

Title: Development of an implementation guide to facilitate the roll out of early intervention services for psychosis

Running title: Implementation of early intervention services for psychosis

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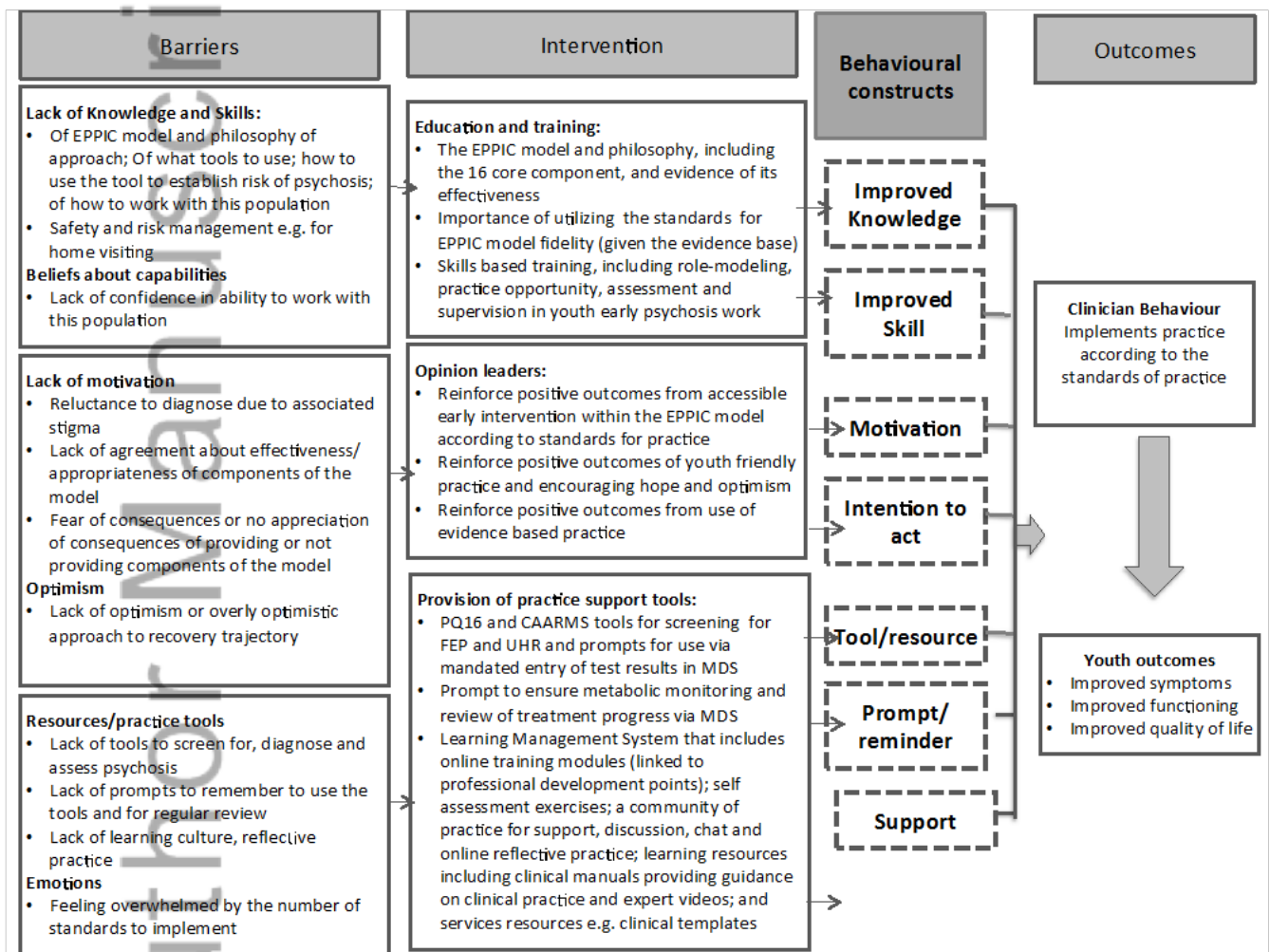
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implementation diagram-Figure 1.tif

Abstract

Aim

Our aim was to develop an implementation guide that was informed by an analysis of context-specific barriers and enablers, behaviour change theory, as well as evidence about the effects of implementation interventions, for the establishment and scaling up of an early intervention model for psychosis (called EPPIC).

Methods

We used a systematic approach involving four steps. First, the target behaviours of the EPPIC model for implementation were specified. Secondly, a consultation was undertaken to explore the barriers and enablers to undertaking these priority minimum standard clinical behaviours. Thirdly, an implementation strategy that included a range of behaviour change techniques tailored to address the identified barriers was developed. Finally, a tool to assess whether those implementing the EPPIC model maintained fidelity to the implementation strategy was designed.

Results

We identified a range of barriers that could act to dilute the core components of the EPPIC model and compromise its implementation. An implementation strategy, using theory and evidence based strategies for behaviour change was designed to address these barriers.

Conclusions

The process we used in the development of the implementation strategy provided a unique opportunity to consider the essential areas to cover, how to make information easily understandable and accessible while noting the complexity of issues involved in not only implementation, but also the scaling up of the EPPIC model for services.

Key Words: first episode psychosis, evidence based practice, implementation, service development

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Introduction

Psychotic illnesses including schizophrenia and bipolar affective disorder affect approximately 3.5% of the population (1). Despite a relatively low prevalence compared to disorders such as anxiety and depression, psychotic disorders cause a disproportionately high burden of illness(2). This is in large part due to the persistent disability that accrues across a number of life domains such as education, employment, accommodation, social involvement and relationships(3). Low levels of functioning in these domains make significant contribution to the cost and burden of psychotic illness(4).

