headspace
National Youth Mental Health Foundation

evidence to practice

Defining integrated care in youth mental health: Implications for implementation at the service and clinical level

headspace National Youth Mental Health Foundation is funded by the Australian Government Department of Health

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Suggested citation:

Bartholomeusz, C. & Randell, A. Evidence to practice: integrated care in youth mental health. headspace, The National Youth Mental Health Foundation. Melbourne, 2022.

Acknowledgements:

We would like to thank the following for participating in the stakeholder sessions in the development of this resource:

- headspace National Youth Reference Group (hY NRG)
- headspace Family National Reference Group
- Primary Health Network and other lead agency staff
- Orygen Service Implementation and Quality Improvement (SIQI) team
- headspace service managers and clinical leaders
- headspace National staff
- Orygen Government Relations and Policy team

This resource is for clinicians and service providers interested in integrated health care for young people with mental health issues. The resource:

- outlines the complexities related to the concept of integrated care,
- highlights the key values of integrated care,
- briefly reviews the evidence for integrated care models,
- reports on the findings from our workshops held with key stakeholders aimed at identifying a definition of integrated care for use by headspace, and the core components of integrated care in youth mental health.

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executive summary

Integrated care is conceptually and pragmatically complex. There are various types of integrated models in health care and while some appear more integrated than others, it is clear that there is no "one-size fits all" model. Not surprisingly, the same can be said for the definition of integrated care, which is typically shaped to meet the needs and purpose of the service or system undergoing transformation. Despite these inconsistencies, overall empirical evidence shows that integrated care is more beneficial for children and young people with mental health issues when compared to standard or usual care. Globally, there is widespread support for integrated care as the preferred treatment approach in the broad health, including the youth mental health, sector. Similarly, an integrated model of care is the approach recommended by Australian and international government bodies.

Although good models of integrated care exist, many young people still do not receive truly integrated care, and there continues to be a lack of consensus as to what integrated care is in the youth mental health space. Therefore, Orygen and headspace National Youth Mental Health Foundation conducted a joint project that sought to define integrated care in the context of youth mental health, and understand the essential components from a health system building blocks framework, which are underpinned by core common values. This project consisted of two phases. The first involved reviewing the literature and extracting the common themes from definitions of integrated care and extracting the core components, from eighty-three papers selected for this project. The second phase involved engaging thirty-nine stakeholders from around Australia, including young people, family (see Appendix 3), clinicians, policy makers, scientists and professionals employed at varying levels of the health system. Stakeholders attended online workshops and were asked to share their perspectives of what integrated care means to them, and to take part in open discussions and online anonymous surveys. Authors facilitated discussions based on presentation of literature and by inviting stakeholders to share personal experiences and opinions of integrated care.

A definition was formulated based on the World Health Organization's user-led definition (Integrated care models: an overview. Copenhagen: World Health Organization Regional Office for Europe; 2016) and the key themes rated in the surveys as important by young people and family reference groups. Accompanying this definition is a statement of implications for health systems, services, and providers, informed by what professional stakeholders rated as important themes of integrated care. Seventeen core components were rated overall as essential for integrated care. These are discussed in detail in Part 3, using a health system framework, categorised under the building blocks: service delivery; workforce; information systems and communication; products and technology; health financing; leadership, governance, and policy.

It is hoped that this resource will be used to guide policymakers, services and health professionals in bettering the care that young people currently receive. Several factors to consider moving forward for achieving more efficient and effective integrated care systems include involvement of young people and family in co-design, rigorous service implementation research, economic cost evaluations and appropriate measurement of service processes and outcomes.

part 1 – complexities and values of integrated care

1.1 What is integrated care?

For over a decade integrated care as a goal for health system reform has been a central topic of discussion among governments, policymakers, academics, health services and providers, worldwide. Integrated care has been proclaimed as the solution to providing clients with a more efficient and higher quality service, ultimately leading to subjectively better experiences by users, reduced economic costs and improved health outcomes for individuals and populations.(1) Despite this, achieving a truly integrated service continues to be a challenge for many health systems, with the key steps for successful implementation remaining somewhat elusive.

There are many different definitions of integrated care, from both scientific articles (for example published in peer-reviewed journals) and grey literature (for example government documents), with a glaring lack of consensus across not only the youth mental health space but the broad health sector. Over the years numerous terms have been used interchangeably to describe integrated care, such as collaborative, coordinated and continuing care, to name a few, adding to the difficulty in reaching a consensus on what integrated care is.

1.1.1 How is integrated care currently defined?

Due to the vast conceptual inconsistency regarding what integrate care is, the World Health Organization (WHO) in 2016 published a scoping review to develop a pragmatic understanding of the concept of integrated care and integrated care models.(2) They concluded that three definitions were appropriate: one that outlined higher level processes (tailored for a government audience), one that was written from a user/carer level perspective and captured the full breadth of integrated care, and one that was focused on health systems (see breakout box 1 for definitions).(2) Common to all three of the WHO definitions is the concept that "…. integrated care should be centred on the needs of individuals, their families and communities".(2 p4) The WHO project was conducted in the context of contributing to the development of the European Framework for Action for Integrated Health Services Delivery (service reform), thus the WHO European Office adopted the health system-based definition as their primary definition of integrated care.

Box 1. World Health Organization definitions of integrated care

Process-based definition
"Integration is a coherent set of methods and models on the funding, administrative, organizational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors. The goal of these methods and models is to enhance quality of care and quality of life, consumer satisfaction and system efficiency for people by cutting across multiple services, providers and settings. Where the result of such multi-pronged efforts to promote integration leads to benefits for people, the outcome can be called integrated care."

User-led definition
"My care is planned with people who work together to understand me and my carer(s), put me in control, coordinate and deliver services to achieve my best outcomes."(2,3)

Systems-based definition
"Integrated health services delivery is defined as an approach to strengthen people-centred health systems through the promotion of the comprehensive delivery of quality services across the life-course, designed according to the multidimensional needs of the population and the individual and delivered by a coordinated multidisciplinary team of providers working across settings and levels of care. It should be effectively managed to ensure optimal outcomes and the appropriate use of resources based on the best available evidence, with feedback loops to continuously improve performance and to tackle upstream causes of ill health and to promote well-being through intersectoral and multisectoral actions."

(2 p3-4)

A definition of integrated care appears dependent upon the intended purpose of its use, and the perspective it is viewed from. Indeed, the primary reason for diversity in definitions over the years appears partly due to varying perspectives of individuals and groups of people within or affiliated with the health system, which is shaped by their own roles, responsibilities, expectations and experiences.(2) To our knowledge there is no universal definition of integrated care that has been informed by young people and family, and which was developed from a youth mental health standpoint. In order to appropriately implement and measure integrated care, we need to be clear about what integrated care is, and what the core components are, in a youth mental health context.

1.1.2 What are the different types of integrated care?

Varying types of integrated care have been described. Heyeres and colleagues identified five types: integrated care pathways, governance models, collaborative/integrative care, integration of interventions, and integration of different health services.(4) However, when considering types of integration, the most commonly acknowledged include: organisational, functional, service and clinical.(2, 5) (See Box 2).

Box 2. Four main types of integration

Organisational integration: different organisations are brought together formally through mergers, coordinated provider networks, structural changes or via contracts made between separate organisations.

Functional integration: non-clinical support and back-office functions and operations are integrated, for example service partners develop a shared electronic records system.

Service integration: different clinical services are integrated at an organisational level, for example by forming teams of professionals trained in varying disciplines (e.g., general practitioner, psychologist, occupational therapist).

Clinical integration: the care delivered to the client, and their family by professionals and service providers, is a single or coherent process within and/or across disciplines, for example through the use of shared protocols and guidelines. (2, 5)

Researchers have further described the mechanisms by which these four types of integration can be achieved: via normative and systemic integration.

- Normative integration is where a culture of shared values and dedication to coordinating work enables trust and collaboration in delivering care.
- Systemic integration is where there is coherence of policies and rules at all levels of the organisation/s. Systemic integration is sometimes called an 'integrated delivery system'.(2, 5)

Figure 1 graphically represents how these typologies and mechanisms collectively achieve integrated care for a young person.

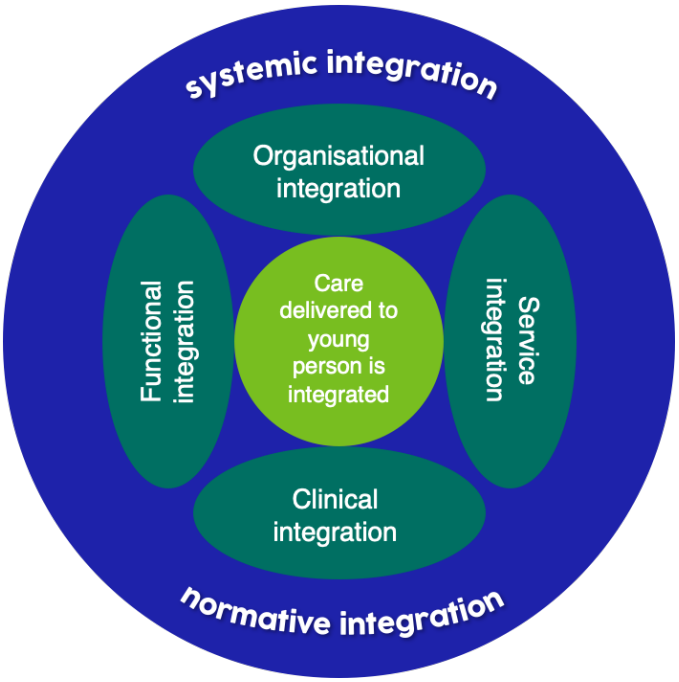

Figure 1. Types of integration (adapted from 6)

1.1.3 What are the different modes of integrated care?

In addition to the different types and mechanisms of integration described above, there are also different modes of integrated care. One of these includes *horizontal* integration, which refers to bringing together activities that are i) performed by differing organisations or operational units and ii) at the same (or similar) stage in the process of delivering care (for example, bringing together the four core streams operative in a headspace service, specifically mental health, physical and sexual health, alcohol and other drugs, and vocational and educational support). Conversely, *vertical* integration refers to bringing together organisations that operate at different structural levels of the healthcare system, under a single management umbrella.(2) The headspace centres that have brought in early psychosis services for young people are good examples of attempted vertical integration.(7) *Longitudinal* (also termed diagonal) integration refers to the health and non-health sectors working together in a manner that is age-appropriate and takes into consideration the developmental stage of the young person. (8) Figure 2 provides a visual representation of the different modes of integrated health care, specific to children and young people.

