

The Ontario Children and Youth Mental Health and Addictions Strategy

Draft Evaluation Framework

Prepared for the Ontario Ministry of Health and Long Term Care

by the Institute for Clinical Evaluative Sciences

April 2, 2012

Executive Summary

- The Ministries of Children and Youth Services, Education, Health and Long-Term Care and Training, Colleges and Universities are collaborating on a Child and Youth Mental Health and Addictions Strategy with the following aims:
 - To provide fast and timely access to high quality services
 - To identify and respond to child and youth mental health needs early and appropriately
 - To identify the needs of vulnerable populations
- The strategy consists of 22 initiatives, one of which is the evaluation of the strategy
- The Institute for Clinical Evaluative Sciences (ICES) has been engaged to evaluate the strategy and its components. This report summarizes progress and provides an outline of the evaluation framework.
- The evaluation framework, scorecard development and data strategy are all critical to the successful evaluation of the Child and Youth Mental Health and Addictions Strategy
- The evaluation framework is grounded in existing conceptual frameworks for child development. The process follows well established guiding principles and uses evidence-based approaches, informed by a grey literature review of existing evaluation frameworks
- Logic models have been used to map the inputs, processes, and expected outcomes of each of the strategy initiatives. These logic models are being integrated to develop three inter-relational logic models of the strategy at the system level
- The overall strategy evaluation depends on the acquisition and secure linkage of appropriate data. ICES has been working with all involved Ministries to understand the data they collect. A key element of the Data Strategy is to identify critical data gaps early to enable timely processes for acquiring data for evaluation purposes. The processes are subjected to a detailed privacy impact assessment and will be reviewed by the Office of the Information and Privacy Commissioner of Ontario
- As part of this evaluation ICES proposes the creation of a Child and Youth Linkable De-identified (CHyLD) data repository that has individual-level, linkable and de-identified data that will enable comprehensive assessment of child development in Ontario. ICES is undertaking an extensive Privacy Impact Assessment to ensure that any development involving data is consistent with the relevant privacy and legal requirements.
- The work being carried out by ICES will create resources and processes that will assess child development in Ontario in the long-term and will enable assessment of a wide range of disorders affecting children and youth.

Evaluation Framework for The Child and Youth Mental Health Strategy

**David Henry
Astrid Guttmann, John Cairney, Paul Kurdyak**

**Jennifer Bennie, Karey Iron, Karen MacCon,
Robert Turner, Kelley Ross, Virginia Waring,
Julie Yang**

Background

The framework is informed by:

- A scientific advisory committee and technical expert panel**

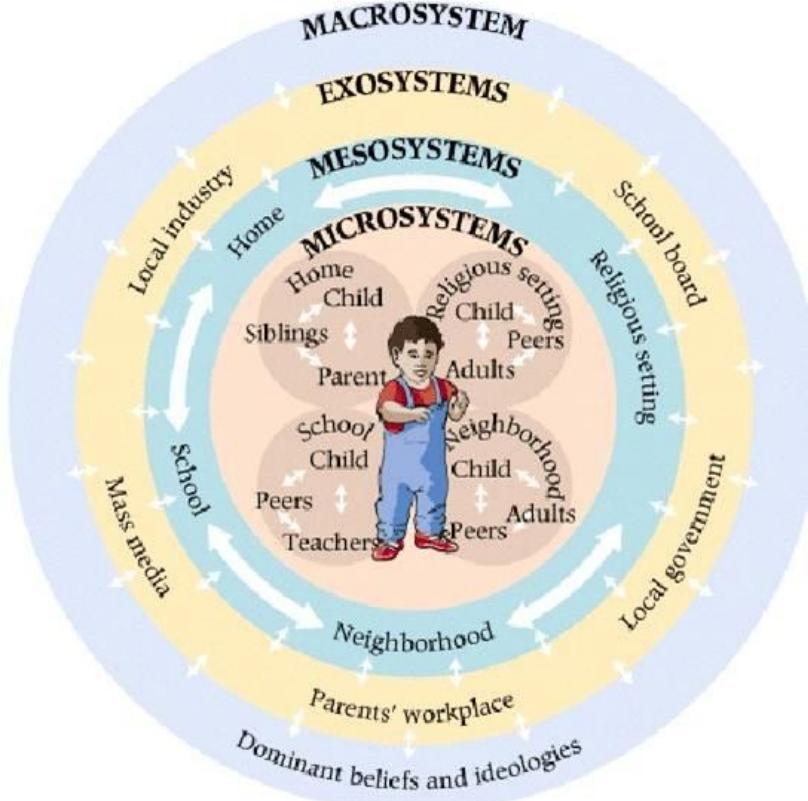
The framework is based on:

- Theories of healthy child development**
- Theories of mental health evaluation frameworks**
- Environmental scan of child/ youth mental health indicators**
- Strategy initiative discoveries**
- Strategy initiative and system level logic models**

The framework creates:

- A data strategy for a population-based baseline scorecard and future monitoring of the impact of the strategy**

Model of Child Development Used



- We selected a theory that highlights both multiple levels of influence (home, school, etc) and the longitudinal and changing nature of healthy development.
- The model for healthy child development is inextricably linked to mental health (broadly defined).

Bronfenbrenner's bio-ecological systems model.

Evaluation Framework Components

- Evaluation frameworks* should include:
 - ▶ Program logic models
 - ▶ Expert input (researchers, clinicians and policy/program leaders)
 - ▶ Evaluation questions arranged in tables
 - outcomes
 - indicators
 - evaluation methods
 - data sources
- clear pictures of the linkage between evaluation questions and indicators

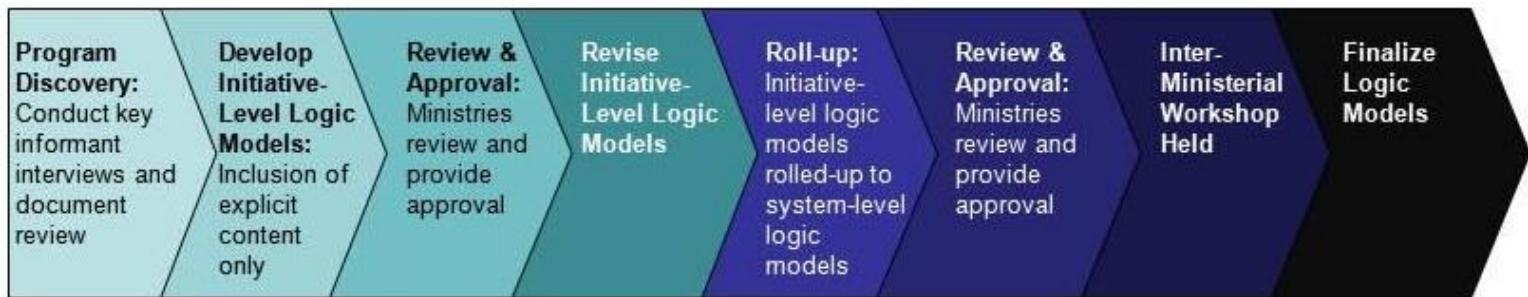
*Completed:

- ✓ Review of theory and environmental scan of mental health evaluation frameworks

Program Discovery and Logic Models

Logic Models have four components:

- ▶ Inputs – resources directed toward the individual initiative
- ▶ Activities – intentional actions and interventions
- ▶ Outputs – tangible products of the initiative
- ▶ Outcomes – changes in knowledge, attitudes, behaviour, clinical outcomes (short-, intermediate- and long-term)
- Roll-up of all logic models → system-level change from the Strategy



