participants provided examples of the positive impact the introduction of the Assertive Community CAMHS team had on reducing avoidable admissions to inpatient facilities. This was in the context of providing intensive support to a child or young person and their family who are known to mainstream Community CAMHS, helping to stabilise the situation, and reducing the likelihood of the young person presenting to hospital on multiple occasions.

> I think the notion that [mainstream Community] CAMHS could refer someone to [Assertive Community CAMHS] to prevent multiple hospital admissions is working. I can think of one young person who was having multiple hospital admissions and since [the Assertive Community CAMHS] team's involvement, those hospital admissions tapered off very quickly and now she is not presenting at all. So that has been a very good part of the service [Assertive Community CAMHS] is providing, minimising that frequent flyer presentation to hospital, and trying to get kids out of hospital sooner. (Community CAMHS, LHD B)

One participant commented that significantly reducing presentations and admissions of children and young people to hospital would be challenging as a significant proportion of the young people who present to hospital are not previously known to CAMHS. This means that the first point of contact with CAMHS is an acute presentation at hospital. The participant noted that in these situations, the Assertive Community CAMHS team were not going to be able to prevent a hospital presentation and/or admission.

In June 2013, about six months after the introduction of the Assertive Community CAMHS team within LHD B, a CAMHS inpatient facility opened within the LHD. No participants commented about whether the introduction of a specialist child and adolescent inpatient unit had changed the management of high-risk children and young people in the LHD.

Local Health District C

A couple of participants described one of the key challenges to reducing admissions to PECCs and adult psychiatric wards within LHD C was the lack of available specialist child and adolescent inpatient mental health services. Given there were no specialist inpatient facilities within the LHD, Community CAMHS had worked on improving referral pathways to specialist Inpatient Units at [metropolitan LHD], [regional LHD], [metropolitan LHD] and the Children's Hospital at Westmead. The improved referral pathways were successful for planned admissions but not for acute unplanned admissions.

> Things are better, we've done a lot of work with our referral pathways [...] but if you need an acute bed then and there for a seventeen year old, or dare I say thirteen year old, we are not going to be able to get you into a bed within a day, with the tyranny of travel and all those sorts of things, so sometimes we do have to have kids in our adult units, and that's not ideal for anyone. (CAMHS, LHD C)

Participants explained that for children or young people requiring an unplanned admission, they were commonly admitted to a local adult unit for a brief period in order to be stabilised, before being discharged to an adolescent unit or home. There was noted to be a high number of admissions to the adolescent unit at [regional] Hospital from the local area. A couple of participants speculated that the community demographics of the local area contributed to the high number of admissions.

One participant also cited the reduced access to community child and adolescent psychiatrists within LHD C as a barrier to successfully reducing admissions to inpatient facilities. The Assertive Community CAMHS model outlined the need for a multidisciplinary team, but the team operating in LHD C had no psychiatry or nursing team members at the time of the evaluation. With no team psychiatrist, there had reportedly been instances where a young person was admitted to an inpatient facility for a short period for the purpose of medication management. Also, if a young person presented at the emergency department, the medical practitioner in the emergency department would often make the decision to admit the young person, as there was no specialist medical support available in the community.

7 Outcomes for children or young people and their families

As outlined in the Assertive Community CAMHS Service Model (Section 2.2.2 the aim of the program was to deliver mobile community acute mental health services that were consumer-sensitive, responsive and able to provide timely, effective and high quality care. Unfortunately, there was a lack of reliable and complete client outcome data available for the purposes of the impact evaluation and hence it was not possible to determine whether any changes in outcomes for children and young people had been achieved through the introduction of the Assertive Community CAMHS program within the three LHDs.

Local Health District A

A number of participants spoke about the value for the Child and Youth Mental Health Service in being able to provide the Assertive Community CAMHS program to children and young people and their families. Having a team who were able to provide an intensive service in an environment that best suited the immediate needs of the young person and their family was viewed as contributing to better outcomes.

It was acknowledged by one participant that discussion regarding outcomes should be viewed in the context that the Assertive Community CAMHS program was fairly recently implemented within the LHD, that new services take time to become established, and subsequently outcome data was still quite limited. However, several participants felt there was early indication that the program had been successful. Participants described a number of early anecdotal outcomes, which included: a reduction in requests to the after-hours adult acute care team to provide weekend home visits or after-hours input to clients of the Assertive Community CAMHS team; a reduction in the number of emergency appointments that the Child and Adolescent Mental Health Service needed to offer; and a reduction in referrals from the Assertive Community CAMHS team to the inpatient mental health services, particularly the inpatient facility in the neighbouring Local Health District.

The promptness and intensity of the service that the Assertive Community CAMHS team was able to provide, the family-based approach, and the flexibility of the service in accommodating the needs of the young person and their family, were cited by participants as beneficial.