1.1.4 Can one model of integrated care be more 'integrated' than others?

Much of the literature supports the conceptualisation of integrated care as being on a continuum.(9-14) For example, Heath and colleagues outlined six intensity levels of integrated care that outline models of care with differing degrees of integration. The first two levels focus on communication and fall under the categorisation 'Coordinated Care', which involves minimal or basic collaboration at a distance. The second two levels focus on proximity and fall under 'Co-located Care', which involves on-site collaboration, and at level four some degree of system integration. The final two levels focus on practice change and are categorised under 'Integrated Care', which involves close/full collaboration leading to a completely transformed integrated practice.(13) Many health professionals and researchers consider lower levels (i.e., coordinated and co-located care) to be forms of integrated care, and view 'fully integrated care' as the final point along a continuum. For the purpose of this resource, all levels of integrated care will be considered. All forms or modes of integration will also be considered, including the integration of primary health care with tertiary services, and integration of primary and secondary health care with social services, such as housing and education.

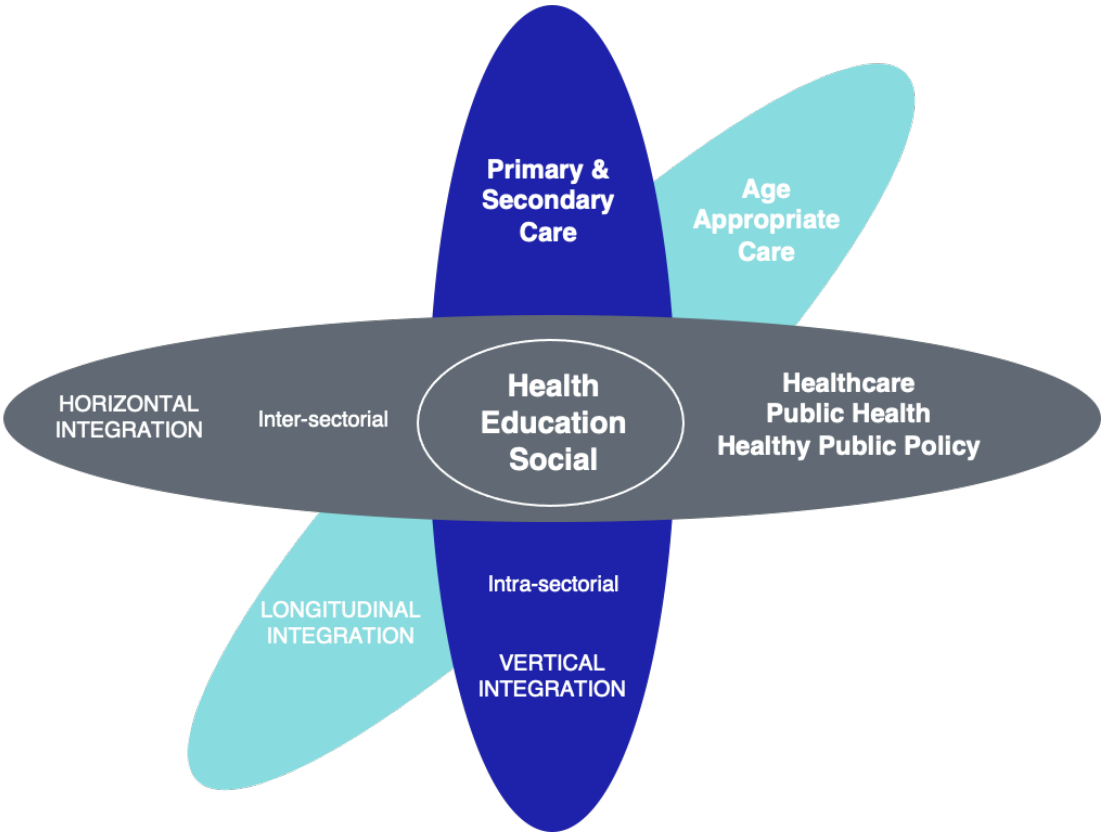

Figure 2. Modes of integration for youth health (taken from 8)

Table 1. Intensity levels of integrated care (taken from 11)

Coordinated Care Key element: communication		**Co-Located Care** Key element: proximity		**Integrated Care** Key element: practice change	
LEVEL 1 Minimal collaboration	LEVEL 2 Basic collaboration at a distance	LEVEL 3 Basic collaboration onsite	LEVEL 4 Close collaboration onsite with some system integration	LEVEL 5 Close collaboration approaching an integrated practice	LEVEL 6 Full collaboration in a transformed/merged integrated practice

1.2 What are the key values of integrated care?

Despite the different approaches in people-centred and integrated health service delivery, there are key values that are common across these approaches and which underpin a given service's guiding principles.(15 p11) While the literature in this area generally uses the terms 'principles' and 'values' interchangeably, we have focused here on values, which can be defined as concepts or beliefs about desirable goals or behaviour, which transcend specific situations, and serve as standards or criteria that guide the selection or evaluation of actions, policies, people, and events.(16) Identification of the underlying values of integrated care enables better understanding of collaboration and behaviour in integrated care and could also help to define quality in integrated care. Values are essential for increasing staff commitment to providing the best quality in integrated care practices for clients.(17) Shared values across professionals and organisations are important factors in informal coordination and collaboration processes.(18) Furthermore, better understanding of the values of integrated care is necessary for the delivery of improved quality of care and client experiences.(19) Although young people, family, health professionals and governments may have different views, interests and objectives, by recognising the fundamental values of integrated care we can have more insights into what propels the behaviours and decision-making of everyone involved.(16, 20) The underlying values of integrated care should form the basis for developing a framework for governance to act as a guide for behaviour, decision-making and evaluation in integrated care. Values of integrated care differ from core components of integrated care, which are essential characteristics of a health system (discussed in Part 3).

A recent review identified 23 values of integrated care.(21) Authors searched the literature using both 'values' and 'principles' as search terms. Table 2 lists those values that we believe are specific to integrated care; other values identified in the review were not considered exclusive to integrated care but were equally important to generally good healthcare delivery. These values were: transparent, empowering, co-produced, goal-oriented, personal, evidence-informed, respectful, equitable, sustainable, preventative, innovative, trustful, proficient and safe.

Table 2. Values of integrated care (adapted from 21)

Value	Description	Number of times present in literature
Collaborative	Professionals work together in teams, in collaboration with clients, their families and communities, establishing and maintaining good (working) relationships.	20
Coordinated	Connection and alignment between the involved actors and elements in the care chain, matching the needs of the unique person. Between professionals, clients and/or families, within teams and across teams.	19
Comprehensive	The availability of a wide range of services, tailored to the evolving needs and preferences of clients and their families.	13
Shared responsibility and accountability	The acknowledgment that multiple actors are responsible and accountable for the quality and outcomes of care, based on collective ownership of actions, goals and objectives, between clients, their families, professionals and providers.	13
Continuous	Services that are consistent, coherent and connected, that address the needs and preferences of clients across their life course.	12
Holistic	Putting the clients and their needs in the centre of the service, whole person oriented, with an eye for physical, social, socio-economical, biomedical, psychological, spiritual and emotional dimensions.	11
Led by whole-systems thinking	Taking interrelatedness and interconnectedness into account, realising changes in one part of the system can affect other parts.	8
Flexible	Care that can change quickly and effectively, to respond to the unique, evolving needs of clients and their families, both in professional teams and organisations.	7
Reciprocal	Care based on equal, interdependent relationships between clients, their families, professionals and providers, and facilitate cooperative, mutual exchange of knowledge, information and other resources.	5

Take-home messages

In summary, the concept of integrated care is complex for a number of reasons.

- There is no single universal definition of integrated care, primarily because the way in which the definition will be used (for example to lobby governments for funding, to unite clinical services) determines how it is written.
- The World Health Organization has put forward a process-based, a user-led and a systems-based integrated care definition; common to all three is that care should be centred on the needs of individuals, their families and communities.
- Adding to the complexity are the different types, modes and levels at which integrated care can take place.
- Some models of integrated care are described in the literature as being ‘more integrated’ than others, and coordinated and co-located care are considered to be at lower levels on the integration continuum.
- Core values of integrated care identified by a recent literature review are that it is collaborative, coordinated, comprehensive, continuous, holistic, flexible, reciprocal, there is shared responsibility and accountability, and is led by whole-systems thinking.

part 2 - evidence summary

2.1 Why is integrated care so important?

Globally, there is widespread support for integrated care as the optimal service approach in the health sector, including for youth mental health. Similarly, an integrated model of care is the approach recommended by Australian and international government bodies.(15, 22-25)

For service providers, integrated care has the following benefits:

- clarifies roles and responsibilities
- seeks to minimise gaps and reduce fragmentation of care
- improves service efficiency, effectiveness and resource allocation
- reduces duplication of effort
- reduces incidence of inadequate or over-treatment
- aims to improve communication between services.