Until the 1990s treatment for psychotic illnesses was largely focused on management of chronicity (5). Since that time a fundamental shift in thinking has occurred with the development of an early intervention focus that is explicitly aimed at the prevention of disability, prevention of the progression of illness, and identification of those at risk of illness in order to prevent onset or minimize delay in accessing treatment (6). As this early intervention focus has developed, both the concept of early intervention and specific interventions within the concept have been evaluated. The outcome of this body of work is an early intervention, youth focused model of comprehensive care that ensures early detection of those at risk of developing a first episode psychosis or who have experienced a first episode psychosis; prevents transition to a full threshold psychosis in those young people who are at risk of developing a first episode psychosis and to provide effective early intervention to those who have a first episode of psychosis to provide recovery from symptoms, pre-empt or minimize disability and restore the normal developmental and functional trajectory (7).

One such model of comprehensive care is The Early Psychosis Prevention and Intervention Centre (EPPIC). The EPPIC model has been shown to be superior to standard clinical care in

terms of clinical as well as economic outcomes (5, 8-12). The EPPIC model has been the basis on which other specialist early psychosis services throughout the world have been established (13, 14).

The Australian Commonwealth Government funded with \$248.6 million to establish 9 EPPIC model within designated headspace centres known as hYEPP (headspace Youth Early Psychosis Programs). This was a different way of working for the usual headspace centres which operate on private practitioner model funded via the Medicare Benefits Scheme (MBS). Headspace centres provide access for young people to services to deal with mental health, physical health, alcohol and drug and work and study issues. The implementation of a different model within a headspace centre was provided by having an integrated intake system where a young person was seen as attending a headspace centre and the service then worked out the best clinical pathway for the young person; such as to primary headspace with the model of private provider service or to be referred to the hYEPP program. As with all of headspace, the hYEPP program was an open catchment area aiming to pick up those young people who were at risk of or experiencing a first episode of psychosis. The Commonwealth contract and funding agreement stipulated to headspace National Office the amount of money available for hYEPP sites in terms of infrastructure, required staffing numbers and levels, including leadership and expectations regarding scaling up of the program within a specific timeframe. Of the 16 core components of the EPPIC model, there were two that were not included in the funding agreement, such as acute in-patient and the sub-acute settings. The aim was for hYEPP sites to develop partnership arrangements to access acute and sub-acute inpatient care.

The implementation of best practice, even in the face of effective treatments and evidence-based guidelines, is widely recognised as challenging (15-17). There is a growing body of

evidence that highlights the need for implementation strategies to be tailored to address specific barriers that are identified to the implementation of best practice; and to use strategies that are informed by behavioural theory (17-19). Barriers can arise at three broad levels (20): the level of the individual clinician (e.g. knowledge, skills, attitudes), the social context in which the clinician works (e.g. patients, colleagues, authorities), and the organisational context in which the practice is delivered (e.g. organisational climate, environmental context and resources). Based on the Commonwealth mandated funding and contractual arrangements we made the assumptions that structural and leadership were not going to be barriers to be addressed. Therefore our focus was on the individual clinician and managers to address i.e. barriers amenable to behaviour change. The use of theory enables the specification and testing of the pathway of change needed for an intervention to work. This means that more effective interventions are likely. Furthermore, it provides an understanding of the factors that modify the magnitude of intervention effects across implementation trials (21-23).

Therefore, the aim of this paper is to describe the process we engaged in to designing the EPPIC model implementation strategy that was informed by an analysis of context-specific barriers and enablers, behaviour change theory, as well as evidence about the effects of implementation interventions that The EPPIC National Support Program (ENSP) followed to arrive at the implementation guide.

Materials and Methods

Formation of the EPPIC National Support Program (ENSP)

Our team, the ENSP, consisted of a number of clinical, service development and workforce

development experts in the EPPIC Model. In addition, we co-opted experts in evidence synthesis, knowledge transfer and implementation science into the team in order to synthesise a strategic service development approach.

Specifying the target behaviours of the EPPIC model for implementation

Much of the work undertaken within the implementation science field has been with aim of implementing one, or at the most several, specific evidence based clinical practice guideline recommendations. As such relatively well-defined target behaviours can be identified for implementation. In the case of the implementation of the EPPIC model, there are potentially hundreds of behaviours involved to ensure adherence to the 16 core components of the model (Appendix 1, 16 core components).

The ENSP developed a set of standards (N=125) organised around the clinical and service level of the 16 core components of the EPPIC model, ensuring that the standards were phrased in terms of who would perform the target behaviour, what the target behaviour was, when it should occur, where it should occur and how it should be carried out.

To identify a manageable number of standards (phrased as target behaviours) that could be used as the basis for developing an implementation strategy, we required a process to prioritise these standards to identify a set of minimum standards. Minimum standards were defined as those that were essential, without which there could be no fidelity to the EPPIC model.