Completed:

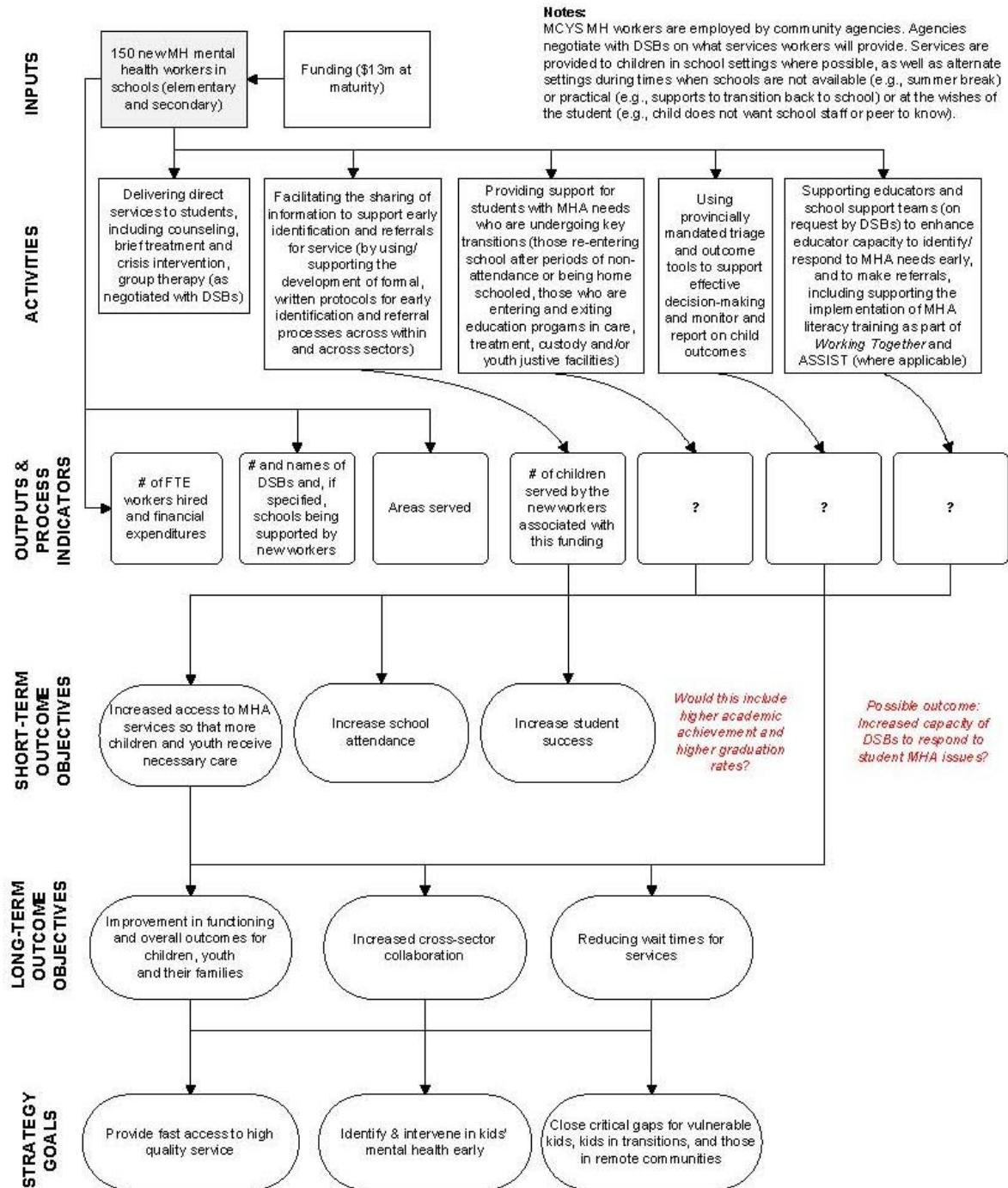
- ✓ Program discovery with all Ministries
- ✓ 17 draft initiative-level logic models

Key Examples of Logic Models

**Focus on School-Based
Interventions**

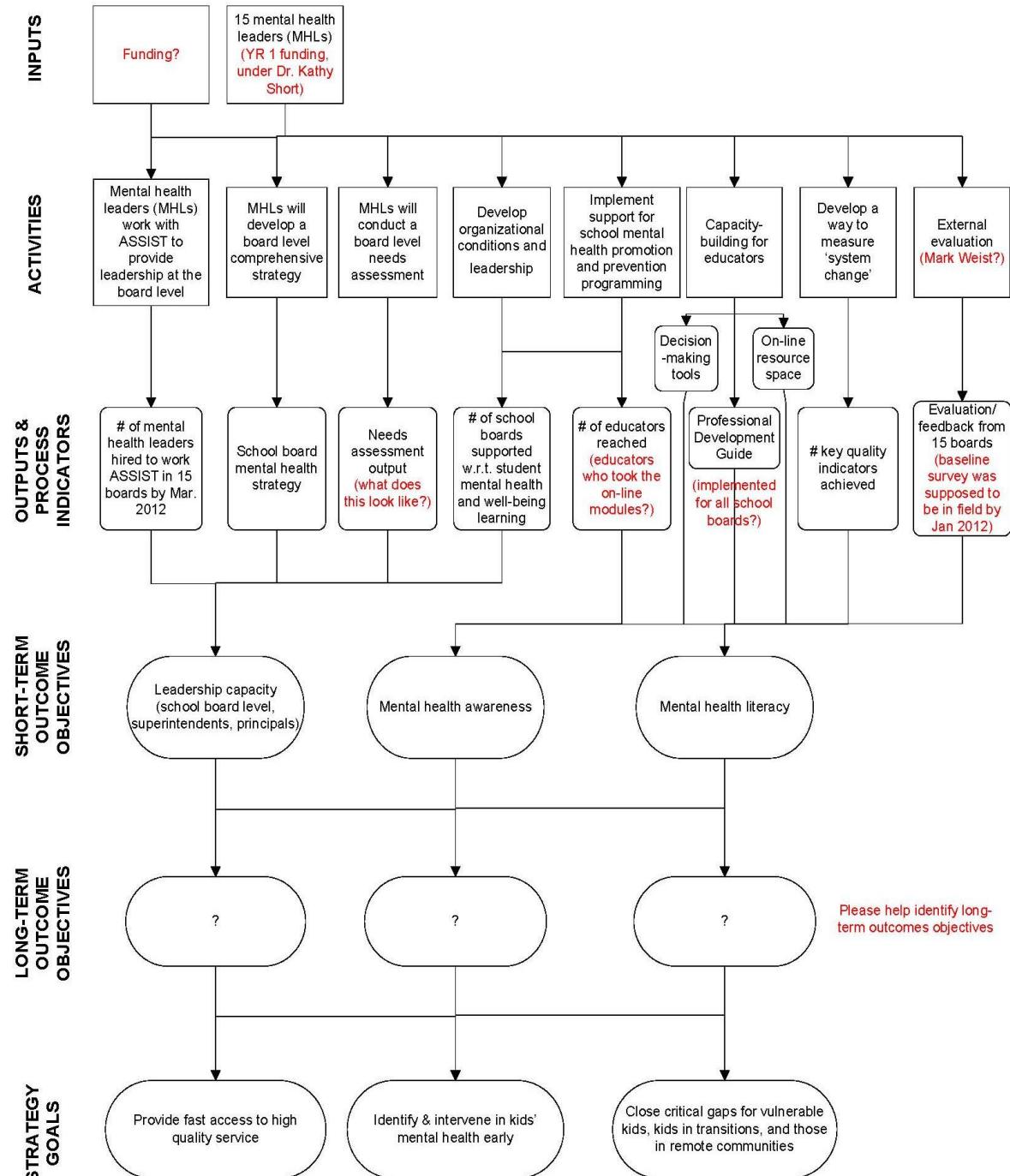
MCYS:

Provide designated mental health workers in schools



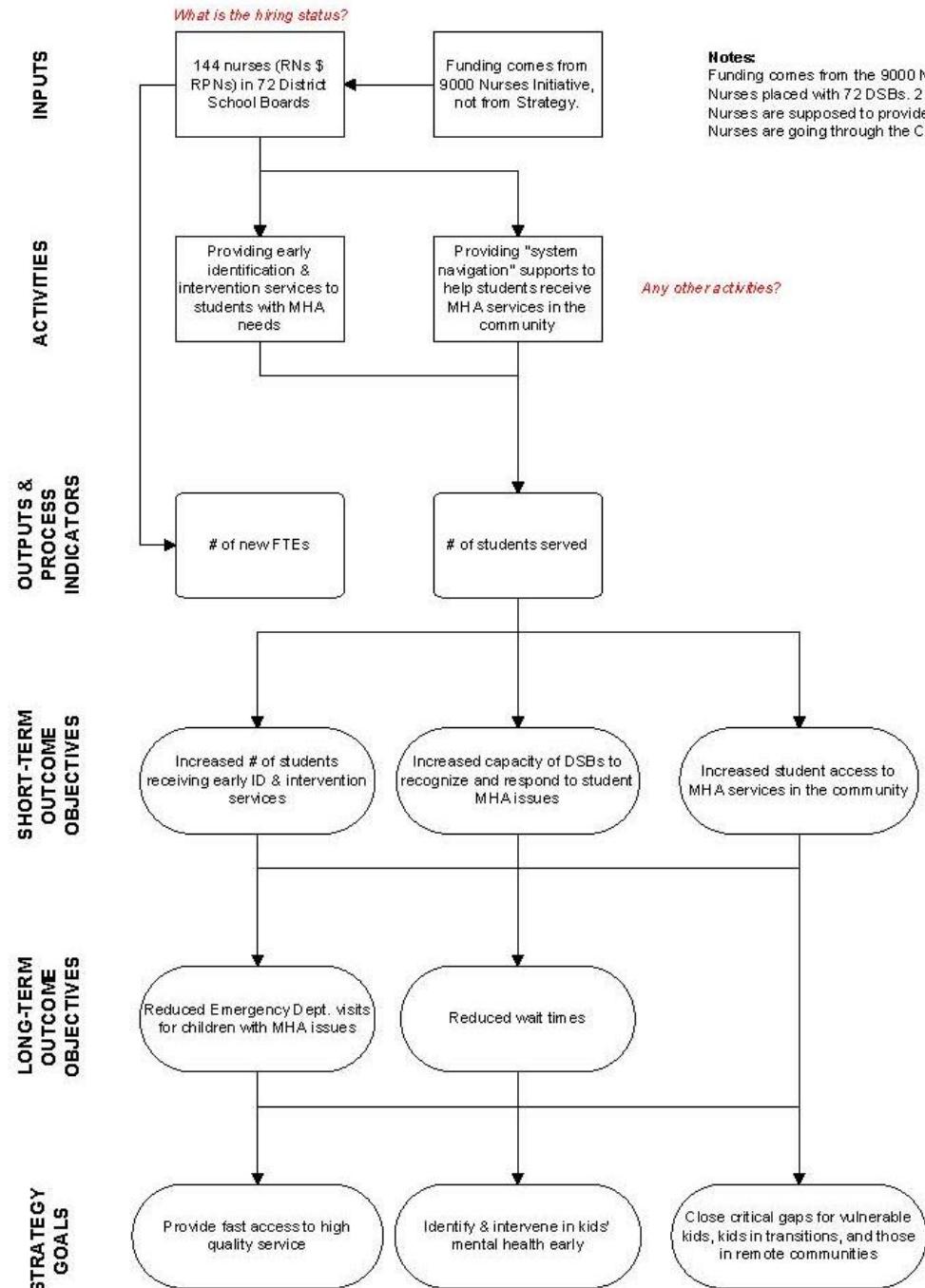
EDU:

Mental health ASSIST program and Mental Health Leaders



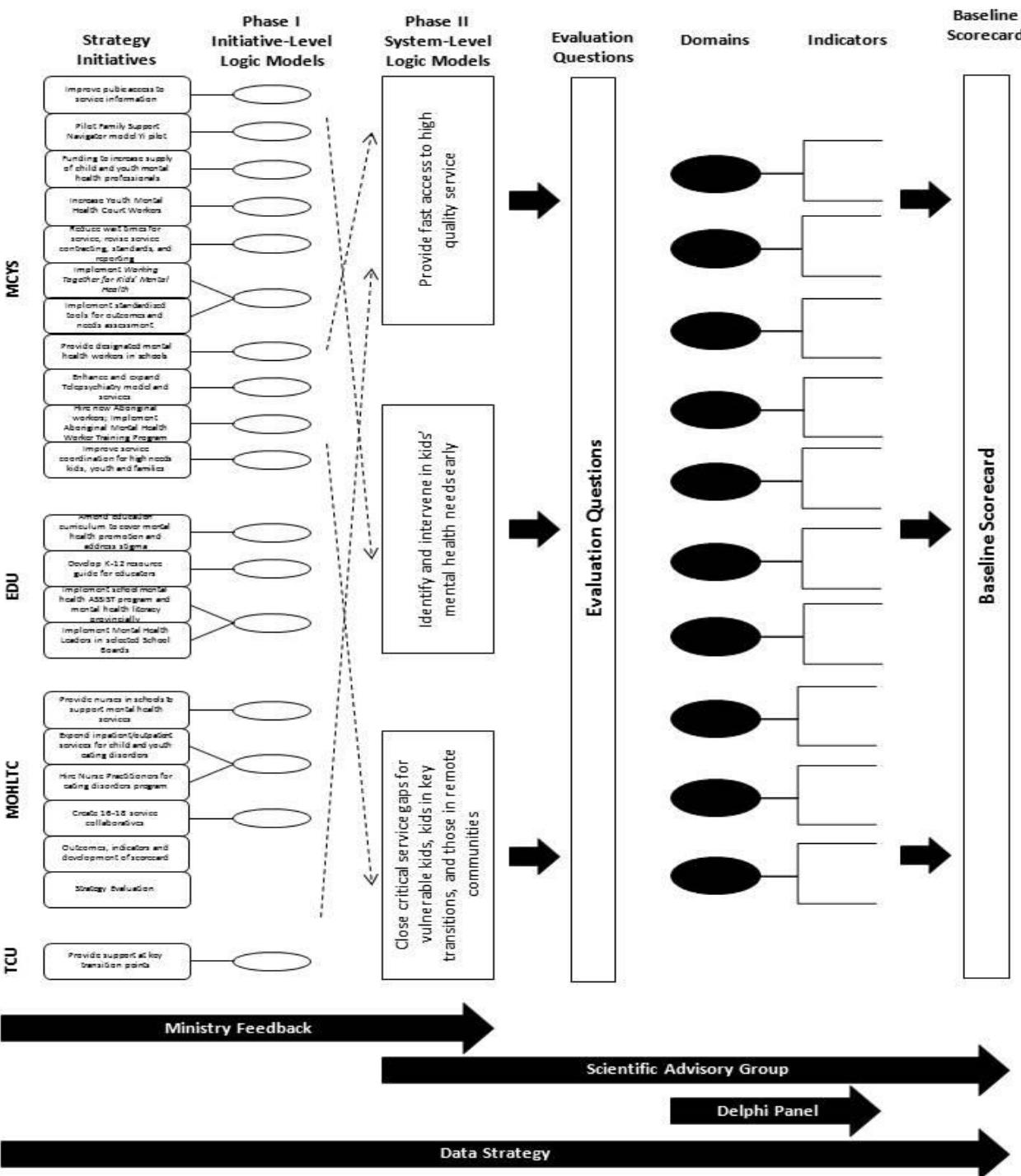
MOHLTC:

Provide nurses in schools to support mental health services (MOHLTC)



Integration:

Draft Evaluation Framework



Scorecard

- Indicator quadrants and domains derived from strategy goals and evaluation framework
 - ▶ Service delivery (access, utilization)
 - ▶ Outcomes (effectiveness)
 - ▶ System integration (coordination)
 - ▶ Resources (efficiency)
- Indicators
 - ▶ evidence-informed
 - ▶ outputs of individual initiatives as well as cumulative → impact of multiple initiatives
 - ▶ reported at multiple units of analysis (individuals, families, agencies, school boards, communities, LHINs, province)
 - ▶ staged approach to monitoring over time (short-, medium-, long-term goals and impact)

Scorecard



Completed:

- ✓ Environmental scan of child and youth mental health indicators (700 indicators – see examples in Appendix)

Baseline Scorecard

- An empirical snapshot describing
 - ▶ Contexts of populations at risk (e.g. children in care)
 - ▶ Current processes of mental health care delivery (e.g. assessment wait times)
 - ▶ Children and youth mental health outcomes (e.g. rates of self-harm, youth justice involvement, school suspensions)
 - ▶ Early progress of strategy initiatives (e.g. # of youth justice mental health workers deployed, K-12 resource guide for educators developed, decrease in eating disorder patients requiring out-of-province services)
- Contains placeholders for indicators of progress of the individual initiatives and cumulative strategy outcomes
 - ▶ Linked cross-sectoral data will enable tracking of outcomes of children and youth served by the initiatives (e.g. ED visits for self-harm for those waiting for MH services, improvements in functioning for treatment centre clients, school completion for youth justice involved clients)

→ Sets the stage for on-going monitoring of strategy progress

Data Strategy

- Collaboration with inter-ministerial partners
- Data for at-risk populations, service delivery (health, mental health, education, youth justice) and outcomes
- Priorities for data are sources that are
 - ▶ individual-level
 - ▶ population-based
 - ▶ linkable
 - ▶ most relevant to strategy evaluation

Completed:

- ✓ Environmental scan of potential data sources in Ontario focused on child and youth
- ✓ Identification of priority data sources for the evaluation
- ✓ Preliminary interviews with data subject matter experts related to priority data sources

Data Strategy - Privacy

- Evaluation of privacy legislations governing the data
- Cross-Ministry Privacy Impact Assessment identifying privacy risks and mitigation strategies, recommendations for data sharing
- Data de-identification and matching strategies
- De-identified data sharing strategies

Completed:

- ✓ Meetings with privacy and legal specialists at MCYS, EDU and partner organizations
- ✓ Scoping of methods for data sharing
- ✓ Notification of IPC

Completed Evaluation Framework Activities

| | |
|--|---|
| Review of theory and environmental scan of mental health evaluation frameworks | ✓ |
| Program discovery with all Ministries | ✓ |
| 17 draft initiative-level logic models | ✓ |
| Environmental scan of child and youth mental health indicators (700 indicators – see examples in Appendix) | ✓ |
| Environmental scan of potential data sources in Ontario focused on child and youth | ✓ |
| Identification of priority data sources for the evaluation | ✓ |
| Preliminary interviews with data subject matter experts related to priority data sources | ✓ |
| Meetings with privacy and legal specialists at MCYS, EDU and partner organizations | ✓ |
| Scoping of methods for data sharing | ✓ |
| Notification of IPC | ✓ |

What's Next

- **Finalize system-level logic models**
- **Finalize indicators for scorecard through the scientific advisory committee and expert Delphi panel**
- **Populate baseline scorecard**
- **Meet with the Office of the Information and Privacy Commissioner June 2012**
- **Complete the cross-Ministry Privacy Impact Assessment**
- **Draft data sharing and governance agreements based on Privacy Impact Assessment**

Summary

- **Framework reflects**
 - ▶ Relevant theoretical models
 - ▶ Expert advice and international environmental scans
 - ▶ Careful assessment of initiative logic models
 - ▶ Strategy initiatives in various stages of implementation
 - ▶ Levels of impact of initiatives (individual, family, school etc.)
 - ▶ Roll up of individual initiative goals → strategy evaluation
- **Data strategy key to support robust, ongoing monitoring of current investments**
- **On target progress**

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Section I – Setting the Context

Section Summary

- This evaluation framework provides a technical ‘roadmap’ to the activities and inputs required to conduct a systematic assessment of the strategy’s outputs and impact.
 - The evaluation framework is developed based on the three provincial goals set for the child and youth mental health strategy (see above) and will address the following key outcomes:
 1. to provide an understanding of how the strategy’s initiatives have evolved successfully within the context of inter-ministerial mental health service delivery to children and youth
 2. to understand the impact of these initiatives on child and youth mental health care service delivery at a system level
 - Selected influential theories from the child development literature are used to guide framework development to ensure integration of contextual and individual factors into the evaluation framework.
-

1.1 Introduction

The Ontario children and youth mental health strategy

In June 2011, the Ontario government released “Open Minds, Healthy Minds - Ontario’s Comprehensive Mental Health and Addictions Strategy”,¹ a cross-government collaborative that is committed to addressing the burden of mental health issues in Ontario over the next ten years. Increasingly and appropriately, responsibility for the recognition and management of mental health and addictions has moved from institutions into the community, with a shift away from a medical model of care to community-based programs that include a range of health professionals, government and non-government organisations, voluntary community groups, schools and other education and training organisations.

This shift away from institutional care has been accompanied by an increasing recognition of the importance of prevention and early detection, which is most effectively done in the community. In many instances, this means detection in children and youth when the first signs of mental health issues emerge.