For young people and their families and friends, integrated care:

- places them at the centre of all efforts to address their health and wellbeing
- ensures their needs and personal preferences are communicated to and understood by all team members
- reduces the need to repeat information if they receive care from multiple providers
- supports them as they transition between services and service providers
- ensures young people with multiple diagnoses and complex care needs receive the most appropriate comprehensive care
- improves health outcomes and service experience.(26)

2.2 What is the evidence for integrated care in the support of young people?

Evidence for the effectiveness of integrated care largely comes from population health research, and the global movement for integrating behavioural health with physical health care.(4, 11, 27-34) A population health meta-analysis into the effects of integrated care on various outcomes for children (age 0-18 years) found that integrated care significantly improved quality of life when compared to standard care, but had no effect on the number of emergency department visits.(35) Additionally, this study found integrated care models were more often cost effective.(35) A large meta-analysis of randomised controlled trials (RCTs) evaluating integrated medical-behavioural primary health care for children and young people (1-21 years), involving over 13,000 participants, found integrated care led to small significant improvements (Cohen's d = 0.32; 95% CI,0.21-0.44) in mental health outcomes (any) compared to usual care.(31) This revealed a 66 per cent chance that a young person receiving integrated care would have a better outcome than a young person receiving usual care. Depression, anxiety, behaviour problems and substance use were the primary outcomes measured in the included studies of this meta-analysis. Larger effects were found when analyses were restricted to integrated treatment interventions excluding preventative programs (Cohen's d = 0.42), and when only collaborative care models were used (Cohen's d = 0.63).

It has been suggested that the strongest evidence for integrated mental health care for young people comes from research into the efficacy of early intervention psychosis services.(33, 36-38) These early psychosis models are characterised by young people receiving integrated specialised treatment for psychosis/psychosis risk, as well as vocational/educational support, and treatment for co-occurring mental health issues.(37) A meta-analysis and meta-regression involving 2,176 participants (average age 27.5), found integrated early psychosis treatment to be more beneficial than treatment as usual for all 13 outcomes measured, including treatment discontinuation, symptom severity, risk of hospitalisation, rate of relapse, remission and recovery, global functioning, involvement with work or school, and quality of life.(36) In the context of treatment discontinuation, this meant that an additional 10 per cent of people who were in the control group stopped their treatment compared to the integrated condition. The early psychosis integrated treatment model was superior at all follow-up time points: 6, 9 to 12, and 18 to 24 months of treatment.

Many of the systematic reviews and meta-analyses conducted for young people (and adults) evaluated the overall quality of RCTs as low to average, or often found studies to vary considerably in terms of sample population characteristics, research methods and impact on outcomes. (30, 31, 35) There is good evidence in support of early intervention models relating to psychosis, and positive outcomes in relation to broader integrated care models for young people. However, more high quality RCTs, cost-effectiveness analyses and service evaluation studies are needed to better inform the development and enhancement of integrated care models for young people.

2.3 What are the barriers and facilitators to delivering integrated care?

Providing integrated care is a multicomponent and complex process and is therefore influenced by multiple facilitators and barriers. A recent review of barriers and facilitators to integrated youth care identified seven themes and 24 subthemes, as displayed in Table 3. Each theme can function as both a barrier and facilitator. For example, time is a facilitator or enabler of integrated care when a health professional has a flexible schedule, enough time for interprofessional team development, reflection on collaboration and clinical discussions. Conversely, a lack of time during regular client visits to address a range of issues is a barrier, as is an inflexible schedule, insufficient time for communicating and leaving collaboration to chance.(39) Future projects should capitalise on facilitators of integrated care and address the challenges of barriers in order to foster collaborative and integrated ways of working.

Table 3. Barriers and facilitators to integrated care for young people (adapted from 39)

Theme	Subtheme	Subtheme description
Young person's environment	Family-centred focus	A holistic approach on a family's welfare
	Fragmentation	Collaboration between education and health care systems
Preconditions	Time	Time to address a broad spectrum of problems and for interprofessional collaboration
	Financial	Financial support and funding streams
	Professionals and resources	Availability of professionals and services
Care process	Screening and assessment	Broad assessment of problems and the use of screening tools
	Shared care plan	Several perspectives and goals in a comprehensive care plan
	Referral	Transition between care providers
Expertise	Knowledge and training	Extending knowledge by means of training
	Guidelines	The use of evidence-based guidelines to support professionals
	Self-efficacy	Confidence and comfort of professionals to provide integrated care
Interprofessional collaboration	General aspects of collaboration	The importance of interprofessional relationships
	Familiarity with other professionals	Knowing and understanding other professionals' expertise
	Forms of integrated care	
	• Co-location	Multiple services at one location
	• Multidisciplinary meetings	Meetings where professionals share knowledge, highlight concerns and reflect on care processes
	• Consultation	Consultation of other (specialist) professionals
	• Care coordination	Professional with the specific task to coordinate a care process
Information exchange	Communication	A shared language and motivation to communicate
	Sharing information and confidentiality	Content and frequency of information exchange, shared medical records and legal guidelines for sharing information
Professional identity	Professional roles and responsibilities	Clarity and expectations about professional roles, sharing responsibility
	Attitudes	Attitudes and commitment towards integrated care and collaboration
	Shared thinking	A shared foundation in thoughts, aims, priorities, and values
	Trust, respect and equality	Mutual trust, respect for other professionals and perceived equality

2.4 Models of integrated care currently used in youth mental health

Several integrated care models have been implemented in youth mental health, ranging across the continuum of models from the less integrated, such as co-ordinated care, to fully integrated care. The success of early psychosis models and services spurred the development and implementation of broader integrated treatment models for young people, which brought together mental health, physical health and social services.(33) Numerous specialised youth integrated care services that address physical and mental health issues, and in some instances also social issues, are in operation today around the globe. While Australia pioneered the change towards new models of care for young people by creating the headspace model,(7, 26) many other countries have taken inspiration from the headspace model (for example Jigsaw) or developed their own models of integrated care based on their populations' needs/demographics and government funding structures. Two current services are described below to demonstrate the breadth and diversity in integrated care models (for full list of current services see 33, 40).

2.4.1 Foundry

Foundry is a province-wide network of integrated health services designed for young people aged 12-24 years in British Columbia, Canada, located in both urban and rural communities. Beginning in 2015 with six centres, it has since grown to 11 centres, with another eight centres due to be operational by 2023. Foundry consists of partnerships with over 200 government and non-profit community-based organisations.(41, 42) Centres are governed by lead agencies and guided and supported by Foundry Central Office and a provincial Governing Council.(43) Foundry services include primary care (physical and sexual health), mental health, substance use, youth and family/caregiver peer support, and social services (for employment, housing, income support). Complementary online tools and resources are also an essential part of achieving Foundry's vision for improving young people's access to care.

In the period of April 2018 to September 2020, Foundry provided over 100,000 services to young people.(41) Foundry Virtual (foundrybc.ca) came online in April 2020, and offers young people and their caregivers drop-in counselling, peer support and primary care through online voice, video and chat functions, which can be accessed anywhere in the province of British Columbia. A key aspect of Foundry is that the model was, and continues to be, updated via co-creation with young people and their caregivers, to ensure the model meets the needs of those accessing the services. Foundry is funded by the provincial government and several philanthropic foundations.

Foundry's proof-of-concept evaluation study, which reported on data from 4,783 service users who had accessed the service between October 2015 and March 2018, showed that young people, predominantly between 15-19 years of age, most often sought help for mental health and substance use issues (57 per cent) and physical health concerns (25 per cent).(42) A youth feedback survey, completed by approximately 100 young people, consistently reported high levels of satisfaction and positive experiences with the service. Ninety-two per cent of participants agreed/strongly agreed that having multiple services in one place made it easier for them to receive the help that they needed. Additionally, 89 per cent believed that staff were able to work together to provide the services.(44)

While in the proof-of-concept phase none of the centres achieved "target" results for any of the constructs measured, which related to partnership functioning (for example synergy, administrative and management effectiveness, sufficiency of resources), several were categorised as making "headway".(44) Despite this, 'distributive leadership', which is "an approach involving concertive action achieved by spontaneous collaboration through intuitive working relationships",(43 p1) was found to be a facilitator of service and system-level integration. This type of leadership was also effective in coordinating efforts for achieving optimised access to care.(43)

2.4.2 Forward Thinking Birmingham

Forward Thinking Birmingham (FTB), is a unique integrated care model in the UK that became operational in 2015, providing primary, secondary and tertiary mental health services to children and young people aged 0-25 years, alongside their families/carers.(45) The FTB model took a 'whole system change' longitudinal integration approach and moved away from a tiered mental health system. The initial objective for creating FTB was "to improve the transitions for young people when moving between Child and Adolescent Mental Health Services (CAMHS) and Adult Mental Health Services, ensuring that all young people with mental health issues have every opportunity to continue in education, training and employment, so they have a life that is not defined or limited unnecessarily by their condition".(46)

The FTB service level aims include:

- Understanding the risk factors that may lead to potential mental health problems and mitigate these through effective early intervention and promotion of wellbeing at all ages.
- Developing a specialist integrated approach: joint working and direct work within an integrated collaboration of organisations (community, voluntary sector, private and public provision).
- Working in partnership with and building front line capacity with emphasis on enablement, empowerment and education, thereby ensuring that fewer children and young people have a need for long-term mental health services.
- Delivering a wide range of evidence-based treatment options with emphasis on solution focused approaches.
- Recognising that working with primary care will form the basis of therapeutic and recovery options.
- Offering community services for 0–25-year-olds and inpatient services for 18+ year olds.(45)

FTB services a catchment area comprising around 450,000 children and young people. Specialised treatment for early psychosis, eating disorders, co-occurring learning disability, personality and complex trauma, as well as autism spectrum disorder assessments, outreach (hospital-in-the-home), crisis team support and inpatient treatment can all be accessed through FTB pathways. FTB also consists of PAUSE, a drop-in service (online, phone or video chat were offered during COVID-19 restrictions) focused on promoting resilience, good mental health and emotional wellbeing. Much like headspace's Youth National Reference Group, FTB operates 'Think4Brum', a youth steering group comprised of service users, who make significant contributions in changing the way the services function; activities range from sitting on interview panels to being involved in planning for new building improvement and design to enhance FTB services across units, hospitals and hubs.