> The family work that the team are doing in a time of crisis, where they are able to do that intensity and are able to say ‘well I can see you on Wednesday if you can’t see us on Monday’. The [mainstream Community CAMHS] team don’t have that flexibility. But the [Assertive Community CAMHS] team, because their client load is as low as it

> would be if they were working in an inpatient unit, it allows for that flexibility […] So families are more likely to engage in the work, and the evidence is there that this is the time when you can do some of the difficult stuff. (Community CAMHS, LHD A)
>
> The [Assertive Community CAMHS] team have certainly been able to take some of those tricky clients and been able to settle thing quite quickly. That being said, they've had to do a lot of work. Meetings, multiple family sessions, some short counselling, but all that intense work had really been able to produce results. I know of some kids who have not really been going to school and exhibiting some really risky behaviour, have settled down quite a lot. So I definitely think it has been effective. (Community CAMHS, LHD A)

Local Health District B

As discussed in Section 6.2, a couple of participants provided examples in which the Assertive Community CAMHS team had helped to reduce admissions of Community CAMHS clients to inpatient facilities. This was achieved by providing intensive support to the child or young person and their family, helping to stabilise the situation, and thereby reducing the likelihood of the young person presenting to hospital on multiple occasions.

The focus on family-based interventions, and the resources to be able to work with a family within their home environment, was also viewed by a number of participants as having resulted in positive outcomes. One participant acknowledged that family dynamics within a centre-based environment could present differently to the dynamics within the home environment and that having a team who could provide an outreach service had been beneficial in determining the underlying issues for certain young people and their families.

Local Health District C

A small number of participants commented that some positive outcomes for children and young people had been achieved following the introduction of the Assertive Community CAMHS team. However, it was noted that positive outcomes were more likely for children or young people at risk who had good existing support networks with whom the Assertive Community CAMHS team could work. This could include family members, school, or other community supports. One of the key barriers for the Assertive Community CAMHS team in LHD C was not having a psychiatrist on the team; if a young person required medical management, it became more challenging for the team to provide support without an admission to hospital.

8 Conclusions

The findings from the evaluation present a complex picture regarding the implementation and effect of the Assertive Community CAMHS model piloted in NSW. These findings should be seen as representing the early stages of implementation of a new program, and it would not be expected that within the first two years of operation, a program such as Assertive Community CAMHS would be fully implemented and embedded in the overall CAMHS system.

A clear and important finding of this evaluation is that the Assertive Community CAMHS model certainly fulfils a need. A relatively large number of children and young people who attend emergency departments and who are admitted to hospital – either as CAMHS inpatients or onto adult mental health wards – could be better supported in the community. For many of the young people in crisis, or whose functioning has deteriorated to such an extent that they are not able to attend clinics, 'traditional' models of CAMHS cannot provide support which is sufficiently intensive or flexible to meet their needs.

The model which was implemented in the Assertive Community CAMHS pilot, although not 'evidence-based' in that it has not been subject to rigorous evaluation or manualisation, nevertheless represents significant elements of commonly accepted good practice in this area. There is clear evidence from this evaluation that where the Assertive Community CAMHS model was well implemented, it complemented and enhanced existing CAHMS services and provided a flexible and appropriate response to children and young people at high risk of ED presentation and/or hospital admission. The systemic approach within the model was particularly valued, and the engagement with families and other services adds an important dimension to CAMHS.

It is apparent from the qualitative data collected for this evaluation, as well as the (very limited) findings from the quantitative data, that the model which was implemented faced a number of significant implementation challenges in its first years. Considering the three implementation drivers set out in Figure 1 in the methodology section (organisational, leadership and competency drivers), it is clear that there were challenges with all three drivers. Of these the most important appeared to be the organisational drivers, whose effectiveness was limited by three significant factors:

Adaptation of the model

One of the recurring issues which emerged from the interviews was the tension between the need for a clearly defined and articulated program with explicit instructions on how the model would work, and the need for each LHD to have the autonomy to implement the model in the

most appropriate way to fit the particular service, demographic and geographical context. Although most of the participants expressed frustration about the lack of clear articulation of the model, it is likely that there would have been equivalent frustration if MH – Children and Young People had specified exactly how the model should be replicated in each LHD. This is evidenced by the very different service provision contexts in the three LHDs which required different versions of the model to work within the broader CAMHS at the district level.

As the first stage of implementation of a pilot project, it is appropriate that the three LHDs were given the leeway to implement the model in the most appropriate way to fit in with the service configuration in that LHD, and also that they were able to experiment with different configurations of staffing, location and reach. Over time it would be expected that implementation lessons would be learned and that the optimal conditions and arrangement of the model will become clearer. At that stage it would be appropriate for MH – Children and Young People to provide much more explicit guidance about the operation of the model.

LHDs were strongly encouraged to recruit to the Assertive Community CAMHS teams as quickly as possible. While this is understandable, it appears to have created difficulties in two of the LHDs, with adverse consequences not only for the resourcing and governance of the Assertive Community CAMHS teams themselves, but also for the wider CAMHS. This is not an issue for Assertive Community CAMHS itself but indicates an overall challenge in NSW of recruiting CAMHS staff.

Contextual factors

Assertive Community CAMHS has been implemented in the three pilot LHDs in a context of rapid organisational change. Two of the three LHDs have experienced significant personnel changes and there have also been structural changes in the three LHDs, as well as within MH – Children and Young People and in mental health services overall. Furthermore, as indicated above, the overall CAMHS system in NSW is significantly under resourced. This context provides significant challenges to the implementation of the model. However, it is unlikely that these contextual factors are going to change significantly in the foreseeable future, and so the pilot has illustrated the reality of implementing innovations within a rapidly changing context. While the implementation science literature indicates that a stable 'implementation ready' organisational context is best for the uptake of new ways of working, this is simply not the reality of CAMHS in NSW (or any other jurisdiction in Australia for that matter).