First, the ENSP evaluated the standards with regard to the amount and level of evidence for the effectiveness underlying that standard, and with regard to the good practice points in the

Australian Clinical Guidelines for Early Psychosis Second Edition (ACGEP)(24). Secondly, consultation with two Senior Clinicians from EPPIC with regard to the draft set of minimum standards (on the basis of the evidence and the ACGEP). Finally, a questionnaire was designed with the aim to gain consensus on the list of minimum standards. As the hYEPP sites were not operational at the point of needing to identify and achieve consensus on minimum standards there was a practical need to choose responders with the most experience in the EPPIC model. Therefore those Directors, senior clinicians and clinical managers with a high level of expertise and involvement in the initial establishment of the EPPIC model and with at least over 20 years working within the EPPIC model and within other internationally regarded early psychosis programs, who were not already part of the ENSP (N=5) were invited to participate and all agreed to be involved. These expert clinicians were emailed a link to a questionnaire, which was delivered via Survey Monkey. Clinicians were given four weeks to complete the questionnaire, with one reminder email sent. All of the clinicians completed the questionnaire and their questionnaire responses were compiled to establish if there was consensus reached with regard to agreement on the prioritised target behaviours. Consensus was reached in the first round of the questionnaire and this resulted in a set of 57 minimum standards (Appendix 2).

Understanding the barriers and enablers to undertaking these priority minimum standard clinical behaviours

Given there were still a large number of minimum standards, six exemplar minimum standards were selected by the ENSP which best summarised the likely clinical pathway of a young person and family through an EPPIC model service and had strong evidence that indicated they were essential elements to have in place (Appendix 3). These exemplar minimum standards were used as the basis for understanding the possible barriers and

enablers to implementing the EPPIC model as a whole. Prior to any strategy being devised a consultation was conducted with three senior clinical leads from **headspace** in which the barriers and enablers to undertaking these six exemplar minimum standards were explored. Clinicians were selected on the basis of: 1. Having had experience as a clinician working with young people who have psychosis; and or, 2. Having a leadership and management role within a local headspace service.

Two of the ESPN team (SH and HS) facilitated the consultation using a semi-structured schedule of questions (Appendix 3) developed on the basis of each domain described within the Theoretical Domains Framework (TDF). The TDF is an integrative framework of theories of practice change developed for assessing implementation problems and informing implementation strategies (21, 25). Participants were given a written copy of the six exemplar minimum standards (Box 1) and asked to comment on any barriers and any enablers to ensuring these standards were implemented. They were also asked questions based on the TDF about the implementation of the EPPIC model as a whole. The consultations were audio recorded, and field notes were taken by HS or SH.

Due to the lack of research in this area and our primary goal being a practical one: to develop an implementation strategy for the roll-out of the EPPIC model, our main focus was to obtain a descriptive account of the barriers and enablers to implementing the 16 core components of model on the basis of the exemplar minimum standards. Therefore, we used a content analysis approach in order to identify the barriers within each of the domains of the TDF. We classified barriers and enablers identified in the data according to these domains in order to compare and contrast the barriers according to level of barrier (individual clinician, clinical presentation and service levels).

Tailoring the implementation strategy to address identified barriers

Selection of implementation interventions for the implementation strategy should be on the basis of their empirical evidence of effectiveness (26). Implementation interventions to improve compliance with recommended or best practice have been researched and evaluated extensively (27-29). The most comprehensive and up-to-date evaluation is a systematic review summarising the findings of 235 studies, some single and some multifaceted interventions (17). In terms of single modality approaches, the review showed that there was variable effectiveness for audit and feedback, and use of local opinion leaders, and generally consistent evidence that educational outreach and reminders were effective. Importantly, the review highlighted the effectiveness of multifaceted implementation strategies that include various intervention approaches (17).

Critical to the effectiveness of the intervention is the selection of implementation interventions relevant to the identified local barriers (18, 30). We used the barriers identified on the basis of the TDF framework for the exemplar minimum standards as a guide to the choice of evidence based intervention components, keeping in mind the pathway or mechanism of change proposed within the TDF. These components were combined to form a cohesive implementation strategy, with the assumption that the strategy would be effective to facilitate the implementation of the EPPIC model as a whole, in terms of all of the minimum standards.

Therefore, we developed the implementation strategy on the basis of: 1. The barriers and enablers identified in clinician interviews; 2. Empirical evidence about the effects of implementation interventions and 3. An understanding of the ‘active ingredients’ of

implementation strategies and theorising the pathways to change (22, 31, 32).

Results

Specifying the target behaviours of the EPPIC model for implementation

We identified fifty-seven standards relevant to the 16 core components and articulated as target clinical behaviours as minimum standards for the implementation of the EPPIC model as listed in Appendix 3. The range of minimum standards per core component of the EPPIC model ranged from 1 to 10 (median 2.5; mean 3.6).

Barriers and enablers to undertaking targeted clinical behaviours

Based on the consultation that centred around 6 exemplar target behaviours, we identified a range of barriers and enablers, which we are categorised according to the relevant domains of the TDF (see Table 1).

=====Insert Table 1 Here=====

Tailoring the implementation strategy

We ensured that the implementation strategy was based on the above-identified barriers and enablers by identifying which implementation interventions (behaviour change techniques and modes of delivery) could overcome modifiable barriers (33). We incorporated evidence based implementation interventions (17) considering specified pathways or mechanisms of change to the desired outcome (clinical practice according to the EPPIC model standards of practice and good outcomes for young people with psychosis) (33). The mechanisms of change include increasing skill and knowledge, increasing motivation and intention to act according to the standards for practice within the EPPIC model and providing tools that both

allow the work required as well as act as prompts for undertaking specific actions. The strategy is presented in Figure 1.

We incorporated a range of interventions and delivery modes based on the evidence (17).