An initial impact and process evaluation report for the period of April 2015 to June 2017, was not able to determine if FTB was meeting its service goals, due to insufficient collection of service use data.(45) Stakeholders, however, did view FTB as improving access to mental health care for all age groups, with particular support for the drop-in service, including drop-in on the weekends. The main areas of concern for children, young people, and family were the long waiting times for appointments, poor continuity of care/repeated changes of staff, and poor and delayed information about what was planned for their care pathway. Similar concerns were raised by professional stakeholders, particularly from voluntary and community sector partners, leading the evaluation team to make several recommendations for bettering the FTB model and service functioning. These included for example, building the FTB workforce and leadership, development of training and continuous performance development opportunities for providers across all sectors, and establishment of a data system that is compatible across all relevant agencies. Given that FTB is one of the first health services to provide integrated mental health care to young people from birth to age 25, it is not surprising that such a system overhaul was faced with many challenges, particularly in the initial phases. More recent evaluation data are expected to be published soon.

Take-home messages

- Integrated care is the preferred approach for delivering youth mental health care in Australia and worldwide.
- There is some good empirical evidence that supports integrated care models as more beneficial than standard care for young people with mental health issues, however more high-quality research is needed.
- There are numerous barriers to delivering integrated care, but there are an equal number of facilitators that should be capitalised on to foster collaborative and more integrated ways of working.
- Despite the challenges, many services have already implemented integrated care models in youth mental health settings, and these vary in breadth and diversity.

part 3 - Integration for headspace: definition and core components as identified by literature and key stakeholders

3.1 Overview

The aims of this project were to develop a definition of integrated care, and to identify the core components of integrated care, for use in youth mental health settings. While comprehensive definitions on integrated care do exist, these tend to lack specificity as to what constitutes integrated care and have not been targeted to youth mental health-specific settings, thus identifying the core components was a particular focal point of this project. It is expected that a clear definition and understanding of essential components of integrated care, specifically within a youth mental health context, will support more consistent application and measurement of integrated care models in real-world settings.

This project was developed for the following reasons:

- While good models of integrated care exist, many young people still do not receive truly integrated care.
- There is a lack of consensus as to what integrated care is in the youth mental health space.
- There is a lack of consensus as to what the essential ingredients are for delivering integrated care to young people.

3.2 Methodology

In order to develop a definition of integrated care and to identify its core components, a two-part process was undertaken: 1) a literature review, and 2) structured discussions and surveys with key youth mental health stakeholders, including health professionals and young people and family. More detailed information about the methodology can be seen in Appendix 1.

3.3 Results

3.3.1 Development of a definition of integrated care for use in a youth mental health setting

At the beginning of the stakeholder sessions, participants were invited to write what integrated care meant to them. Common themes that emerged focused on care that is seamless, holistic, connected, cohesive, and coordinated. It was also noted that integrated care looks different for every young person depending on their needs. Many stakeholders acknowledged that integrated care should be designed to address issues not only related to mental health but also other aspects of health and wellbeing. Several health professional stakeholders mentioned the model or level of integration in their perspective of integrated care, and while these differed at times, meeting the needs of the young person and family, was a common feature across stakeholders' perspectives. Health professionals, young people and family, agreed that the extent to which care was integrated or not, largely depended on how the young person experienced the care provided to them.

A selection of quotes reflecting the range of the responses is presented in Box 3. Additional quotes are provided in Appendix 2. To maintain anonymity, for the purpose of this document quotes from the Youth Enhanced Services Advisory Group or stakeholders from the headspace-associated workshops are attributed to a 'health professional', and those from the sessions that were attended by young people and members of the family reference group are attributed to a 'young person or family'.

Box 3. What does integrated care mean to you?

"Communication and collaboration between health professionals of different specialties e.g., psychologists, GPs, social workers. Integrated care might also involve integrating a person's health on a whole and not just mental health." (Young person or family)

"A partnership approach where various service options are identified to address needs and are then planned and delivered in a way that complement each other." (Young person or family)

"Young people being able to access the care they need, from different service providers and services, and the structures and processes that support those services being able to ensure the young person's care is coordinated." (Health professional)

During the stakeholder workshops, we presented the definitions of integrated care that the WHO had developed/adapted. The response from stakeholders were fairly consistent; the **WHO user-led definition** appeared to resonate the most with our stakeholders, many of whom found the process- and systems-based definitions to be too wordy and abstract.

"I like this one (user-led definition) because it has the least jargon. The whole field is populated with jargon, which is a barrier. Simple, clear cut and brings it all together" (Young person or family)

"I sit in a space around 'who are we integrating for?' and for me it's for the client experience, their goals, and their outcomes." (Health professional)

Taking into account stakeholders' feedback, a definition was formulated based on both the WHO user-led definition and the key themes that were rated in the surveys as important by the young people and family, who participated in the stakeholder workshops (see Figure 3). This figure also provides a summary of what systems, services and providers can take away from our integrated care definition, and this part of the figure was informed by the professionals who took part in the stakeholder workshops and what they rated in the surveys as important themes of integrated care.

Figure 3. Proposed definition for use in a youth mental health context

3.3.2 Core components of integrated care

The core components of integrated care derived from the overall ratings of all the stakeholders are listed in Figure 4. After discussion with members of the headspace National steering group, to facilitate a system-wide perspective, the core components of integrated care have been categorised using a framework adapted from Hodgins et al.(47) who used the WHO health system building blocks to consider health systems change.(48) Figure 4 presents a framework for integrated care. It shows the overarching values of integrated care, the six building blocks for integrated care, and the core components comprising each building block. The building blocks of any health system are: service delivery, workforce, information systems and communication, products and technology, financing, and leadership, governance and policy.

In addition to the core components seen in Figure 4, a number of other components identified in the integrated care literature and rated as important by stakeholders, were core components of 'good clinical care', and can be applied to any model of care, not just integrated care models. It is important to note that, during the surveys stakeholders were asked to think about what is 'essential' for doing specifically *integrated care*. Therefore, because stakeholders were not asked explicitly to also identify core components of standard or 'good clinical care' (and the literature sourced for this project was specific to integrated care), Figure 4 only includes the core components for integrated care. The 'good clinical care' components rated as important by stakeholders were: clear governance structure; young people and family involvement in co-design at all levels; monitoring and evaluation; clear role definitions; youth participation; family participation; appropriate care, where care is individualised to the young person's specific needs and strengths; easy access and enhanced access to services.

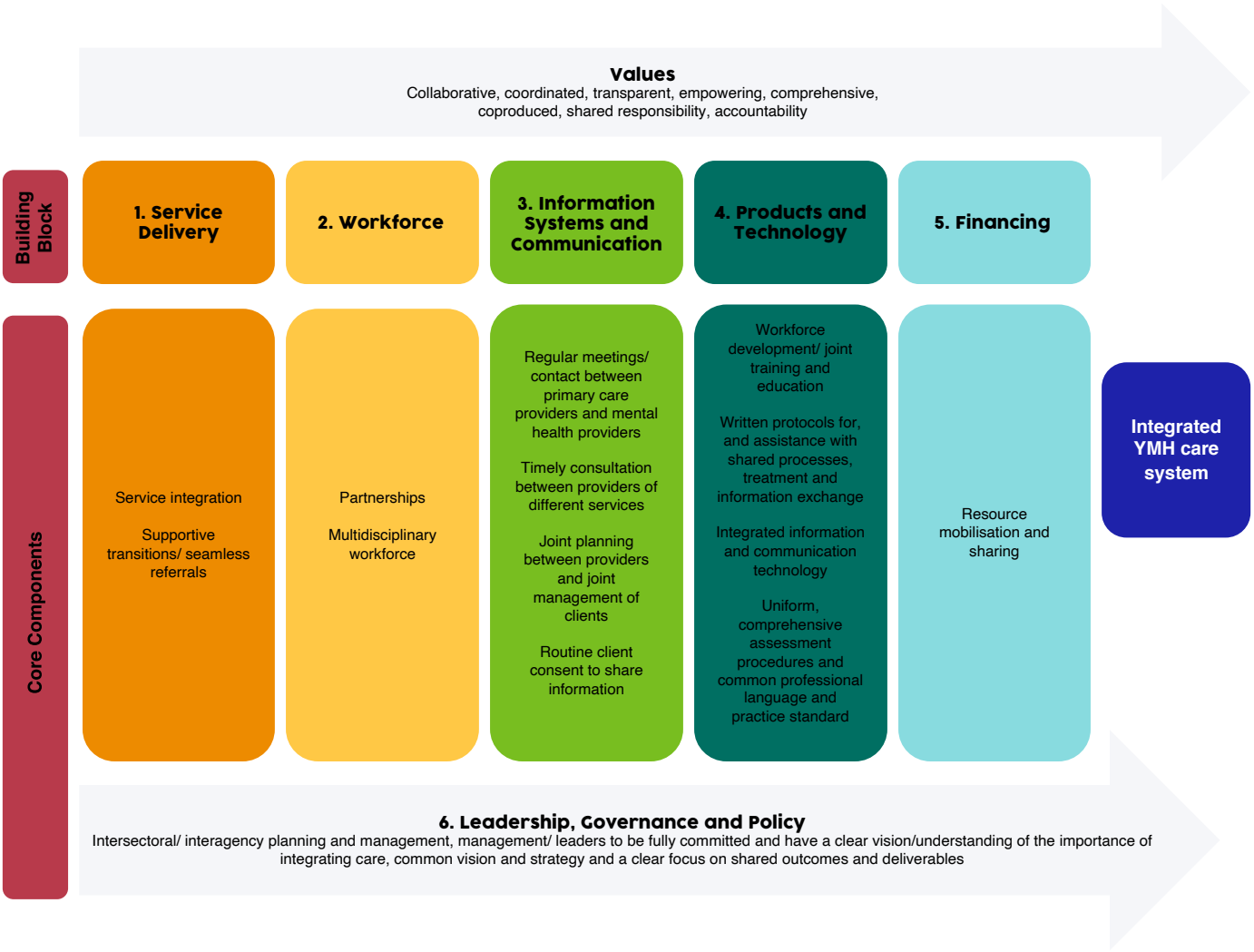

Figure 4. Framework for core components of integrated care (adapted from 47)

The following section discusses the core components of integrated care identified within the overarching building blocks.