Resources

The Assertive Community CAMHS teams were well resourced, and there appeared to be no significant issues related to the resourcing of the teams. As indicated above, the more

challenging issues arose from attempts to fill all the funded positions quickly. Support from MH – Children and Young People was also provided at a higher level than is usually available for this sort of program, and was valued by all three teams.

Data collection issues

This evaluation originally aimed to assess the extent to which the Assertive Community CAMHS model had achieved its primary objectives of reducing emergency department admissions and hospital separations for youg people with acute mental health issues, as well as improvements in mental health and general functioning for clients of Assertive Community CAMHS. Unfortunately the lack of reliable data means that we are not able to answer any of these questions with any degree of authority. Indeed it is not even possible to know definatively how many young people accessed the program.

There is no data on emergency department admissions or hospital stays, either at the unit level (i.e. for clients of Assertive Community CAMHS) or at the aggregate level in these LHDs; thus, it is not possible to know even if the main outcomes were achieved in these areas, let alone whether those changes can be attributed to Assertive Community CAMHS. With regard to targeting, the evaluation team have found that the HoNOSCA and CGAS scores for Assertive Community CAMHS clients at entry into the program indicated that they were functioning at higher levels than the average client of CAMHS in NSW. This is a counter-intuitive finding and is contrary to the reports in the qualitative interviews. This is likely to again be a function of the poor data collection practices in the Assertive Community CAMHS teams, with at best estimate only about a quarter of clients having scores at entry, and virtually none having scores at exit. This is not a good record for a pilot program which is attempting to demonstrate its effectiveness and to justify the need for sustained funding.

Administrative data is not primarily collected for evaluation purposes, and the hundreds of hours which practitioners and administrators have spent inputting data would be warranted if these scores were used routinely for case management. However, this does not seem to be the case.

Overall, therefore, while we can report that Assertive Community CAMHS fulfills a significant gap in the CAMHS system in NSW, we are not able to assess whether it is an effective model in terms of achieving its stated objectives, or whether it has targeted the appropriate clients.

With regard to implementation, the program has encountered a number of challenges and has been adapted in various ways to address contextual and staffing issues. This process is still ongoing and the model has not been in practice long enough to make specific judgements about the optimal staffing, location, or geographical remit of the teams.

It is strongly recommended that when a model is finalised, this is manualised and then rigourously evaluated so that its effectiveness can be established.

Implementation lessons

The evaluation has demonstrated that the successful implementation of a service innovation such as Assertive Community CAMHS is highly dependent on the three main implementation drivers; leadership, competency and organisation. Where the leadership of the program and senior leaders within the LHD were committed to the model and provided the vision of how it would complement current CAMHS, the implementation went smoothly and the model itself appeared to be working well. However, where the leadership was divided or uncommitted, this tended to affect the response of the whole staff cohort and impeded implementation. Organisational drivers were even more important but inevitably took more time to sort out. The Assertive Community CAMHS model could work very well with other components of the service system if the refferral pathways were clear and the team had a clear role and rationale. This also applied within the team, and clear roles and a shared understanding of the purpose of the model were crucial. Competence drivers were perhaps less significant in this pilot. Nevertheless, selection of appropriate staff at different levels, and training of Assertive Community CAMHS staff members, as well as other CAMHS members and the broader service provision system, so that the model and its purposes was better understood and utilised could lead to greater outcomes for the service.

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Appendix A: Research tools

Assertive Community CAMHS File Review Tool

Identifiers

Service: LHD A ☐ LHD B ☐ LHD C ☐

Current Client File: ☐ **Discharged Client File:** ☐ **If discharged, date of discharge** _____

Client ID: _____ **Sex:** _____ **DOB:** _____

Client data cross check

Indigenous status	Country of birth	Language spoken at home	Diagnoses

Date of referral: _____ Date of Initial Appointment: _____ Date of Transfer of Care: _____

Aspects of Care

Who is/was involved in family sessions?

Parents/step parents	Siblings	Extended Family e.g. Grandparents	Other (relationship to client)

Family involvement in care – Number of recorded family sessions:

1	2	3	4	5	6	7	8	9	10	Other

(*Please tick boxes for services involved in stage of care*)

Stage of Care	Involved in care		Other People/Services involved in care														
			Mental Health					Other NSW Health			External to NSW Health						
	Client/ Family/ Carer		CAMHS		Other MH		PECC	ED	Paeds	Other (Name)	GP	Private MH provider	Education	NGO	Community Services	Other (Name)
			IPU	Community	IPU	Community										
Initial Assessment	Client	Family/ Carer														
Care Planning																
Case Conference																
Treatment																
Review																
Transfer Planning																

Unplanned hospital presentations (*Please indicate number if evidence sighted*)

Hospital setting	**Number of presentations**
Emergency Department	
CAMHS IPU	
Adult MH IPU	
Paediatric ward	
PECC	
General Hospital	

Evidence of care planning –Mental Health Clinical Documentation Care Plan

(*Please tick box if evidence sighted*)

Evidence of Care Planning	**YES**	**NO**
Is a Care Plan present?		
Are there documented goals?		
Does the care plan detail interventions aligned to the goals?		
Evidence of young person involvement in the development of the Care Plan?		
Evidence of family involvement in the development of the Care Plan?		

Evidence of other service providers' involvement in the Care Plan?		
Evidence that the young person has received a copy of the Care Plan?		
Evidence that the family have received a copy of the Care Plan?		
Evidence of Care Plan Review?		
Is Safety Planning part of the care plan?		