This includes:

- Local, face to face meetings in order to:
 - Develop relationships with the executive and the senior project group in any service wanting to implement the EPPIC model
 - Provide education, advice and guidance on the EPPIC model implementation to the senior group in their role as drivers and coordinators of service implementation, culture development and leadership
- Provision of written materials to explicate and translate the EPPIC model into practice
- A workforce development strategy which provides;
 - A face to face, online and/or blended approach to the delivery of education and training that incorporates content about comprehensive, evidence-based orientation to the EPPIC model and its efficacy, evidence-based clinical interventions for early psychosis
 - Access to a range of written materials to support clinical education and training activities and individual clinical practice
 - Access to a range of demonstration videos and self-assessment tools which provide a rationale and guidance on the 16 core components of the EPPIC model
 - Access to an online community of practice to support the translation of knowledge into clinical practice

We chose the delivery mode on the basis of the potentially vast geographical spread of services that might be implemented nationally and internationally. However, the mode of delivery are a familiar way in which practitioners and clinical managers have had practice change interventions delivered in the past.

It should be noted that we did not target a number of the barriers identified in the implementation strategy because we felt that they would be addressed by the organisational approach and resourcing facilitated by local funding of any new initiative. The organisation approach and resourcing should allow for distinct early psychosis services to be established that will be well-resourced in terms of the staffing and infrastructure requirements and will receive the appropriate branding and community awareness raising activities to ensure both clinician and young people and other stakeholder expectations are appropriate with regard to the new service.

=====Insert Figure 1 Here=====

Discussion

We have used a systematic approach to designing an implementation strategy, consisting of a range of evidence based practice implementation interventions that target identified potential barriers to the implementation of the EPPIC model. This represents a more rigorous approach that includes specification of the model of the mechanisms of change based on a sound theoretical approach (22, 31, 32), potentially allowing for examination of the association between the components of this complex intervention and its effects. We have demonstrated that it is possible to undertake this process in the context of large and complex practice change initiatives.

The TDF represents a comprehensive framework that incorporates a broad range of theory regarding change pathways thus allowing for an expansive understanding of behaviour change (21). This has been an important development in the field and is an improved approach given the larger number of theories and frameworks that exist (34, 35). Given the range of domains in which barriers to practice change can exist, and the interaction between the domains (e.g. between teams and the organisational structures and resources), it is important to have a framework that can encompass and make sense of these processes allowing for a comprehensive approach to the implementation of large practice change initiatives.

Our approach has some limitations. Given there were no new services that were operational when we were conducting this work we could not interview those clinicians and clinical managers who might be responsible to deliver the EPPIC model. Thus our approach to barrier analysis was based on the subjectivity of people we consider to have the appropriate knowledge and experience within the headspace setting, yet had to put themselves in the shoes of those who might be delivering the Early Psychosis services. It is a strength, in this context, that we included not only clinicians but clinical services managers responsible for the management of services where the Model may be implemented as well as those in clinical leadership positions. We were working in a context where there was a commitment from the then Commonwealth Department of Health and Ageing to the roll-out the EPPIC model throughout all the states and territories of Australia through the **headspace** platform (**headspace** National Youth Mental Health Foundation includes over 80 enhanced primary care services providing national mental health care) and the ENSP have maintained an

approach where they worked closely with the leadership team at **headspace** National Office and lead agencies of the **headspace** Centres identified to implement the EPPIC model, attempting to ensure that their perspective is taken into account as part of the overall implementation strategy put in place by **headspace** National Office.

While, we had the mandate and funding to implement a comprehensive model, we are aware that in other jurisdictions/countries that a full model often isn't implemented. Even in these circumstances, managers and service developers can assess the gaps between the EIP core components and what has been implemented in their service, or intended service. Similarly, managers and service developers can assess the gaps between aspects of the specific clinical practices (described as target behaviours in our description of our work) implemented in their service and what is specified as best practice within the core components of the EPPIC model. What we have described here is a process that can be generalised to address any gaps that are identified.

What is critical to these endeavours is that there is appropriate monitoring to determine whether the implementation of the model (or specific target behaviours within the model) is realised. Such monitoring ensures that, where necessary, new and specific targets of behaviour change are identified and strategies to bring about those desired behaviour changes are introduced. This allows a mechanism for improving implementation strategies as those responsible for the oversight of the implementation, (in this case ENSP), continually learn from the earlier steps taken. In this way a culture of continuous quality improvement is established and maintained. This monitoring must ensure capture of both changes in service managers and clinician behaviour, as well as demonstrating the impact on clinical outcomes for those who are recipients of the healthcare being provided. It is also important to monitor

the potential mediators of the change, such as a change in knowledge, skills, motivation as this provides opportunity for further exploration of barriers and refinement of the implementation strategy.

In summary, we have used a rigorous and replicable process to develop an implementation strategy for the establishment and scaling up of a complex model of service provision for the management of young people with early psychosis. This process has allowed a unique opportunity to consider the essential areas to cover, how to make information easily understandable and accessible while noting the complexity of issues. It serves as a useful model for the implementation of complex interventions and models of care.