1. Service delivery

Service delivery is the first building block in the framework and comprises two core components: service integration and supported transitions/seamless referrals. Service integration in this context refers to multiple services being managed and provided within one organisation/health service. For example, providing mental health, alcohol and other drugs (AOD), vocational and physical health services at a youth mental health service. Supported transitions/seamless referrals means proactively linking young people with external services when required, including organising appropriate discharge and transfer agreements and ensuring that the young person is engaged with the external service.

> **"Care that involves someone receiving more than one type of care, via multiple care givers, that is experienced by the individual as one collaborative and seamless process." (Health professional)**

2. Health workforce

The second building block is health workforce and comprises two core components: partnerships and a multidisciplinary workforce.

Partnerships are with external organisations, including other mental health services, primary health, AOD services, as well as workforce training organisations such as academia and professional colleges. Partnerships with research entities can also serve the health workforce by facilitating and promoting evaluation, continuous improvement and evidence-based practice. Partnerships might also be across other sectors relevant to young people such as welfare, education and justice. Partnerships could be fostered organically via meetings, shared forums and workshops involving managers and team leaders from different agencies. Such partnerships could be formalised via service level agreements/partnership agreements, memorandums of understanding, letters of commitment and contracts, which can ensure commitment and accountability.(49) A multidisciplinary workforce refers to providers working together who are trained and skilled in different professions, such as psychology, occupational therapy, general practice, psychiatry and AOD work. The importance of professional credibility and mutual respect between different vocations was emphasised during the open discussions:

> **"Trust and professional respect. If someone referred a client and said, 'this is the need', then you accept it as it is. There's a shared understanding of what these things mean, but you trust and respect the other person/ professional within this model or in your team that you accept it, and you're not doing another assessment, or you're not saying 'no, they don't know what they are talking about', that creates that seamless service as well." (Health professional)**

It was also suggested during the workshops that a way to foster a workforce capable of delivering integrated care is by recruiting staff that have demonstrated experience working in an integrated way; future employee position descriptions could include a commitment to integrated care as essential.

> **"...actually choosing staff that have a commitment to integration, and also consumers choosing staff (as in – they are on the recruitment panel for new staff). My thinking was that integrated care is about collaborating with young people about their own care – and a key component of this is young people having a 'say' in who works at the service". (Health professional)**

3. Health information systems and communication

The health information systems and communication building block comprises four core components: 1) regular meetings/ contact between primary care providers and mental health providers; 2) timely consultation between providers of different services; 3) joint planning between providers and joint management of clients; and 4) routine client consent to share information.

Regular meetings/contact between primary care providers and mental health providers means that providers communicate effectively to share information about clients and develop shared treatment goals. Timely consultation between providers of different services would see providers making it a priority to consult and collaborate with experts outside their profession as needed. The component of joint planning between providers and joint management of clients would encompass, for example, joint team meetings, case conferences and individual consultation/supervision. Lastly, routine client consent to share information entails asking clients routinely for permission to share information as appropriate between services as part of standard integrated care practice. Information would include verbal information, such as through joint care coordination meetings and secondary consultation, as well as sharing of client documentation and records.

> **"I like the inclusion of empowerment and transparency in terms of having autonomy and access to the information that might be shared between care providers about me." (Young person or family)**

4. Products and technology

The fourth building block is products and technology, with four core components: 1) workforce development/ joint training and education; 2) written protocols for, and assistance with shared processes, treatment and information exchange; 3) integrated information and communication technology; and 4) uniform, comprehensive assessment procedures and a common professional language and practice standard.

Workforce development/joint training and education refers to providing comprehensive training, supervision and mentoring, and continuous professional development to providers from all disciplines, with opportunities for cross-discipline upskilling. This also includes staff training related to integrated working and implementation strategies that the service has adopted for achieving a higher level of integration. Written protocols for, and assistance with shared processes, treatment and information exchange includes treatment guidelines and algorithms (e.g., to guide medication titration, or to formalise information exchange among providers). This will facilitate accountability and monitoring and promote sustainability. The core component of integrated information and communication technology describes technology that is compatible between services to support information sharing. Lastly, uniform, comprehensive assessment procedures and a common professional language and practice standard includes things such as standard diagnostic criteria, adherence to code of conduct etc., to ensure consistency and common understanding of young people's needs.

> **"To me the shared records and that sort of thing implies a seamless communication between providers. That might alleviate the need for constant communication. If you are sharing information and intake forms etc., then it will be an automatic sharing of information rather than constant direct communication." (Health Professional)**

5. Health financing

The fifth building block, health financing, has only one component considered essential for integrated care: resource mobilisation and sharing. This means that resources, including money, infrastructure, time and skills, be coordinated and balanced across the whole service. Activities involved in securing new and additional resources should be a joint responsibility across services/organisations. From a systems level perspective, secure long-term government funding, allocated equitably within and across services/ organisations is needed to overcome fragmented financing of health, including mental health, and social care.

The degree to which the previously outlined components (within the building blocks service delivery, workforce, information systems and communication, and products and technology) could be actualised, is heavily dependent on funding and infrastructure. Restricted budgeting would lead to more reliance on lower-level integration. For example there would be greater reliance on supported transitions/seamless referrals and less capacity for delivering a truly integrated service.

> **"You do have to start somewhere, and you can't just say 'now every health provider in the country is now doing integrated care', because you have to build understanding and create resources and abilities for people to be able to do that." (Young person or family)**

6. Leadership, governance and policy

Lastly, appropriate leadership, governance and policy underpins all the other building blocks and core components of integrated care. This has four core components: 1) intersectoral/interagency planning and management; 2) management/leaders that are fully committed and have a clear vision of the importance of integrated care; 3) a common vision and strategy; and 4) a clear focus on shared outcomes and deliverables.

Intersectoral/interagency planning and management is driven by leaders and managers from respective services/ organisations, and should include discussions with participating staff about provider expectations, program scope and preferred methods of communication, which can be fed back at the governance and policy level. The core component of management and leaders being fully committed and having a clear vision of the importance of integrated care includes strong leadership, fostering a culture supportive of integrated care, and staff holding a high trust in management. A common vision and strategy refers to having clear aspirations, measurable goals and defined timelines for organisational/service change, which are decided on collaboratively, across services and organisations. A clear focus on shared outcomes and deliverables means that cross-disciplinary and interagency professionals collectively working together to deliver specific integrated treatment goals are evaluated at the group level, as opposed to outcomes being assessed at the individual provider level.

Of note, no clear preference emerged in the ratings regarding the type of governance structure (i.e., lead agency governance versus interagency governance) in terms of what would be more suited to an integrated care model. However, it was emphasised during the discussions that the governance structure should be one that is most efficient and least bureaucratic, which in some people's experience was a lead agency.

> **"I'm more of the view around a lead agency governance, I think it's really crippling with having layers of governance that you need to manage with involved agencies, it's really difficult to operationalise an efficient, high performing service if everyone's got their own separate governance accountabilities. I've seen a lead agency work really well in that (youth mental health) space." (Health professional)**

3.4 Considerations for achieving integrated care in youth mental health

Implementing integrated care systems in youth mental health is challenging, but critical to improve outcomes for young people, their families and communities. To successfully implement, it is essential to be clear about the purpose of integration, and to understand what needs to be integrated. This supports appropriate integrated care strategies, models, processes and structures. These points were concluded by an umbrella review (a review of reviews), commissioned by Queensland Health, Australia, that critiqued 17 publications, mostly from the UK, USA and Australia, all focused on health service integration, some of which focused on care models for mental ill health.(4) After noting the diversity in integrated care strategies, from collaborative care models to integration of different health services, the review concluded that there is no "one-size fits all" approach, but that a clear purpose for integration was required.

3.4.1 Co-design and economic cost evaluation

Importantly, to create fully client-centred integrated health care systems, greater emphasis must be given to involving end-users in genuine co-design.(4) This reflects the increasing uptake of participatory methods, including co-design, for healthcare reform.(50) Co-design involves engaging people and family with lived experience in the creation, redesign and improvement processes of health services. In mental health specifically, co-design is expected to promote trust, empowerment, autonomy, self-determination and choice for clients who access the service, as well as staff who work within the service.(50)

Notably, the umbrella review mentioned above reported mixed findings in relation to cost-effectiveness of integrated care, but argued that the ability to integrate financial and clinical information, across health and social care, was appraised as an important factor for monitoring cost-effectiveness. There was a clear lack of economic cost evaluation research however,(4) which should be considered as an important focus of future integrated care research, as it has wide-ranging implications for implementation of these models into real-world settings.

3.4.2 Measuring the effectiveness of integrated care models

Evaluation of integrated care models is compromised by its conceptual ambiguity and difficulty in measuring the effectiveness of care integration.(51, 52) The definition and identification of core components of integrated care in the context of youth mental health by the current project will help inform the development of measurement and evaluation tools. To our knowledge there are currently no standardised validated instruments that cover all aspects of integrated care for youth mental health.

Future projects should determine measurable indicators of each of the core components of integrated care in youth mental health identified by this project and develop and validate tools to measure and evaluate these indicators. A comprehensive measurement approach must consider the multiple dimensions, components and perspectives of integrated care.(53) Measurement approaches should triangulate data from mixed data sources, including questionnaires, registry data, and qualitative methods such as interviews, observations and workshops. Although there are currently no measures of perceptions of care integration for youth mental health, or any that have been validated among young people, measures of patient perspectives of integrated care exist and could be adapted.(54-57) For example, the Patient Perceptions of Integrated Care Survey (54) measures the integration of care as experienced by the patient/client across six dimensions. The dimensions include information flow to the health professional, post-visit information flow to the patient, and coordination between the care team and community resources. To date, it has only been validated among adults with multiple chronic health conditions.