Evidence of Risk Assessment - Has the Mental Health Clinical Documentation Risk Assessment been completed: **Yes** ☐ **No** ☐

Treatment (*Please tick box if evidence sighted*)

Psychosocial or psychological interventions

(*Please tick box if evidence sighted*)

Intervention		**In Care Plan**	**Delivered**
Solution Focused family intervention			
Psychoeducation			
CBT Techniques			
Behavioural Techniques			
Skills Training	Mindfulness		
	Interpersonal effectiveness		

	Emotion regulation		
	Distress Tolerance		
Motivational Interviewing			
Behaviour Family therapy			
Other:			

Medication intervention

(*Please tick box if evidence sighted*)

Was Medication	Commenced	
	Ceased	
	Altered	
	Maintained	
	No medication	

Outreach

Setting (*Please tick box where care delivered*)

Stage of Care	Setting where care was delivered				
	Community Health Centre	**Home**	**School**	**Hospital**	**Other (Name)**
Initial Assessment					
Care Planning					
Case Conference					
Treatment					
Review					
Transfer Planning					

Assertiveness

Non-Attendance

Were there any Did Not Attend recorded in the file? **Yes** ☐ **No** ☐ **If Yes what % of appointments were DNAs.**

If yes, what were the actions recorded?

Comments on the suitability of the actions:

Transfer of Care (*Please tick box if evidence sighted*)

Reason	**Present**
Client no longer required service	
Clients goals have been met	
Client was discharged to another service	
Client was transferred to CAMHS Team	
Family declined service	
Other:	

Transfer/Discharge Summary

For files of discharged clients please record the following:

Does the file include a documented Transfer/Discharge Summary? **Yes** ☐ **No** ☐

To whom was the Transfer/Discharge Summary given/sent? ((*Please tick box if evidence sighted*)

Client/Family/Carer		**Mental Health**					**External to NSW Health**					
		CAMHS		**Other MH**				**Private**			**Community**	**Other**
Client	**Family/ Carer**	**Inpatient**	**Community**	**Inpatient**	**Community**	**PECC**	**GP**	**MH provider**	**Education**	**NGO**	**Services**	**(Name)**

What type of service was the client transferred to? _____

Is there evidence that referral is matched with the next set of goals? **Yes** ☐ **No** ☐

Review conducted by (NAME)…… (TEAM)…… (DATE)……

Appendix B: File review analysis separated by Local Health District

Table 17 Demographics

		LHD A	LHD B	LHD C
		N	N	N
Gender	Male	7	11	6
	Female	13	9	12
	Missing	0	0	1
	Total	20	20	19
Aboriginal or Torres Strait Islander?	Yes	1	1	2
	No	10	14	15
	Missing	9	5	2
	Total	20	20	19
Country of birth	Australia	17	15	18
	Other	0	3	0
	Missing	3	2	1
	Total	20	20	19
English spoken at home	Yes	13	18	18
	No	7	2	1
	Missing	0	0	0
	Total	20	20	19

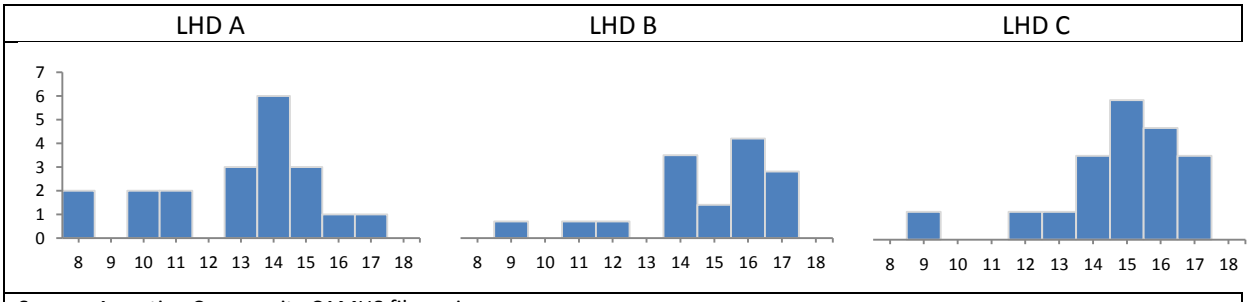
Source: Assertive Community CAMHS file review

Table 18 Client age at initial appointment

	LHD B	LHD A	LHD C
Valid N	20	20	18
Mean	14.80	12.95	14.78
SD	2.14	2.50	1.99
Median	15.5	14.0	15.0

Source: Assertive Community CAMHS file review
Note: Referral dates substituted for missing initial assessment dates

Figure 8 Age distribution



Source: Assertive Community CAMHS file review

Table 19 Diagnosis on entry to Assertive Community CAMHS

	LHD B	LHD A	LHD C	Total
	N	N	N	N
Oppositional defiant disorder	1	2	1	4
Obsessive-compulsive disorder	1	0	0	1
Post-traumatic stress disorder	0	3	1	4
Generalised anxiety disorder	4	1	0	5
Autism spectrum disorder	0	2	0	2
Depression	9	1	9	19
ADHD	0	1	2	3
Deliberate Self harm	2	2	3	7
Suicidal ideation	4	2	6	12
Major depressive disorder	2	3	2	7
Borderline Personality Disorder	2	0	0	2
Anxiety	5	4	6	15
Missing (no diagnosis listed)	6	8	1	15
Children with at least one diagnosis listed	14	12	18	44