In response to the broad government strategy, the Ministries of Children and Youth Services, Education, Health and Long-Term Care, and Training, Colleges and Universities collaborated to prioritize children and youth as the first phase of implementation of the broad strategy (Exhibit 1). The vision of the Child and Youth Mental Health Strategy is:

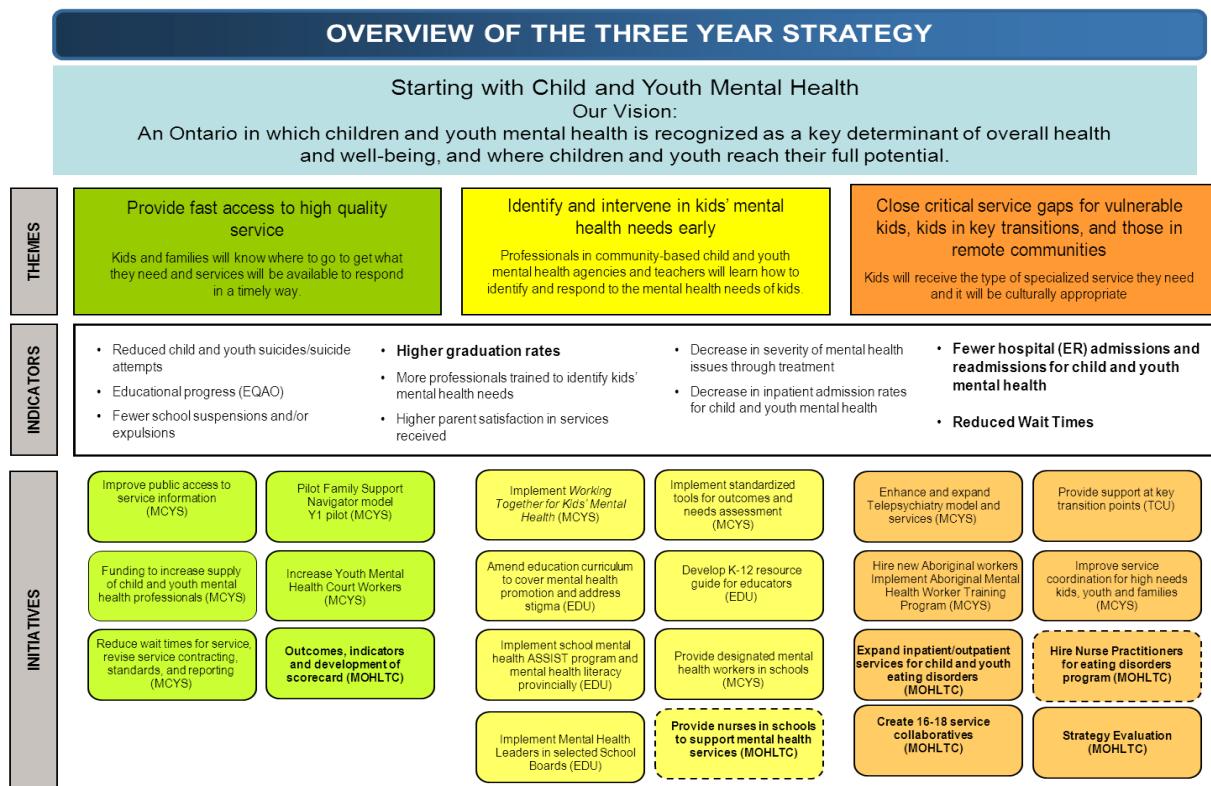
*An Ontario in which children and youth mental health
is recognized as a key determinant of overall health and well-being,
and where children and youth reach their full potential.*

Three broad thematic areas have been identified, which overarch the critical actions necessary to accomplish this vision:

- a. provide **fast and timely access** to high quality service so that kids and families know what services to get and where to get those services, based on their needs;
- b. training of community-based professionals (teachers, nurses and personnel at community-based mental health agencies) to **identify and respond to child and youth mental health needs early and appropriately**; and
- c. **identification of the needs of vulnerable populations**, kids in transition and kids in remote areas and provision that appropriate (culturally targeted and specialized) services are readily available.

Targeted initiatives have been proposed that align with these three themes, each with the assigned responsibility/ownership of one of the Ministries. Examples of indicators for the success of this initiative have also been identified in the three-year strategy overview focusing on child/youth outcomes (e.g. decreased number of suicides/suicide attempts, higher graduation rate), provision of professional services (e.g. increased number of trained professionals for early identification and treatment) and system/access issues (e.g. shorter wait times for services). The ultimate goal will be to evaluate the movement of these important child/youth outcomes overall in Ontario, but also specifically in those who receive the services funded by the strategy.

Exhibit 1 Overview of the Three-Year Strategy.



The purpose of this evaluation framework is to provide a technical ‘road-map’ to the activities and inputs required to conduct a systematic assessment of the strategy’s outputs and impact. Evaluation is “the systematic assessment of the operation and/or the outcomes of a program or a policy, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program or policy” (p. 4).² Findings derived from a well-planned and executed evaluation contribute to transparency and accountability to clients, stakeholders and funders. The following sections will describe:

- the foundational work used to generate the evaluation framework;
- the processes and components included in the evaluation framework;
- the framework’s data strategy; and
- recommended next steps to the CYMH strategy evaluation.

There is no widely agreed-upon approach to the evaluation and monitoring of a comprehensive mental health and addictions strategy. **As such, a significant part of the work here is developmental and it is important to state that, for various reasons, many initiatives involved in the strategy have not yet been fully implemented.** Therefore, the framework for the evaluation is a ‘living’ document that lends itself to adjustments and alterations if needed.

Overarching context and assumptions

The evaluation framework is based on the three broad, thematic goals of the child and youth mental health strategy. The framework will focus on system-level questions, which will address the following key outcomes:

1. to provide an understanding of how the strategy's initiatives have evolved successfully within the context of inter-ministerial mental health and addictions service delivery to children and youth
2. to understand the impact of these initiatives on child and youth mental health and addictions service delivery at a system level.

This evaluation framework is dependent on the availability of data from a variety of sources that collect child and youth mental health information. Sources include, but are not limited to: those at the community service organization level, LHIN, school board etc. The preferred approach to measuring the effectiveness of the provincial strategy is to use individually-linked data from these sources, in other words data that are able to define those children/youth who receive services and link these to their outcomes across sectors (health, education, mental health assessment, justice). Only this level of data linkage will allow a comprehensive and robust understanding of the outputs and impacts associated with the child and youth mental health strategy. This can only be achieved by a comprehensive data strategy, which is described later.

Guiding principles

To support this evaluation framework, the following principles have been identified:

- The evaluation is evidence based and accountable;
- The evaluation is transparent;
- A coordinated and collaborative approach is used;
- Evaluation is related to the implementation of each initiative, exhibiting flexibility and responsiveness to changing circumstances and priorities;
- Evaluation is an on-going process that includes multiple phases;
- The system-level evaluation incorporates the evaluation plans of each initiative within the strategy;
- Evaluation takes into account other relevant contexts (for example, children and youth mental health initiatives external to the strategy, evaluations conducted in other jurisdictions);
- Data acquisition will have a direct effect on the outputs that can be evaluated.

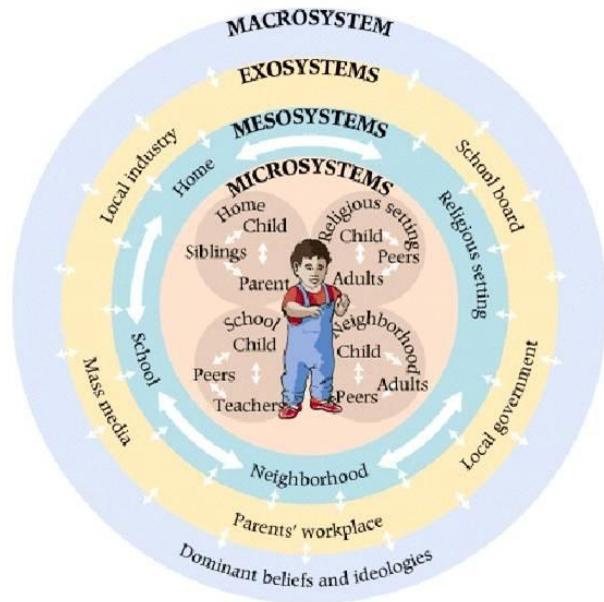
1.2 Theoretical Framework

While the evaluation framework is based principally on the overarching themes of the initiative, there is great value in ensuring that the overall evaluation process is grounded within a broader understanding of the forces that influence child development and child health including mental health. Accordingly, we conducted a literature review of existing theories to select the ones most appropriate to the goals of project. The choice of theory that guides this evaluation framework reflects what we understand to be both the nature of the interventions and the context in which the evaluation takes place. Fundamentally, what we are evaluating are a series of initiatives that target children and youth in multiple contexts (e.g. school, community) and that have the potential to affect children at different points in their development from early childhood into early adulthood. The initiatives also range in intensity and target different aspects of mental health care. Therefore, we need to consider models that conceptualize development and child health at both the individual child level and the system level (e.g. family, school and community). Two models satisfy these very broad criteria – Bronfenbrenner's ecological theory of child development³, and the Institute of Medicine's model of child health⁴.