The opinions of young people and family are of the utmost importance when measuring integrated care, however their perspectives give limited insight into the many specific clinical activities coordinated into their care, and are unlikely to have insights into both system- and organisational-level integration activities.(58) Established surveys and measurement tools might inform the best ways to measure integration from a health professional or health services perspective (i.e., centre managers).(59, 60) These tools could also address multiple levels, dimensions or types of integrated care (for example clinical, service, functional and organisational integration).

In addition to measuring the implementation and extent of integration, it is also imperative to examine its effectiveness. Future research must determine the relationship between client/professional perspectives of integrated care and outcomes, such as clinical health outcomes (e.g., symptomology), health service use, quality of life, health care quality, education and vocational outcomes, cost savings and cost effectiveness.(35) Research must also investigate which components identified in this project improve integration and patient outcomes. Measurement and evaluation of integrated care can inform change management and continuous improvement strategies.(52) Rigorous evaluation supports accountability to funders, advancement of integrated care knowledge base, enhancement of patient care, identification of areas of poor performance, and improvement of managerial and professional behaviour changes.(61) Only through appropriately integrated care systems will the mental health care outcomes for young people be optimised.

Take-home messages

- Integrated care in youth mental health was defined from the existing literature and a range of stakeholder perspectives: “my care is planned with people who work together to understand me and my carer(s) and put me in control. Multiple service providers, trained in different disciplines, coordinate and deliver their services in a way that provides me with integrated person-centred care. This will enhance the quality of care that I receive, to achieve my best possible outcomes”
- What this definition means for health systems, services and providers, as determined by the literature and stakeholders is: health professionals work together to improve clients’ experience of care, by removing barriers, creating seamless referral pathways, tailoring care to the needs of the individual and their families, and offering continuity of care. The care provided is integrated and holistic, focused on the whole person.
- The building blocks of any health system are; service delivery, workforce, information systems and communication, products and technology, financing, and leadership, governance and policy. Seventeen core components were rated overall as essential for integrated care.
- Future work should consider the importance of co-design and economic cost evaluation. The development of specific tools for the measurement of integrated care in youth mental health, and evaluation of efficacy for a range of outcomes, is also needed.

references

1. Armitage GD, Suter E, Oelke ND, Adair CE. Health systems integration: state of the evidence. Int J of Integr Care. 2009;9:e82.
2. World Health Organization. Integrated care models: an overview. Copenhagen: World Health Organization Regional Office for Europe; 2016. https://www.euro.who.int/__data/assets/pdf_file/0005/322475/Integrated-care-models-overview.pdf.
3. National Voices. A narrative for person-centred coordinated care. 2013. http://www.england.nhs.uk/wp-content/uploads/2013/05/nv-narrative-cc.pdf.
4. Heyeres M, McCalman J, Tsey K, Kinchin I. The complexity of health service integration: a review of reviews. Front Public Health. 2016;4:223.
5. Lewis R, Rosen R, Goodwin N, Dixon J. Where next for integrated care organizations in the English NHS? London: The King's Fund; 2010. https://www.nuffieldtrust.org.uk/files/2017-01/where-next-integrated-care-english-nhs-web-final.pdf.
6. Fulop N, Mowlam, A, Edwards, N. Building integrated care: lessons from the UK and elsewhere. London: The NHS Confederation; 2005. https://www.rchnfoundation.org/wp-content/uploads/2015/07/Building-integrated-care.pdf.
7. Rickwood D, Paraskakis M, Quin D, Hobbs N, Ryall V, Trethowan J, et al. Australia's innovation in youth mental health care: the headspace centre model. Early Intervent Psychiatry. 2019;13(1):159-66.
8. Wolfe I, Mandeville K, Harrison K, Lingam R. Child survival in England: strengthening governance for health. Health Policy. 2017;121(11):1131-8.
9. Brown M, Moore CA, MacGregor J, Lucey JR. Primary care and mental health: overview of integrated care models. J Nurse Pract. 2021;17(1):10-4.
10. Kodish I, Richardson L, Schlesinger A. Collaborative and integrated care for adolescent depression. Child Adolesc Psychiatric Clin N Am. 2019;28(3):315-25.
11. Getch SE, Lute RM. Advancing integrated healthcare: a step by step guide for primary care physicians and behavioral health clinicians. Mo Med. 2019;116(5):384.
12. Doherty W, McDaniel S, Baird M. Five levels of primary care/behavioral healthcare collaboration. Behav Healthc Tomorrow. 1996;5(5):25-7.
13. Heath B, Wise Romero P, Reynolds K. A standard framework for levels of integrated healthcare. Washington, D.C.: SAMHSA-HRSA Center for Integrated Health Solutions; 2013. https://www.pcpcc.org/sites/default/files/resources/SAMHSA-HRSA%202013%20Framework%20for%20Levels%20of%20Integrated%20Healthcare.pdf.
14. Kolko DJ, Perrin E. The integration of behavioral health interventions in children's health care: services, science, and suggestions. J Clin Child Adolesc Psychol. 2014;43(2):216-28.
15. World Health Organization. WHO global strategy on people-centred and integrated health services: interim report. Geneva: WHO; 2015. https://apps.who.int/iris/handle/10665/155002.
16. Schwartz SH, Bilsky W. Toward a universal psychological structure of human values. J Pers Soc Psychol. 1987;53(3):550.
17. Goodwin N. Taking integrated care forward: the need for shared values. Int J Integr Care. 2013;13:e026.
18. Valentijn PP, Schepman SM, Opheij W, Bruijnzeels MA. Understanding integrated care: a comprehensive conceptual framework based on the integrative functions of primary care. International J Integr Care. 2013;13:e010.
19. Minkman M. Values and principles of integrated care. Int J Integr Care. 2016;16(1):2.
20. Hitlin S, Piliavin JA. Values: reviving a dormant concept. Annu Rev Sociol. 2004;30:359-93.
21. Zonneveld N, Driessen N, Stüssgen RA, Minkman MM. Values of integrated care: a systematic review. Int J Integr Care. 2018;18(4):9.
22. Richardson J, Ingoglia C. Bridging the addiction treatment gap: certified community behavioral health clinics. Washington, DC.: National Council for Behavioral Health; 2018. https://njamha.org/links/publicpolicy/CCBHC-Addictions-Treatment-Impact-survey-report-updated_8-29-19.pdf.
23. National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services. Principles of drug addiction treatment: a research-based guide. 3rd ed. Bethesda, MD: author; 2018. https://nida.nih.gov/download/675/principles-drug-addiction-treatment-research-based-guide-third-edition.pdf?v=74dad603627bab89b93193918330c223
24. State of Victoria. Royal Commission into Victoria's mental health system, final report, summary and recommendations, Parl Paper No. 202, session 2018–21 (document 1 of 6). Melbourne; 2021. https://finalreport.rcvmhs.vic.gov.au/wp-content/uploads/2021/02/RCVMHS_FinalReport_ExecSummary_Accessible.pdf.
25. Productivity Commission. Mental health, report no. 95. Canberra; 2020. https://www.pc.gov.au/inquiries/completed/mental-health/report/mental-health.pdf.
26. headspace. headspace Model Integrity Framework (hMIF V2). Melbourne; 2020.
27. Ee C, Lake J, Firth J, Hargraves F, de Manincor M, Meade T, et al. An integrative collaborative care model for people with mental illness and physical comorbidities. Int J Ment Health Syst. 2020;14(1):1-16.
28. Looman W, Struckmann V, Köppen J, Baltaxe E, Czypionka T, Huic M, et al. Drivers of successful implementation of integrated care for multi-morbidity: mechanisms identified in 17 case studies from 8 European countries. Soc Sci Med. 2021;277:113728.
29. Davis M, Balasubramanian BA, Waller E, Miller BF, Green LA, Cohen DJ. Integrating behavioral and physical health care in the real world: early lessons from advancing care together. J Am Board Fam Med. 2013;26(5):588-602.
30. Rocks S, Berntson D, Gil-Salmerón A, Kadu M, Ehrenberg N, Stein V, et al. Cost and effects of integrated care: a systematic literature review and meta-analysis. Eur J Health Econ. 2020;21(8):1211-21.
31. Asarnow JR, Rozenman M, Wiblin J, Zeltzer L. Integrated medical-behavioral care compared with usual primary care for child and adolescent behavioral health: a meta-analysis. JAMA Pediatr. 2015;169(10):929-37.
32. Hetrick SE, Bailey AP, Smith KE, Malla A, Mathias S, Singh SP, et al. Integrated (one-stop shop) youth health care: best available evidence and future directions. Med J Aust. 2017;207(10):S5-S18.
33. Fusar-Poli P. Integrated mental health services for the developmental period (0 to 25 years): a critical review of the evidence. Front Psychiatry. 2019;10:355.