Source: Assertive Community CAMHS file review

Note: Note a person may have multiple diagnoses

Table 20 Service timing

		LHD A	LHD B	LHD C
		N	N	N
Days from referral to appointment	Valid N	20	19	15
	Mean	4.25	9.8	4.73
	SD	4.82	12.2	5.97
	Min	0	0	0
	Median	2.5	5	1
	Max	16	38	18
Length of engagement (days)	Valid N (discharged clients)	16	13	9
	Mean	91.81	130.5	96.44
	SD	83.51	55.2	52.71
	Min	7	41	28
	Median	76.5	120	90
	Max	306	239	186

Source: Assertive Community CAMHS file review

Table 21 Evidence of care planning

	LHD A	LHD B	LHD C
Mental health clinical documentation risk assessment completed	17	18	18
Are there documented goals?	16	20	13
Is a care plan present?	15	19	10
Is safety planning part of the care plan?	15	18	9
Does the care plan detail interventions aligned to the goals?	13	16	11
Evidence of young person involvement in the development of the care plan	6	17	9
Evidence of care plan review	5	17	6
Evidence of family involvement in the development of the care plan	4	18	5
Evidence of other service providers' involvement in the care plan	10	2	5
Evidence that the young person has received a copy of the care plan	1	1	0
Evidence that the family have received a copy of the care plan	5	17	6

Source: Assertive Community CAMHS file review

Table 22 Care setting per LHD

		LHD A	LHD B	LHD C
		N	N	N
Initial assessment	Community health centre	12	4	14
	Home	5	4	0
	School	1	0	0
	Hospital	2	11	7
	Other	1	0	0
	Valid N	18	19	18
	Missing – no detail recorded	2	1	1
Care planning	Community health centre	15	10	7
	Home	7	8	0
	School	4	4	0
	Hospital	1	5	0
	Other	0	0	0
	Valid N	19	16	7
	Missing – no detail recorded	1	4	12
Case conference	Community health centre	3	10	1
	Home	0	6	0
	School	9	3	0
	Hospital	3	1	0
	Other	1	0	1
	Valid N	14	15	2

	Missing – no detail recorded	6	5	17
Treatment	Community health centre	16	11	16
	Home	10	10	2
	School	2	3	1
	Hospital	1	0	1
	Other	2	0	1
	Valid N	19	15	17
	Missing – no detail recorded	1	5	2
Review	Community health centre	16	9	5
	Home	1	6	1
	School	2	2	0
	Hospital	0	0	2
	Other	1	0	1
	Valid N	18	13	8
	Missing – no detail recorded	2	7	11
Transfer planning	Community health centre	14	9	6
	Home	1	10	0
	School	1	0	0
	Hospital	2	2	0
	Other	0	2	0
	Valid N	15	13	6
	Missing – no detail recorded	5	7	13

Source: Assertive Community CAMHS file review.
Note: Multiple responses can be recorded. Valid N is a count of clients with at least one response recorded in that category.

Table 23 Involvement in care

		LHD B	LHD A	LHD C
Initial Assessment	Client	1	20	6
	Family/Carer	1	19	5
	CAMHS IPU	1	1	0
	CAMHS Community	6	6	16
	Other MH IPU	0	0	1
	Other MH Community	0	0	2
	PECC	1	1	0
	Missing – no detail recorded	12	0	2
	Total	8	20	17
Care planning	Client	16	17	3
	Family/Carer	16	18	2
	CAMHS IPU	0	1	0
	CAMHS Community	7	3	3
	Other MH IPU	0	0	0
	Other MH Community	0	1	0
	PECC	1	0	0
	Missing – no detail recorded	0	0	16
	Total	20	20	4
Case conference	Client	7	8	0
	Family/Carer	7	10	0

	CAMHS IPU	1	1	0
	CAMHS Community	6	3	1
	Other MH IPU	0	1	0
	Other MH Community	0	0	0
	PECC	0	0	0
	Missing – no detail recorded	9	9	18
	Total	11	11	1
Treatment	Client	13	17	3
	Family/Carer	11	17	1
	CAMHS IPU	0	1	0
	CAMHS Community	5	0	13
	Other MH IPU	1	0	1
	Other MH Community	0	0	0
	PECC	0	0	0
	Missing – no detail recorded	4	3	6
	Total	16	17	13
Review	Client	8	8	2
	Family/Carer	8	9	2
	CAMHS IPU	0	1	0
	CAMHS Community	8	2	3
	Other MH IPU	1	0	1
	Other MH Community	0	1	0
	PECC	0	0	0
	Missing – no detail recorded	4	10	14
	Total	16	10	5
Transfer planning	Client	4	15	4
	Family/Carer	5	16	3
	CAMHS IPU	0	2	0
	CAMHS Community	6	2	5
	Other MH IPU	1	1	1
	Other MH Community	0	0	0
	PECC	0	0	0
	Missing – no detail recorded	9	3	13
	Total	11	17	6

Source: Assertive Community CAMHS file review.
Note: Multiple responses can be recorded. Valid N is a count of clients with at least one response recorded in that category.