Ecological systems theory

Bronfenbrenner's ecological systems theory³, what may now be called a 'bio-ecological systems theory', is one of the most popular theoretical models of child development. It provides a general framework with broad 'orientating' categories that provide flexibility for shaping the components of the model to the unique needs of the researcher. The model is represented by a series of concentric circles, the centre of which is the child (Exhibit 2). Each circle or ring represents a different developmental context, with circles closest to the child exerting the strongest influence and which can exert both a direct and indirect effect on the child. Although these rings are depicted as separate forces, Bronfenbrenner views development as the product of a set of complex interactions between the individual child (e.g. biological maturation) and his/her environment. Different levels of context also interact as part of the ecology in which the child develops socially and psychologically. This complex of environmental (ecological) and intra-child processes define individual aging trajectories.

Exhibit 2 Bronfenbrenner's bio-ecological systems theory



Bronfenbrenner identifies five ecological influences:

1. microsystems focus on the immediate contexts in which the child lives (e.g. family, peers, neighborhood, and school);
2. mesosystems are the interactive effects of the micro contexts to influence health and development (e.g. families where parents are supportive and nurturing may mitigate some of the negative exposures associated with living in a socioeconomically disadvantaged neighborhood).
3. exosystems are the indirect influences that are slightly more distal to the micro and meso-levels (e.g. the home environment is influenced by parental work)
4. the macrosystem is the cultural and/or societal influences that underly the broader context in which the child lives. (e.g. poverty as a structural condition created by the economic organization of a society exerts a powerful influence on the well-being of children).
5. the chronosystem is the complex interplay of time at the individual level of children (life course transitions, maturational effects) and time in a historical sense. (e.g. Elder's⁵ work on the children of the Great Depression showed that, depending on the developmental stage of the child when the recession occurred (e.g. early childhood or adolescence) and the immediate impact of the event to the family (e.g. whether the family was directly or indirectly affected), developmental outcomes were shaped years into the future).

The convergence of personal, familial, social and historical forces, therefore, shapes individual developmental trajectories. This model draws our attention to the complexity of interacting contexts in shaping development, and of the important role that social and even historical, conditions can play in shaping child well-being.

Model of child health

This model proposed by the Institute of Medicine (IOM) builds on the ecological system model with an explicit focus on “health”. In the document introducing this model⁴, the IOM defines health as including:

1. the presence of conditions (medical);
2. social and physical functioning; and
3. the developmental potential of the child.

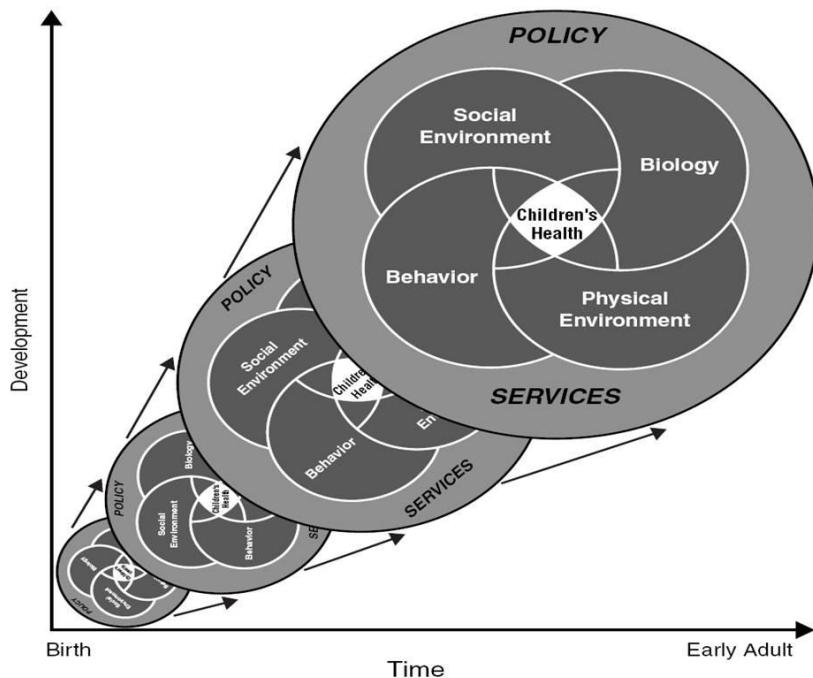
In this sense, health refers to broad states, including pathological processes and typical development that are inherently intertwined.

The model identifies a number of factors that have broad influences on child health:

1. the physical environment (e.g., pollution, crowding);
2. social factors (e.g., SES, income inequality at the community level);
3. biology (inherited and non-inherited); and
4. behaviour (psychological factors).

The model also includes a temporal dimension that explains how the relative effect or contribution of any one factor will change as the child develops overtime (Exhibit 3). For example, biological influences may be extremely important later in life (genetic risk of heart disease) whereas the physical environment may be more important in the first few years of life. These interactions between domains are constantly changing, influencing developmental trajectories.

Exhibit 3. Institute of Medicine's model of child development



Relevance to mental health

These models are useful for the development of the evaluation because:

- they emphasize core environmental and individual level influences on child health.
- they ground these influences in a developmental context, suggesting that the relative influence of any particular effect may vary over time.
- they consider time as a factor, in terms of maturation (development of the child over time) and in the historical sense.

For the purposes of the evaluation, these models help us understand and predict where policies/interventions might influence these levels or processes, which in turn affect outcomes at the child level. Specifically, they remind us to attend to:

1. the level the intervention is targeted;
2. how will non-targeted levels potentially impact the intervention (and the child);
3. what can we measure at each level to assess impact (also, what can't we measure); and

4. “timing” (when does an intervention occur; at what developmental stage and how will that influence the trajectory of the child, in the short term and long term?).

Finally, the recognition of the importance of contextual effects such as family, home and community as outlined in the models are not only critical to development in general, but are also widely regarded as important determinants of mental health in children. For example, familial socioeconomic status,^{6,7,8,9} family environment (e.g., familial or parent conflict, harsh or punitive parenting),^{10,11,12,13} housing^{14,15,16} and neighborhood characteristics¹⁷ are all recognized as important contributors to child mental health.