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Table 1: Barriers and enablers to the implementation of the EPPIC model

Domain	Barriers and Enablers	Example quote
Skills/knowledge	<p>Lack of knowledge about the EPPIC model and its core components</p> <p>Lack of knowledge of what tools to use and lack of skill in how to use them e.g. to assess psychosis</p> <p>Lack of skill in how to engage young people with psychosis e.g. the type of psychoeducation to provide at what stage and how to do this; and lack of advanced skills need to deliver CBT to young people with psychosis</p> <p>Lack of skill in safety and risk management e.g. for home based care/visiting homes</p> <p><i>Enablers: good knowledge of youth friendly practice; there are a lot of information resources already available; resourcing for implementation of EPPIC model has workforce</i></p>	<p>“[we] just give a leaflet”;</p> <p>“different skills are required for teasing out complex presentations and psychosis”</p> <p>“[clinicians] don’t have CBT skills specific to psychosis”</p>

	<i>development embedded</i>	
Social/professional role and identity	<p>A large shift in identity for headspace Centres</p> <p>Its unclear whose role it would be e.g. to provide 24-hour care; who provides home based care</p> <p>Significant changes in roles e.g. for home based care compared to current service provision</p> <p>Providing CBT not seen as part of professional role (i.e. for those who are not psychologists)</p> <p><i>Enablers: Strong commitment from headspace to ensure youth friendly practice, evidence based practice and to work with and engage families</i></p>	<p>“It is a change in identity for headspace brand which includes no catchment and no restrictions”</p>
Beliefs about	Staff feel inexperienced and not expert enough to work with this population	“[people] say ‘I’m not good

<p>capabilities</p>	<p>Lack of confidence in delivering e.g. appropriate psychoeducation, engaging young people in CBT</p>	<p>at that' and think others as being better"</p>
<p>Optimism</p>	<p>Clinicians have a lack of optimism or overly optimistic expectations about recovery in this population</p>	<p>"[people have an] overly optimistic approach that does not match the recovery trajectory in this population"</p>
<p>Beliefs about consequences</p>	<p>Reluctance to diagnose due to stigma</p> <p>Alternate beliefs about worth of particular aspects of the model e.g. home based care; lack of available evidence</p> <p>Lack of appreciation of the consequences of not providing the services at the level needed</p>	<p>"[there is a] lack of belief in the usefulness of intensive management and long term care"</p>

Concern about the perception that some young people would get two years of service within the psychosis service and others who have non psychotic disorders would only get 10 sessions and would find this confusing and unacceptable

Enablers: there is already a belief in the early intervention model within headspace; growing belief in the positive outcomes of involving families/carer

Reinforcement

Currently there is no real feedback on adequacy of service delivery for the individual or the headspace Centre

Regular supervision is not mandated currently

Regular review of treatment progress is not currently mandated and is difficult in the current headspace model that utilizes private practitioners

Enablers: Centres and clinicians working within Centres are aware of and increasingly

“because of the model regular review doesn’t really happen with the private psychologists who are not always there”

compliant with Minimum Data Set requirements with regard to entry of process and outcome data for all young people seen at the service

Intension/motivation Poor motivation due to lack of knowledge/rationale about “[there is a] lack of belief in the effectiveness/appropriateness of model and its components e.g. the use of CBT in this population; home visiting usefulness of intensive management and long term care”

Enablers: Desire to support and advocate for young people; desire to change the service, raise awareness, bring about reform

Memory, attention and decisional processes No current prompts/reminders for e.g. use of tools; regular review of treatment progress “there are already so many requirements for clinicians in terms of the process of working and data entry and MDS....adding more things will make it difficult”

Environmental context and resources (practice tools)

The EPPIC model requires different staffing and organisation of clinical care from current headspace services e.g. to provide 24 hour assessment; to provide home-based care; to provide case management

[it will be] difficult to recruit skilled staff especially in rural areas”

Lack of tools to use to screen for/diagnose/assess psychosis; Lack of prompting/forgetting to use the tools

“it requires different staffing”

Other tools are required e.g. for home based care, such as fleet vehicles

Lack of learning culture, reflective practice in the context of developing a new service

No geographical catchment areas are defined in this new model meaning that the services could be overwhelmed

The physical space is not adequate e.g. to provide meeting rooms for family

meetings

Enablers: Adequate resourcing of a new service; clear processes and expectations with regard to new service and CQI; headspace is seen as a good model and a good place to work; headspace already has a culture of achievement and professionalism, and innovation; headspace already has access to workforce development and knowledge resources

Social influences

Reluctance to diagnose due to cultural norms within headspace

“How do you explain [lack of service] for non response of

Not wanting to be seen to preference young people with psychosis compared with e.g. young people with chronic depression in terms of the length of care they are eligible for

non psychosis [disorders], especially suicidality

Enablers: those working within headspace, and generally working in the youth mental health section have a desire to do good and to help; the funding for the EPPIC implementation is for separate teams, rather than the same team providing different services based on presentation

Emotion

Overwhelmed by the number of standards involved in implementing the model

“difficulty with current staff

seeing this now well

Some components/standards seen as less important

resourced team when they are

dealing with a lack of

Current headspace services and their staff see unfavourable comparison in terms of resources”

level of funding and provision of services of new psychosis services

Enablers: Headspace is a positive environment to work in and there is a lot optimism and hope about young people; those working within headspace and the youth mental health section generally have a desire to contribute and make change; the funding for the EPPIC implementation is for separate teams, rather than the same team providing different services based on presentation

Appendix 1: Essential Elements and Core Components of the EPPIC model

The essential elements of the EPPIC were thus distilled for this purpose on the basis of research evidence and consultation (13) and include:

- 24 hour access via a dedicated mobile early detection and home treatment team
- Case management CCT with a caseload of 15-20 per case manager
- A team-based case management approach with a key worker and a team of other clinicians to draw on for specific interventions
- A minimum 2-year tenure of service, with the option of care extending to 5 years post-entry
- Access to a youth-specific inpatient unit
- Availability and use of a wide range of evidence-based psychosocial interventions.
- Genuine and multifocal involvement of young people (current and former consumers or participants) and family members
- An alumni program for clients

These essential elements were operationalized into 16 core components of the model:

1. Community Education and Awareness
2. Easy Access to Service
3. Home-based Care and Assessment
4. Access to Streamed Youth-friendly Inpatient Care
5. Access to Youth-friendly Sub-Acute beds
6. Continuing Care Case Management
7. Medical Treatments
8. Psychological Interventions

9. Functional Recovery Program
10. Mobile Outreach
11. Group Programs
12. Family Programs and Family Peer Support
13. Youth Participation and Peer Support Program
14. Partnerships
15. Workforce Development
16. Ultra High Risk Detection and Care

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Appendix 2: Minimum standards

The 57 minimum standards are as follows:

Community Education and Awareness

- 1.1 There is a designated community education and awareness worker.
- 1.2 The community education and awareness worker provides education about early intervention to primary carers and the wider community to increase knowledge and reduce stigma, with primary care professionals trained in identifying psychosis and given information about how to refer to specialist services. These awareness and education activities should be provided on a regular and frequent basis to staff such as teachers, youth workers, counsellors, general practitioners and police.

Easy Access to Service

- 2.1 EPPIC services are accessible 24 hours/day, 7 days/week and provide a timely assessment for people experiencing their first episode of psychosis.^{GPP Footnote 1}
- 2.2 Early detection of psychosis is enabled by the EPPIC service receiving referrals from any source and having a clear referral pathway, with one clear telephone contact point.
- 2.3 The EPPIC service is located in a youth-friendly setting, such as close to public transport and contains a welcoming reception area.
- 2.4 A low threshold for expert assessment is set for any person suspected of developing a psychotic disorder for the first time.^{GPP Footnote}

Home-Based Care and Assessment (EPACT)

- 3.1 An EPPIC EPACT team clinician conducts a face-to-face assessment of a young person within 24 hours of an accepted referral, in the least restrictive manner at a place convenient for the young person and their family.
- 3.2 All clients have a comprehensive biopsychosocial assessment by the acute treating team. This includes developing an understanding of the personal context of their illness and developing a case formulation; a mental state examination; physical examination and investigations; cognitive assessments; assessment for comorbid disorders and a risk assessment.^{GPP Footnote 1}
- 3.3 An EPPIC EPACT team clinician informs the referrer of the outcome of the initial assessment within 48 hours.^{GPP Footnote1}
- 3.4 An EPPIC EPACT team clinician notifies the young person's general practitioner of their contact with the EPPIC service within 48 hours after entry to the EPPIC program

and provides feedback of the assessment to the young person and, with consent, to any other key supports.^{GPP Footnote 1}

- 3.5 An EPPIC EPACT team clinician provides to all young people and their families written and verbal information regarding their rights and responsibilities, and provides access to the feedback and complaint process at the first face-to-face clinical contact and as part of an EPPIC information pack.
- 3.6 The EPPIC EPACT team provides community treatment as home-based care where young people are not only assessed, but treated and supported in their own environment.

Access to Streamed Youth-Friendly Inpatient Care

- 4.1 There is access to designated inpatient care for young people in a youth-friendly environment.
- 4.2 The EPPIC inpatient unit has policies and procedures that optimise clinical practice so that this care is provided in the least restrictive manner.

Access to Youth-Friendly Sub-Acute Beds

- 5.1 An EPPIC service provides access to a designated youth-friendly sub-acute setting for young people.

Continuing Care Case Management

- 6.1 The EPPIC service has a designated multidisciplinary continuing care case management team.
- 6.2 An EPPIC service will designate a senior clinician to allocate new referrals to a case manager and a doctor within 48 hours after referral to the continuing care case management service.
- 6.3 An EPPIC continuing care case manager and a designated doctor undertake and document risk assessments at each young person's appointment, and this is done in collaboration with the young person and their family.
- 6.4 The EPPIC continuing care team consultant psychiatrist is informed immediately of any young person identified as being at high risk of suicide or a homicidal risk.
- 6.5 Both the EPPIC continuing care case manager and doctor meet with the young person and, where possible, the family, and develop an individual treatment plan within four to six weeks after entry to the service, and include collaborative goal-focused treatment.^{GPP Footnote 1}
- 6.6 Treatment response and adherence are regularly reviewed. All young people are seen at least twice weekly in the acute phase and at least weekly by a case manager (or EPACT clinician) and at least fortnightly by a doctor in the early recovery phase.^{GPP}

- 6.7 The possibility of relapse is discussed with young people and families along with education regarding early warning signs, and there is development of a relapse action plan.^{GPP}
- 6.8 Young people with persisting positive or negative symptoms are identified at the three month point of care and on an ongoing basis.^{GPP}
- 6.9 All EPPIC young people are linked in with a general practitioner on discharge and the GP is sent a discharge summary.^{GPP Footnote 1}
- 6.10 An EPPIC continuing care team case manager completes a discharge summary prior to a young person's discharge from the service and the discharge summary is sent to the relevant treatment providers and general practitioner.

Medical Treatments

- 7.1 After entry to the EPPIC service all young people are seen by a doctor within 48 hours, then at least weekly in the acute phase, fortnightly in the early recovery phase and monthly in the late recovery phase. A consultant psychiatrist reviews the young person within one week after entry to the service.
- 7.2 All young people within the EPPIC service are assigned to a medical doctor (minimum is a psychiatric registrar) and supervised by a consultant psychiatrist.
- 7.3 Antipsychotic medication is not used in the first 24–48 hours of treatment in young clients with a first episode of psychosis.^{GPP}
- 7.4 An EPPIC doctor informs and discusses with a young person the medication options and potential side effects prior to commencing pharmacotherapy.
- 7.5 Second generation antipsychotics (SGAs) are used in preference to first generation antipsychotics (FGAs).^{GPP}
- 7.6 The EPPIC has a preventative and proactive approach to monitoring and intervening in physical health issues, particularly related to psychotropic medication side effects.