Table 24 Involvement in family sessions

	LHD B	LHD A	LHD C
Parents/step parents	18	19	12
Siblings	5	9	2
Extended family e.g. grandparents	1	3	2

Table 25 Psychosocial or psychological interventions outlined in care plan

	LHD B	LHD A	LHD C
Solution focused family intervention	8	1	0
Psychoeducation	8	3	2
CBT techniques	4	3	2
Behavioural techniques	5	1	4
Skills training	0	0	0
Mindfulness	1	1	1
Interpersonal effectiveness	0	2	0
Emotion regulation	0	5	1
Distress tolerance	2	3	3

Table 26 Psychosocial or psychological interventions delivered

	LHD B	LHD A	LHD C
Solution focused family intervention	6	4	0
Psychoeducation	11	12	4
CBT techniques	5	6	4
Behavioural techniques	3	2	5
Skills training	0	0	0
Mindfulness	2	0	2
Interpersonal effectiveness	0	1	1
Emotion regulation	1	6	3
Distress tolerance	3	5	5
Motivational interviewing	0	2	0
Behaviour family therapy	0	8	2
Other psychosocial or psychological treatment	13	5	11

Table 27 Unplanned hospital presentations

		LHD A	LHD B	LHD C
Emergency Department	Valid N Cases	13	16	15
	N with any presentations	2	11	4
	Sum presentations	5	17	10
CAMHS IPU	Valid N Cases	13	16	15
	N with any presentations	2	1	0
	Sum presentations	2	2	0
Adult MH IPU	Valid N Cases	13	16	15
	N with any presentations	0	0	4
	Sum presentations	0	0	4
Paediatric	Valid N Cases	13	16	15

ward	N with any presentations	0	6	0
	Sum presentations	0	7	0
PECC	Valid N Cases	13	16	15
	N with any presentations	0	3	0
	Sum presentations	1	4	0
General Hospital	Valid N Cases	13	16	15
	N with any presentations	1	1	0
	Sum presentations	1	4	0

Source: Assertive Community CAMHS file review
Note: A person may have multiple presentations

Table 28 Discharge details

	LHD A	LHD B	LHD C
N discharged case files	13	16	11
N discharged with any discharge details recorded	8	2	4
N discharged with no discharge details recorded (missing)	5	14	7
Client	0	0	2
Family/Carer	1	0	1
CAMHS Community	1	1	0
Other MH Inpatient	1	0	0
Other MH Community	2	0	0
GP	4	2	2
Private MH provider	0	0	1
Education	1	0	0
NGO	1	0	0
Community services	1	0	0

Source: Assertive Community CAMHS file review
Note: Discharged clients with any details recorded may have multiple entries

Appendix C: Administrative data analysis

The following tables present a summary of the data extracted by NSW Health from the NSW State Health Information Exchange.

The original data request was for a range of demographic, service use and outcomes data for all clients of Assertive Community CAMHS.

Once the data were provided to the research team, a number of issues were identified seriously affecting the quality of the data. Some of these were addressed through a combination of data management or exclusion. However, some issues could not be resolved and it is due to these issues that the output reported below should not be considered to be a reliable summary of the Assertive Community CAMHS as a whole, nor of the Assertive Community CAMHS at any of the three LHDs. As can be seen, there are often fewer responses to some questions in the NSW State Health Information Exchange output than there are in the file review data, which means the output can be contradictory to the file review data.

The issues affecting data identified to date include:

Critical issues:

- As described Section 5.1.1, the staffing issues within LHD C meant that members of the Assertive Community CAMHS team were performing clinical cover to other services (e.g. mainstream Community CAMHS, adult mental health services). Unfortunately the Assertive Community CAMHS code was used to record this additional cover (i.e. to record the team's work even when it was not for Assertive Community CAMHS). This meant that it was impossible to distinguish between the clients in the data extract that may have received an assertive response and those who received an alternative service. Part of the resulting issue was that data was received for hundreds of people in all age groups; however, removing those people aged 18 and older still left a large number of children and young people who did not receive Assertive Community CAMHS. Unfortunately due to these clients being recorded as Assertive Community CAMHS, the evaluation team was unable to disentangle the Assertive Community CAMHS clients from other clients. The data from this LHD should therefore not be used in any way to represent Assertive Community CAMHS.
- No data could be extracted in LHD A for Assertive Community CAMHS clients who commenced services at the time the service first opened, as no specific data code had been set-up. The data therefore only represents a portion of the clients for this

LHD. The evaluation team were advised that there was data missing for 26 clients; however, the information that was able to be extracted still had missing data and it remained unclear whether the extracted data was representative of the clients and cases in that LHD.

- The Assertive Community CAMHS in LHD B had relatively few clients during the observation period of the evaluation. Due to this, the data may not be representative of the client base when capacity and service maturity has been reached.

Other data cleaning steps taken

- records with no person ID attached were removed prior to reporting
- children aged younger than 10 years were grouped
- adults aged 18 and over were removed prior to reporting
- unless otherwise indicated, all demographic information is taken from the client's first contact

Table 29 Demographic details of young people using ACCAMHS as per NSW State Health Information Exchange

	LHD A		LHD B		LHD C	
	N	%	N	%	N	%
Females	72	71.3	46	64.8	106	60.6
Males	29	28.7	25	35.2	69	39.4
Total	101	100.0	71	100.0	175	100.0
Indigenous status						
Aboriginal and/or Torres Strait Islander	5	5.0	2	2.8	3	1.7
Non-Aboriginal	44	43.6	52	73.2	157	89.7
Unknown / not recorded	52	51.5	17	23.9	15	8.6
Total	101	100.1	71	99.9	175	100.0
Country of birth						
Australia	113	99.1	81	91.0	301	99.7
Other[6]	0	0.0	6	6.7	0	0.0
Unknown	1	0.9	2	2.2	1	0.3
Total	114	100.0	89	100.0	302	100.0
Preferred Language						
English	108	94.7	86	96.6	301	99.0
Unknown / not recorded	6	5.3	3	3.4	3	1.0
Total	114	100.0	89	100.0	304	100.0

[6] Due to small numbers, 'Other' is not disaggregated. It includes young people from England, Netherlands, Ukraine, Malaysia, China (excl. SARS and Taiwan) and Hong Kong.