Section II – Methodological Approach to Evaluating the Strategy

Section Summary

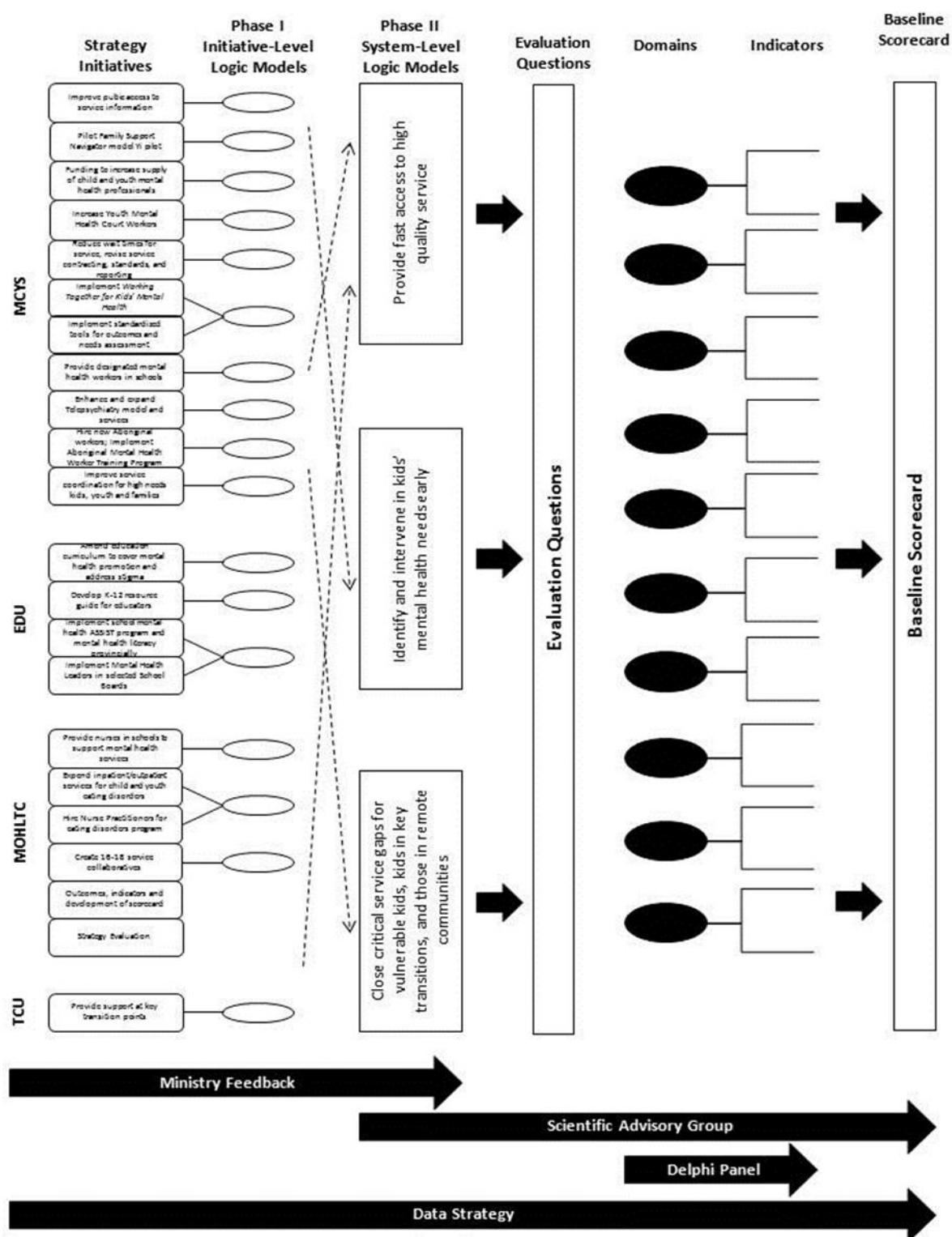
Exhibit 4 presents the evaluation framework schema for the Ontario child and youth mental health and addiction strategy.

- An environmental scan of evaluation frameworks for mental health initiatives was conducted. Theory and practice indicate that evaluation frameworks should include:
 - Logic models
 - Expert input from researchers, clinicians and policy/program experts
 - Evaluation questions arranged in tables indicating outcomes, indicators, evaluation methods and data sources to provide clear pictures of the linkage between evaluation questions and indicators.
- Logic models present in a visual way, the connection between intended activities of an initiative and expected outcomes, and can help frame the evaluation by making explicit the objectives of initiative activities.
- 17 initiative-level logic models were completed using four sources of information, including key informant interviews with policy and program staff.
- 3 system-level inter-relational logic models are designed to capture the overall vision of the strategy, taking into account the various approaches adopted by individual initiatives to achieve particular outcome objectives and derive explicit connections and interactions among the strategy initiatives by mapping out activities that cross-cut various Ministry accountabilities.
- Evaluation questions, informed by the logic models and developed by ICES with input from subject matter experts, assess the Child and Youth Mental Health Strategy at the system level. These evaluation questions inform indicator development.
- The scorecard is divided into four quadrants and is populated with domains and indicators derived from the strategy goals and evaluation framework:
 - service delivery (e.g. access, utilization)
 - outcomes (e.g. effectiveness)
 - system integration (e.g. coordination)
 - resources (e.g. efficiency)
- Indicators for the scorecard are developed based on a set of guiding principles:

-
- 1. are evidence-informed
 - 2. reflect outputs of individual initiatives as well as cumulative impact of multiple initiatives
 - 3. are reported at multiple units of analysis (individuals, families, agencies, school boards, communities, LHINs, province)
 - 4. include a staged approach to monitoring over time (short-, medium-, long-term goals and impact)
 - The **baseline scorecard**, populated with indicators finalized through the expert Delphi panel, is an empirical ‘snapshot’ that describes
 - 1. the contexts of the population at risk (e.g. children/youth in care);
 - 2. current processes of mental health care delivery to children and youth in Ontario (e.g. assessment wait times);
 - 3. children and youth mental health outcomes (e.g. rates of self-harm, youth justice involvement, school suspensions); and
 - 4. early progress of strategy initiatives (e.g. # of youth mental health court workers deployed, K-12 resource guide for educators developed, decrease in eating disorder patients requiring out-of-province services).
 - But also contains placeholders for indicators of progress of the individual initiatives and cumulative strategy outcomes
 - Linked cross-sectoral data will enable tracking of outcomes of children and youth served by the initiatives (eg. ED visits for self-harm for those waiting for MH services, improvements in functioning for treatment centre clients, school completion for youth justice involved clients)