Psychological Interventions

- 8.1 An EPPIC service employs a designated senior psychologist.
- 8.2 The EPPIC service provides a range of evidence-based psychological interventions aimed at promoting recovery and providing comprehensive psychological interventions to young people and their families.

Functional Recovery

- 9.1 Within the EPPIC service there is a designated vocational consultant utilising the individual placement and support model employed as part of the functional recovery program within the continuing care team.

- 9.2 Within the EPPIC service there is a designated educational and liaison role (with a teaching background).
- 9.3 All young people have access to specialist assistance from a defined functional recovery program within the EPPIC service.
- 9.4 Within the EPPIC group program there are group activities aimed at functional recovery.

Mobile Outreach

- 10.1 The EPPIC service provides mobile outreach intensive case management for those young people with complex needs.
- 10.2 Within the EPPIC continuing care service there is clearly documented criteria for the identification of young people who require intensive mobile outreach and a designated system of review of each case.
- 10.3 Within the EPPIC service there is a system in place to monitor caseloads in line with the EPPIC model requirements. This system should take account of the intensity of individual caseloads.

Group Programs

- 11.1 Young people have access to a comprehensive group program within the EPPIC service.

Family Programs and Family Peer Support

- 12.1 A designated specialist family worker is employed in the EPPIC.
- 12.2 Within the EPPIC service, family peer support workers who have experience of a family member experiencing FEP are employed.
- 12.3 All families are contacted by an EPPIC clinician as soon as possible, or at least within 48 hours following the initial assessment of the young person, unless there are exceptional clinical reasons why this should not be done.
- 12.4 Family members are accepted as partners in treatment and care strategies and their needs respected and supported.^{GPP}
- 12.5 Consumers and families who cannot speak English, or who speak limited English, are able to access professional interpreting and translating services where significant decisions are concerned and where essential information is being communicated.

Youth Participation and Peer Support Program

- 13.1 Within the EPPIC service there is a designated youth participation coordinator employed within the clinical program.
- 13.2 Peer support workers operate within the EPPIC service.

Partnerships

- 14.1 There are service level agreements and/or memorandums of understanding detailing the clear purpose, expectations and outcomes of the service with all partner services and the EPPIC. These are reviewed on a yearly basis.
- 14.2 Partnerships or co-location with other services are reflected in the EPPIC strategic plan.

Workforce Development

- 15.1 All EPPIC clinical staff are provided with regular clinical supervision on a fortnightly basis at a minimum.
- 15.2 Every EPPIC clinician has access to the competency and evidence-based clinical training and multimedia resources provided through the EPPIC National Support Program.

UHR Detection and Care

- 16.1 The UHR group is provided by a separate stream of care to those with full threshold FEP and may be located outside of the central EPPIC service location.
- 16.2 Young people in the UHR group have access to the full range of service components, even if the setting may be located outside the rest of the EPPIC service.
- 16.3 Antipsychotic medication is NOT considered as the first treatment option for UHR. However, if rapid worsening of psychotic symptoms occurs together with significant deterioration in functioning related to these symptoms and an elevated risk to self or others, a low dose atypical antipsychotic may be considered as a time-limited trial only, in conjunction with close monitoring and support. Note this is not justified in the majority of such situations.^{GPP}
- 16.4 The UHR care for young people is for a minimum of six months unless there is transition to full threshold psychosis.
- 16.5 An EPPIC has transfer procedures for those UHR young people who transition to FEP and for those young people who have completed treatment or who may need referral to other community services.

Appendix 3: EXEMPLAR MINIMUM STANDARDS

- Minimum standard 1: EPPIC services are accessible 24 hours/day, 7 days/week and provide a timely assessment for people experiencing their first episode of psychosis (Easy Access to Service standard 2.1).
- Minimum standard 2: The EPPIC Youth Access Team provides community treatment as home based care where young people, as much as possible, are not only assessed but treated and supported in their own environment (Home- based Care and Assessment (Youth Access Team standard 3.22).
- Minimum standard 3: Psychoeducation and support is provided for the young person and family on an initial, continuing and 'as needed' basis through individual work, group programs or family participation program (Continuing Care Case Management standard 6.10).
- Minimum standard 4: Treatment response and adherence are regularly reviewed. All young people are seen at least weekly by a case manager and at least fortnightly by a doctor in the early recovery phase GPP (Continuing Care Case Management standard 6.11).
- Minimum standard 5: An EPPIC Continuing Care Team case manager provides access to a range of evidence-based psychological therapies for young people depending on their needs. Examples of therapies include Cognitive Behaviour Therapy, Cognitively Oriented Psychotherapy in Early Psychosis, Cannabis and Psychosis (Psychological Interventions standard 8.11).
- Minimum standard 6: Family work within the EPPIC is provided to young people and their family on a regular basis and consists of, at a minimum, psychoeducation and regular frequent family meetings relevant to the phase of illness (Family Programs and Family Peer Support standard 12.21).

Appendix 3.

Facilitator Guide for Group Discussion

Priority Standard 1 EPPIC services are accessible 24 hours/day, 7 days/week and provide a timely assessment for people experiencing their first episode of psychosis^{GPP} (Easy Access to Service standard 2.1).