Age at first contact						
10	2	1.8	2	2.2	6	2.0
11	3	2.6	0	0.0	6	2.0
12	3	2.6	2	2.2	5	1.6
13	5	4.4	1	1.1	11	3.6
14	15	13.2	12	13.5	25	8.2
15	18	15.8	19	21.3	36	11.8
16	26	22.8	16	18.0	37	12.2
17	21	18.4	16	18.0	28	9.2
18	8	7.0	3	3.4	21	6.9
Missing	13	11.4	18	20.2	129	42.4
Total	114	100.0	89	100.0	304	100.0
Mean		15.4		15.4		15.2

Table 30 Diagnosis on entry – LHD A

Local Health District A	N	%
Mental diagnosis yet to be allocated	46	45.5
Reaction to severe stress, and adjustment disorders	11	10.9
Suicidal ideation	7	6.9
Depression	6	5.9
Atypical parenting situation	5	5
Other anxiety disorders	4	4
Intentional self-harm by unspecified means	3	3
Family history of other mental and behavioural disorders	2	2
Mental health diagnosis not applicable	2	2
Obsessive-compulsive disorder	2	2
Pervasive developmental disorders	2	2
Unspecified disorder of psychological development	2	2
Acute and transient psychotic disorders	1	1
Conduct disorders	1	1
Disorders of social functioning with onset specific to childhood and adolescence	1	1
Emotional disorders with onset specific to childhood	1	1
Hyperkinetic disorders	1	1
Oppositional defiant disorder	1	1
Other specified problems related to primary support group	1	1
Separation anxiety disorder of childhood	1	1
Unspecified mental retardation	1	1
Total	101	100

Table 31 Diagnosis on entry – LHD B

Local Health District B	N	%
Total	71	100
Unknown	52	73.2
Mental diagnosis yet to be allocated	7	9.9
Depression	3	4.2
Intentional self-harm by unspecified means	2	2.8
Suicidal ideation	2	2.8
Unspecified disorder of psychological development	2	2.8
Other anxiety disorders	1	1.4
Other specified problems related to primary support group	1	1.4
Reaction to severe stress, and adjustment disorders	1	1.4
Total	71	100

Table 32 Diagnosis on entry – LHD C

LHD C	N	%
Mental diagnosis yet to be allocated	137	78.3
Depression	8	4.6
Mental health diagnosis not applicable	4	2.3
Other anxiety disorders	4	2.3
Suicidal ideation	4	2.3
Emotional disorders with onset specific to childhood	2	1.1
Generalised anxiety disorder	2	1.1
Mental and behavioural disorders due to use of drugs	2	1.1
Phobic anxiety disorders	2	1.1
Conduct disorders	1	0.6
Emotionally unstable personality disorder, borderline type	1	0.6
Family history of mental and behavioural disorders	1	0.6
Hyperkinetic disorders	1	0.6
Obsessive-compulsive disorder	1	0.6
Oppositional defiant disorder	1	0.6
Other childhood emotional disorders	1	0.6
Reaction to severe stress, and adjustment disorders	1	0.6
Reactive attachment disorder of childhood	1	0.6
Social anxiety disorder of childhood	1	0.6

Table 33 CGAS scores on entry, by LHD and State

	NSW	LHD A	LHD B	LHD C
N	13,121	15	13	44
Mean	57.1	51.5	58.5	62.1
SD	12.1	14.9	12.0	9.5
Min	N/A	10.0	39.0	45.0
Median	57.0	51.00	57.50	62.00
Max	N/A	70.0	75.0	88.0

Source: NSW State Health Information Exchange
Note: NSW scores calculated at wdst.amhocn.org admission scores for ambulatory children and adolescents in NSW over the 2010-2013 financial years.
Criteria for selection include:

- Must be complete and valid
- Client must have an admission date
- Must be the first entry score (very small number of cases had 1+ entry scores)
- Must be the first admission to the program (although it was relatively common to have more than one admission date, there were very few cases with more than one admission and more than one admission score)
- Must be collected within 30 days of admission date (very small number had collection date after then), or no earlier than 7 days prior to admission date (very small number had collection date earlier than that.

Table 34 HoNOSCA scores on entry, by LHD and State

	NSW	LHD A	LHD B	LHD C
N	13,790	14	14	45
Mean	14.0	19.1	18.4	13.2
SD	6.9	6.5	8.5	6.2
Min	N/A	7.0	6.0	1.0
Median	13.0	19.0	18.5	13.0
Max	N/A	29.0	36.0	30.0

Source: NSW State Health Information Exchange
Note: NSW scores calculated at wdst.amhocn.org admission scores for ambulatory children and adolescents in NSW over the 2010-2013 financial years.
Criteria for selection include:

- Must be complete and valid
- Client must have an admission date
- Must be the first entry score (very small number of cases had 1+ entry scores)
- Must be the first admission to the program (although it was relatively common to have more than one admission date, there were very few cases with more than one admission and more than one admission score)
- Must be collected within 30 days of admission date (very small number had collection date after then), or no earlier than 7 days prior to admission date (very small number had collection date earlier than that.