34. Richardson LP, McCarty CA, Radovic A, Suleiman AB. Research in the integration of behavioral health for adolescents and young adults in primary care settings: a systematic review. J Adolesc Health. 2017;60(3):261-9.
35. Wolfe I, Satherley R-M, Scotney E, Newham J, Lingam R. Integrated care models and child health: a meta-analysis. Pediatrics. 2020;145(1):e20183747.
36. Correll CU, Galling B, Pawar A, Krivko A, Bonetto C, Ruggeri M, et al. Comparison of early intervention services vs treatment as usual for early-phase psychosis: a systematic review, meta-analysis, and meta-regression. JAMA Psychiatry. 2018;75(6):555-65.
37. Early Psychosis Guidelines Writing Group and EPPIC National Support Program. Australian clinical guidelines for early psychosis. 2nd ed. Melbourne: Orygen, The National Centre of Excellence in Youth Mental Health; 2016. https://www.orygen.org.au/Campus/Expert-Network/Resources/Free/Clinical-Practice/Australian-Clinical-Guidelines-for-Early-Psychosis/Australian-Clinical-Guidelines-for-Early-Psychosis.aspx?ext
38. Bond GR, Drake RE, Luciano A. Employment and educational outcomes in early intervention programmes for early psychosis: a systematic review. Epidemiol Psychiatr Sci. 2015;24(5):446-57.
39. Nooteboom LA, Mulder EA, Kuiper CH, Colins OF, Vermeiren RR. Towards integrated youth care: a systematic review of facilitators and barriers for professionals. Adm Policy Ment Health. 2021;48:88-105.
40. McGorry PD, Mei C, Chanen A, Hodges C, Alvarez-Jimenez M, Killackey E. Designing and scaling up integrated youth mental health care. World Psychiatry. 2022;21(1):61-76.
41. Zenone MA, Cianfrone M, Sharma R, Majid S, Rakhra J, Cruz K, et al. Supporting youth 12–24 during the COVID-19 pandemic: how Foundry is mobilizing to provide information, resources and hope across the province of British Columbia. Glob Health Promot. 2021;28(1):51-9.
42. Mathias S, Tee K, Helfrich W, Gerty K, Chan G, Barbic SP. Foundry: early learnings from the implementation of an integrated youth service network. Early Interv Psychiatry. 2022;16(4):410-18.
43. Salmon A, Fernando S, Mai Berger D, Tee K, Gerty K, Helfrich W, et al. Distributive leadership within an emerging network of integrated youth health centres: a case study of Foundry. Int J Integr Care. 2020;20(4):19.
44. Foundry. Foundry early learnings: proof of concept evaluation report. Vancouver: Foundry; 2018. https://foundrybc.ca/wp-content/uploads/2020/06/L.8-Foundry-Proof-of-Concept-Evaluation-Report.pdf.
45. Birchwood M, Street C, Singh S, Lamb C, Anderson Y, Warner Gale F, et al. Impact and process evaluation of Forward Thinking Birmingham, the 0–25 mental health service: final report. University of Warwick; University of Birmingham; Great Involvement Future Thinking; CLAHRC-WM. 2018. http://wrap.warwick.ac.uk/100545/7/WRAP-impact-process-evaluation-report-Birchwood-2018.pdf
46. Devlin R, Forward K. The case for change: commissioning a 0-25 year old mental health service across Birmingham. 2013. https://cypmhcommissioning.nelcsu.nhs.uk/wp-content/uploads/2017/04/Birmingham-Case-for-Change-0-25-year-olds.pdf.
47. Hodgins M, Van Leeuwen D, Braithwaite J, Hanefeld J, Wolfe I, Lau C, et al. The COVID-19 System Shock Framework: capturing health system innovation during the COVID-19 pandemic. Int J Health Policy Manag. 2021.
48. World Health Organization. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: WHO; 2010. https://apps.who.int/iris/handle/10665/258734
49. Savic M, Grynevych A, Best D, Lubman D. Review of integrated working strategies. Melbourne: Turning Point; 2014. https://www.researchgate.net/publication/303857919_Review_of_Integrated_Working_Strategies
50. Palmer VJ, Weavell W, Callander R, Piper D, Richard L, Maher L, et al. The Participatory Zeitgeist: an explanatory theoretical model of change in an era of coproduction and codesign in healthcare improvement. Med Humanit. 2019;45(3):247-57.
51. Bautista MAC, Nurjono M, Lim YW, Dessers E, Vrijhoef HJ. Instruments measuring integrated care: a systematic review of measurement properties. Milbank Q. 2016;94(4):862-917.
52. Wankah P, Guillette M, Lemaitre T, Belzile L, Couturier Y. Challenges in measuring integrated care models: international knowledge and the case of Quebec. Int J Care Coord. 2020;23(2-3):75-91.
53. Browne G, Kingston D, Grdisa V, Markle-Reid M. Conceptualization and measurement of integrated human service networks for evaluation. Int J Integr Care. 2007;7:e51.
54. Singer SJ, Friedberg MW, Kiang MV, Dunn T, Kuhn DM. Development and preliminary validation of the Patient Perceptions of Integrated Care survey. Med Care Res Rev. 2013;70(2):143-64.
55. Drewes HW, de Jong-van Til JT, Struijs JN, Baan CA, Tekle FB, Meijboom BR, et al. Measuring chronic care management experience of patients with diabetes: PACIC and PACIC+ validation. Int J Integr Care. 2012;12.
56. Glasgow RE, Wagner EH, Schaefer J, Mahoney LD, Reid RJ, Greene SM. Development and validation of the patient assessment of chronic illness care (PACIC). Med Care. 2005:436-44.
57. Walker KO, Stewart AL, Grumbach K. Development of a survey instrument to measure patient experience of integrated care. BMC Health Serv Res. 2016;16(1):1-11.
58. Strandberg-Larsen M, Krasnik A. Measurement of integrated healthcare delivery: a systematic review of methods and future research directions. Int J Integr Care. 2009;9:e01.
59. Browne G, Roberts J, Gafni A, Byrne C, Kertyzia J, Loney P. Conceptualizing and validating the human services integration measure. Int J Integr Care. 2004;4:e03.
60. Fares J, Chung KSK, Passey M, Longman J, Valentijn PP. Exploring the psychometric properties of the Rainbow Model of Integrated Care measurement tool for care providers in Australia. BMJ Open. 2019;9(12):e027920.
61. Nutley S, Smith PC. League tables for performance improvement in health care. J Health Serv Res Policy. 1998;3(1):50-7.

appendices

Appendix 1: Methodology

This project was a joint initiative by Orygen and headspace National Youth Mental Health Foundation, and consisted of two phases: 1) reviewing the literature and extracting the common themes found within definitions of integrated care, and extracting the core components of integrated care identified in the literature, and 2) engaging stakeholders, including young people and family, clinicians, policy makers, scientists and professionals employed at varying levels of the health system (for example, headspace centre managers, Primary Health Network representatives).

1) Literature review

We conducted a search of the literature in August 2021 using the following scientific databases: Google Scholar, Pubmed and Cochrane Collaboration. The following grey literature sites were also searched: OpenGrey, The Grey Literature Report, Canadian Agency for Drugs and Technology in Health (CADTH) and Electronic Theses Online Service (EThOS). The main search terms used were: integrated, integration, integrate, partnership, collaborate, collaborative, collaboration, coordinated, coordination, coordinate, continuing and mental.

While our search was not systematic, we did make efforts to collect a representative sample that included both scientific and grey literature, and literature from both the broad health system and mental health specific settings. Articles were initially screened based on title and abstract, and then the full text article, to determine whether there was a definition provided and/or reference to core components. The information was extracted into an Excel spreadsheet. Figures 5 and 6 outline the screening process. The list of included articles is available upon request from the first author.

2) Stakeholder consultation

Stakeholders: There were three groups of stakeholders involved in this project: 1) Youth Enhanced Services Advisory Group, 2) people working in headspace-associated youth mental health services and Orygen policy and government relations staff, and 3) young people and family. Each group of stakeholders were invited to attend two sessions each (for a total of six sessions); the first session was focused on developing a definition of integrated care for youth mental health and the second session aimed to identify the core components of integrated care in youth mental health. Due to the COVID-19 pandemic and widespread locations of attendees, the workshops were all conducted online via Zoom. Workshop attendance ranged from five to 15 people and there were representatives from the states of New South Wales, Victoria, Queensland, Tasmania and Western Australia. The same people were invited to participate in both workshops and many did, however there were some staff changes and people unable to attend both.

The young people and family were contacted via expression of interest using the headspace National Youth Reference Group (hY NRG) and Family Reference Group. hY NRG is made up of a diverse group of young people of varying ages, genders and cultural backgrounds. The headspace Family Reference Group is comprised of members with lived experience of supporting a young person through headspace services.

The Youth Enhanced Services Advisory Group consisted of Primary Health Network (PHN) staff that worked in roles relevant to youth mental health and Orygen Service Implementation and Quality Improvement (SIQI) staff. PHNs are independent organisations designed to streamline health services. They assess the health care needs of their community and commission health services to meet those needs, minimising gaps or duplication. PHNs fund headspace services. Youth Enhanced Services are services aimed at young people aged 12 to 25 who are at risk of, or experiencing, a serious mental illness. The role of the advisory group is to review progress of the national Youth Enhanced Services program; explore the enablers, barriers and requirements for commissioning youth enhanced mental health services; identify risks and opportunities; facilitate the sharing of information and knowledge and facilitate collaboration and coordination between PHNs, governments, peak bodies and other relevant organisations. The integrated care workshops occurred during the group's regularly scheduled meetings.

The third group was comprised of people working in headspace-associated youth mental health services, namely, lead agencies who are responsible for providing oversight for the delivery of headspace services, and headspace service managers and clinical leaders who deliver the headspace model. A representative sample of stakeholders were identified across these roles that matched the diversity of headspace centres across Australia. This included sites whose lead agencies are Local Hospital Districts, sites that have an Early Psychosis platform connected, sites in regional areas, and sites in metropolitan areas. This third group also consisted of staff from the Orygen policy and government relations team.

Consultation: The key themes and components derived from the literature review were listed in questionnaires (conducted as Menti surveys shared via a web link) which were presented to stakeholders during two sets of online workshops. Two workshops were conducted for each group. The first set of workshops, held during September and October 2021, focused on the definition of integrated care. Stakeholders were asked whether each definition theme should be included in a definition of integrated care for youth mental health services, by rating on a 5-point Likert scale (where 1= Strongly Disagree, 2= Disagree, 3 = Neither Disagree or Agree, 4 = Agree and 5 = Strongly Agree). Definition themes that had an average rating of 4.0 and above, corresponding to agreeing or strongly agreeing that they should be included, were used for developing the proposed definition. The second set of workshops focused on the core components of integrated care and occurred in December 2021. The same stakeholders that participated in the first session were asked to rate whether they agreed that a component was an essential component of integrated care, using the same 5-point Likert scale. Components that had an average rating of 4.0 and above were included. The ratings were able to be accessed and downloaded by the authors via Menti. These were entered into an Excel spreadsheet and mean scores were calculated for professionals (Youth Enhanced Services Advisory Group or the headspace-associated/Orygen policy and government relations staff) and young people/family separately, and as a whole group. The sessions were recorded, therefore key quotes were able to be captured verbatim.