- 1) How easy or difficult will headspace centres find it to be accessible 24hours/7 days per week, both generally and to provide access to EPPIC?
 - a) What will be the difficulties?
 - b) What could assist them in overcoming these difficulties?
- 2) How easy or difficult will headspace staff find it to provide a timely assessment for people experiencing their first episode of psychosis?
 - a) What will be the difficulties?
 - b) What could assist them in overcoming these difficulties?
- 3) Prompt questions by domain (see table)

Priority Standard 2 The EPPIC Youth Access Team provides community treatment as home based care where young people, as much as possible, are not only assessed but treated and supported in their own environment (Home- based Care and Assessment (Youth Access Team standard 3.22)).

- 1) How easy or difficult will headspace centres find it to provide home-based assessment and treatment for young people with FEP as part of the EPPIC model rollout?
 - a) What will be the difficulties?
 - b) What could assist them in overcoming these difficulties?
- 2) Prompt questions by domain

Priority Standard 3 : Psychoeducation and support is provided for the young person and family on an initial, continuing and 'as needed' basis through individual work, group programs or family participation program (Continuing Care Case Management standard 6.10).

- 1) How easy or difficult will headspace staff find it to provide psychoeducation and support for young people with FEP as part of the EPPIC model rollout? (this includes through individual, group and family work)
 - a) What will be the difficulties?
 - b) What could assist them in overcoming these difficulties?
- 2) Prompt questions by domain

Priority Standard 4 Treatment response and adherence are regularly reviewed. All young people are seen at least weekly by a case manager and at least fortnightly by a doctor in the early recovery phase GPP (Continuing Care Case Management standard 6.11).

1) How easy or difficult will headspace staff find it to regularly review treatment response and adherence with young people in the early recovery phase? (regularly means at least weekly by case manager and at least fortnightly by a case manager)

a) What will be the difficulties?

b) What could assist them in overcoming these difficulties?

2) Prompt questions by domain

Priority Standard 5 An EPPIC Continuing Care Team case manager provides access to a range of evidence-based psychological therapies for young people depending on their needs. Examples of therapies include Cognitive Behaviour Therapy, Cognitively Oriented Psychotherapy in Early Psychosis, Cannabis and Psychosis (Psychological Interventions standard 8.11).

1) How easy or difficult will headspace staff find it to provide access to a range of evidence based psychological therapies for young people (e.g. CBT, cognitively oriented psychotherapy etc)

a) What will be the difficulties?

b) What could assist them to overcoming these difficulties?

2) Prompt questions by domain

Priority Standard 6 Family work within the EPPIC is provided to young people and their family on a regular basis and consists of, at a minimum, psychoeducation and regular frequent family meetings relevant to the phase of illness (Family Programs and Family Peer Support standard 12.21).

- 1) How easy or difficult will headspace staff find it to provide family work to young people and their families on a regular basis?
 - a) What will be the difficulties?
 - b) What could assist them to overcome the difficulties?
- 2) Prompt questions by domain

EPPIC model as a whole:

- 1) Based on your knowledge of the EPPIC model as a whole, what do you think will be the most pressing/most significant barriers faced by headspace centres and staff that will need to be addressed in this rollout?
- 2) Are there any other issues that haven't already been raised that you would like to discuss/raise?
- 3) What haven't we covered that you still want to mention in relation to the EPPIC model rollout?

Domain Table – Prompt Questions:

Knowledge	How much do you think headspace staff know about that...?
Skills	Do you think staff possess the skills necessary to...? What skills training do you think they will need to be able to do this?
Beliefs about capabilities?	Do you think headspace staff will find ...easy or difficult to do? If difficult what makes it difficult? Do you think they will be confident? Competent?

Social/Professional role and identity	<p>Do you think headspace staff will see...as part of their role?</p> <p>An appropriate part of their work? Why or why not?</p> <p>Will they perceive ...as the role of other providers?</p>
Beliefs about Consequences/optimism	<p>What do you think headspace staff will believe are the consequences of ...?</p> <p>Do you think they will see any benefits of doing this? What are they? What about disadvantages?</p> <p>Do you think they will believe that... will lead to positive outcomes? (for themselves? For young people with FEP?) what are they?</p>
Reinforcement	<p>Do you believe headspace staff will find...rewarding?</p> <p>Can you see any incentives for headspace staff to...?</p>
Intentions/goals	<p>How motivated will headspace staff be to...?</p> <p>Do you think they will feel this is a priority? An important thing to do?</p>
Memory/attention and decision processes	<p>Are there other competing demands that will limit their ability to...?</p>
Environmental context and resources	<p>To what extent will resources (time, facilities etc) enable or hinder headspace staff's ability to...?</p> <p>Will access to equipment/materials/facilities be an issue do you think?</p> <p>Do you think the headspace working environment and facilities be conducive to...?</p> <p>Do you think the lack of time may be an issue to...?</p>

<p>Social influences</p>	<p>How do you think people with FEP (and families) will respond to...by headspace staff? Do you think they will cooperate? In what way may this influence headspace staff decisions to...?</p> <p>Do you think other colleagues of headspace staff will approve of them? Is it different from what they already do for their clients?</p> <p>What do you think will be the general view of headspace staff regarding their role in...?</p>
<p>Emotion</p>	<p>Do you think there are any emotional factors that will influence headspace staff...?</p> <p>Do you think they will find...challenging to do? Stressful? Uncomfortable? Aversive? Difficult to deal with?</p> <p>Is it something they are likely to prefer to avoid?</p>
<p>Behavioral regulation</p>	<p>Are there any existing systems at headspace to aide monitoring of whether headspace staff to...?</p>

Figure Legends

Figure 1: Development of the Tailored Implementation Strategy

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