Table 35 SDQ-P scores on entry, by LHD and State

	NSW	LHD A	LHD B	LHD C
N	2,428	6	7	34
Mean	17.7	28.2	24.7	26.8
SD	7.1	6.1	4.9	5.6
Min	N/A	23.0	17.0	16.0
Median	18.0	26.0	24.0	26.5
Max	N/A	38.0	30.0	36.0

Source: NSW State Health Information Exchange
Note: NSW scores calculated at wdst.amhocn.org admission scores for ambulatory children and adolescents in NSW over the 2010-2013 financial years.
Criteria for selection include:

- Must be complete and valid
- Client must have an admission date
- Must be the first entry score (very small number of cases had 1+ entry scores)
- Must be the first admission to the program (although it was relatively common to have more than one admission date, there were very few cases with more than one admission and more than one admission score)
- Must be collected within 30 days of admission date (very small number had collection date after then), or no earlier than 7 days prior to admission date (very small number had collection date earlier than that.

Table 36 SDQ-S scores on entry, by LHD and State

	NSW	LHD A	LHD B	LHD C
N	5,940	5	7	37
Mean	18.9	29.0	28.0	28.5
SD	6.8	4.5	4.4	4.6
Min	N/A	25.0	23.0	16.0
Median	19.0	27.0	26.0	29.0
Max	N/A	36.0	34.0	35.0

Source: NSW State Health Information Exchange
Note: NSW scores calculated at wdst.amhocn.org admission scores for ambulatory children and adolescents in NSW over the 2010-2013 financial years.
Criteria for selection include:

- Must be complete and valid
- Client must have an admission date
- Must be the first entry score (very small number of cases had 1+ entry scores)
- Must be the first admission to the program (although it was relatively common to have more than one admission date, there were very few cases with more than one admission and more than one admission score)
- Must be collected within 30 days of admission date (very small number had collection date after then), or no earlier than 7 days prior to admission date (very small number had collection date earlier than that.

Table 37 Length of engagement (first entry and all entries) amongst discharged clients, by LHD

	LHD A	LHD B	LHD C
Length of engagement – first engagement only (days)			
N	16	48	91
Mean	59.12	83.63	89.08
SD	62.19	62.11	79.28
Median	31.5	73	69
Length of engagement – first engagement to last discharge (days)			
N	16	48	91
Mean	88.81	98.46	102.92
SD	82.92	71.85	85.62
Median	49.5	86	83

Source: NSW State Health Information Exchange
Note:
LHD C includes non-assertive Community CAMHS clients so is not representative of Assertive Community CAMHS specifically.
Length of engagement – first engagement only is the difference between the first service request and the first discharge date, length of engagement –first engagement to last discharge is the difference between the first service request date and the last discharge date regardless of whether the client had gaps in service. Admission counted as an activity with the activity type 'Service request'.
Excludes persons aged 18 and older. Excludes clients with no admission recorded even though some case activity was recorded (e.g. some clients were receiving services prior to the Assertive Community CAMHS code being created). Excludes clients with no discharge date. Excludes clients with no service request date.
Note: Excludes persons aged 18 and older. Excludes persons whose score was recorded prior to their first admission date. Excludes missed appointments. Excludes duplicated rows.

Table 38 Number of admissions (service requests), by LHD

	LHD A	LHD B	LHD C
1	26	48	112
2	4	7	18
3	1	0	4
4	0	0	0
5	0	0	1
Valid total	31	55	135

Source: NSW State Health Information Exchange
Note: LHD C includes non-Assertive Community CAMHS clients so is not representative of Assertive Community CAMHS specifically. Excludes duplicated rows.
Admission counted as an activity with the activity type 'Service request'.
Excludes persons aged 18 and older. Excludes clients with no admission recorded even though some case activity was recorded (e.g. some clients were receiving services prior to the Assertive Community CAMHS code being created). This count makes no consideration of the distance between service requests.

Table 39 Referrals to Assertive Community CAMHS, by LHD

	LHD A	LHD B	LHD C
Public Mental Health service in Area	153	208	13
Family/friend	163	0	94
Specialist Adolescent Service	0	137	0
Public Mental Health service in other area	98	0	4
Emergency Department	6	0	48
Education Service	16	4	9
GP	2	1	18
Self	2	0	17
Other health service	1	12	0
Criminal justice service	12	0	0
Law Enforcement Service	5	0	6
Private Psychiatrist	2	8	0
Other specialist Clinician	1	8	1
Other specialist Medical Officer	3	2	0
Public Inpatient service	2	1	2
Community Health	4	0	0
NGO	4	0	0
Specialist Child & Family Service	0	3	0
Boarding house	0	0	1
DoCS Service	1	0	0
Other	1	0	12
Unknown/not stated	43	0	37
Total	519	384	262

Source: NSW State Health Information Exchange
Note: This is a count of all referrals not just those at the start of a service episode, a client may have multiple referrals.

Appendix D: LHD B Service Description

[Redacted]