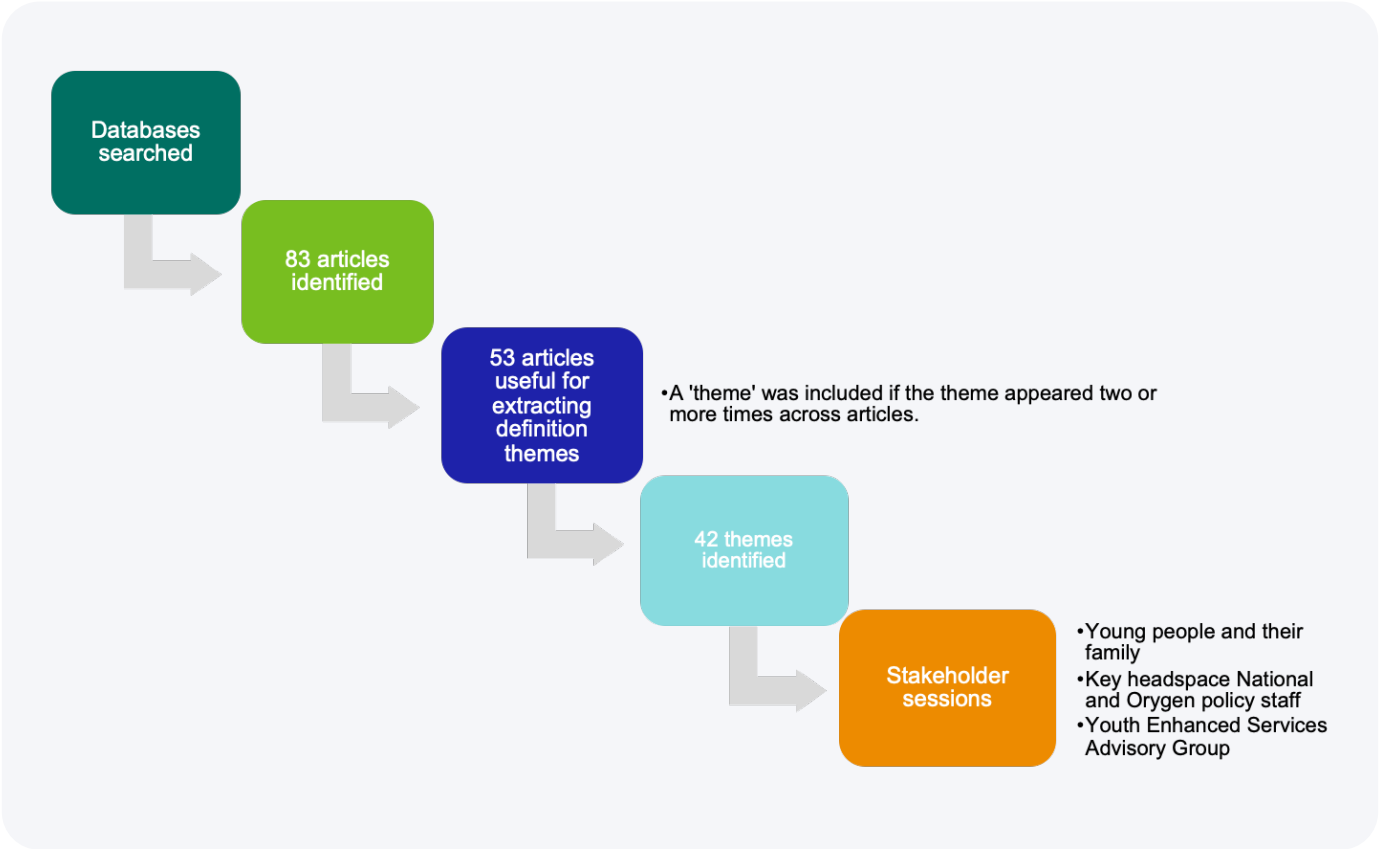

Figure 5. Literature screening process – definitions of integrated care

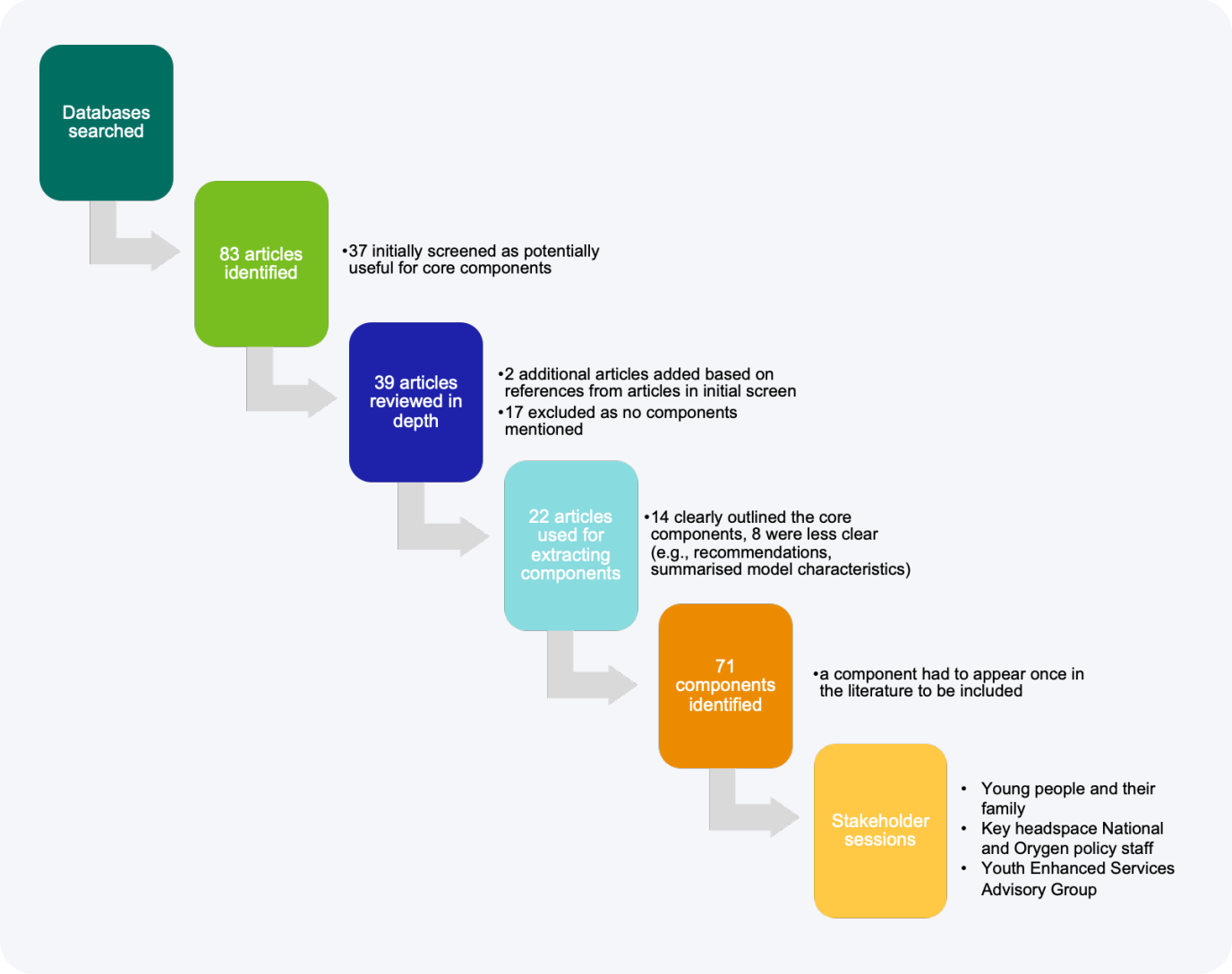

Figure 6. Literature screening process – components of integrated care

Appendix 2: Stakeholder quotes about the definition of integrated care

"Different services (e.g., psychology, hospital, GP) and different domains (e.g., psych, social, physical health) set up to work together (communicate/collaborate), reducing obsolete overlap and increasing the efficacy of each service/domain." (Young person or family)

"A model of care inclusive of family and supportive friends where the care continues even after the young person has disengaged from your service." (Young person or family)

"The provision of care that responds to someone's broadest physical, emotional, social, spiritual needs." (Young person or family)

"One stop shop/hub and spoke" (Health professional)

"Recognises outcomes are produced by the whole system rather than individual organisations or programmes." (Health professional)

"Services can be co-located or convene at points in time to share information" (Health professional)

"Services integrated around the needs of the young person - vertically and horizontally" (Health professional)

"Shared care plan across service streams with shared understanding of risk and safety, an agreed method for sharing info and engagement of family/others. Care team process common understandings/ formulation services backing each other" (Health professional)

"Care that meets needs of the individual, their family and community regardless of who delivers that care" (Health professional)

"Holistic care that takes into account a young person's diverse needs and brings together a range of professionals and disciplines in a coordinated way" (Health professional)

"I like the (WHO) definition that more focuses on the user experience. Because ultimately that's the measure of integrated care, regardless of how many different types of care are being provided by numerous workers or organisations, the measure to me of integrated care is that the user experiences it as one seamless process, that's not fragmented and contradicting each other, and limited by each other and all of the things that currently get in the way of integrated care." (Health professional)

Appendix 3: The headspace definition of family

At headspace, *family* is defined uniquely by each young person. Family is considered to be an integral part of a young person's circle of care. Family and other caregivers – whether by birth, choice or circumstance – hold a significant role in supporting a young person by fostering a sense of belonging and connection through their shared experience.

The term family may include parents, caregivers, siblings, partners, Elders, kin, mentors and other community members who are viewed by the young person as people who play a significant emotional, cultural, faith-based or other role in their life. At headspace we acknowledge and respect the diversity of families across Australia. headspace is committed to the reflective practice of cultural humility and the need to meet families where they are at.