→ Sets the stage for on-going monitoring of strategy progress

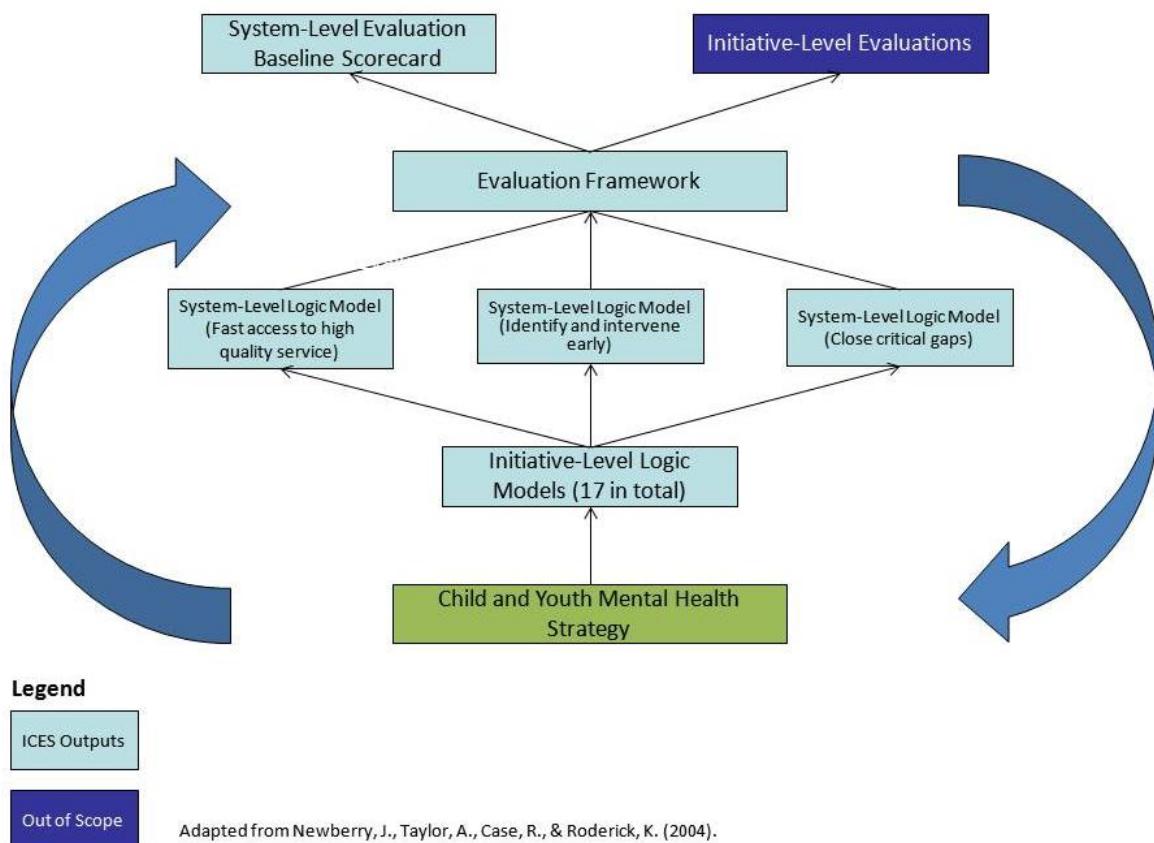
Exhibit 4. Evaluation Framework



2.1 Review of the evaluation approach

This evaluation framework provides a technical ‘roadmap’ to the activities and inputs required to conduct a systematic assessment of the strategy’s outputs and impact (Exhibit 5).

Exhibit 5. Roadmap to ICES Evaluation Framework and Scorecard Development



The World Health Organization recommends that the first step in setting up a framework for evaluating mental health should be “clarifying [its] purpose and scope.”¹⁸ The mental health evaluation frameworks we surveyed varied widely in scope, focusing on: smaller scale, city¹⁹ or county-based^{20,21} initiatives and programs for specific populations (e.g., veterans and their families,¹⁹ or seriously mentally ill (SMI) patients²²); aggregated community-based^{22,23} or provincial^{24,25} programs; and mental health policies and plans for particular national populations²⁶ or entire nations.^{27,28,29,30,31} Frameworks also varied in their purpose: some were designed to gather easily accessible benchmark measures of mental health care for international comparison,³² others to prioritize client participation in the evaluative process^{20,21,26} or gauge extent of program adoption and reform of the mental health service sector,^{28,30,31} and still others to assess gaps in mental health prevention and promotion.²³

Despite these variations, mental health evaluation frameworks shared certain features, most importantly, logic models and evaluation tables. Typically, a logic model was used to help guide construction of the

evaluation. Logic models – of the mental health context, policy, plan, or initiative – detailed planned activities, their intended outcomes, and the steps and relationships between them. The most thorough frameworks employed logic models of both the macro-level, overall mental health context and policy, and micro-level, specific, planned activities and results.^{19,23,27,31} Logic models are used for good reason. To understand how an intervention leads to particular results, we must understand (and model) the entire sequence from context through plan and implementation to outcomes. While all of the evaluative approaches that we surveyed demonstrated or implied some relationship between intervention and outcome, logic models make this relationship explicit, guiding us in the selection of outcome variables.

All evaluative frameworks relied on expert input from researchers, clinicians, mental health sector officials and high level administrators, with expertise in public health, policy, epidemiology, and quality of care. Informed by the objectives identified in these logic models, and input from experts, most of these evaluation frameworks were displayed as tables that indicated the strategy/activity to be evaluated, outcomes/indicators, and evaluation sources and methods. Some frameworks were extensive, including analysis of the mental health context^{18,20,22,31} (and in some cases establishing baselines for comparison^{18,19,20,22,30,31}), policy and plan development,^{18,23,30,31} funding, participant engagement, and time-specific outcomes.^{21,22,27,30,31} Like the logic models they were based on, these tables provided clear pictures of evaluative processes, which could then be evaluated themselves.

The literature is consistent regarding the critical activities necessary to conduct a valid and reliable evaluation. Namely, the development of logic models, evaluation questions, tables connecting questions to indicators and as well as direction and guidance from external experts

2.2 Logic models

Logic modeling for evaluation purposes

A strong rationale for undergoing a process of program discovery and logic modeling for any evaluation is provided by the UK Government Social Research Unit³³: “failure to be clear about the causal sequence by which a policy is expected to work can result in well intentioned policies being misplaced, and outcomes that are contrary to those that were anticipated” (p. 1:4). Logic models are often called ‘roadmaps’ because they identify how and what results are expected from program activities. Logic models can be presented in several ways but are typically made up of four components: inputs, activities, outputs and outcomes.

- Inputs: the resources that are directed toward the initiative and can include human, organizational and community resources (e.g. funding, staff and space).
- Activities: what is being done with the resources and refer to the intentional part of the initiative (e.g. the intervention).

- Outputs: the products of the activities, often described in a tangible and quantifiable manner (e.g. number of individuals served).
- Outcomes: changes in knowledge, attitudes, behaviour, clinical outcomes and the mental health system that are expected to result from the activities (e.g. reduction in suicide-related behaviour). Outcomes are often subdivided into the short term (one to three years), intermediate term (four to six years) or long term (seven to ten years). Outcomes can be further connected to the vision or goals of the initiative to demonstrate what global impacts the initiative is expected to make (e.g. provide fast access to high quality service).

Logic models are a useful starting point for several reasons:

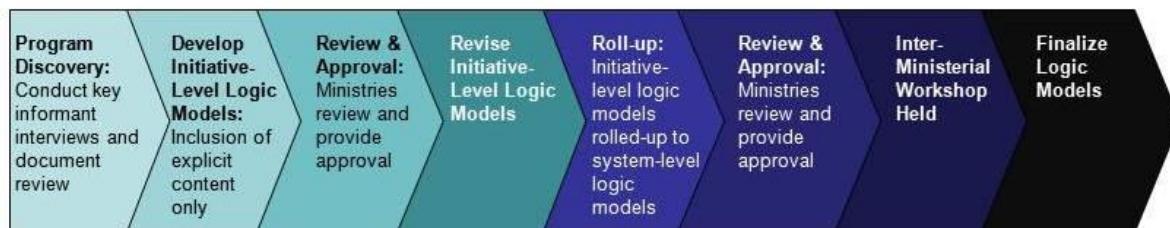
- Logic models can help frame the evaluation by making explicit the objectives of program activities;
- Logic models can be part of the “evaluability”³⁴ assessment for initiatives. That is, they can help determine whether a program or initiative is ready to be evaluated;
- Logic models can identify indicators and highlight data needs;
- With a group of logic models, different levels and different perspectives of the strategy can be displayed;
- When explaining evaluation findings, logic models provide a framework for interpreting information; and
- Engaging stakeholders in the development of logic models help create a shared understanding of the initiatives and ensures that stakeholders are involved in the evaluation process.

While logic models are a helpful, and indeed an essential tool, there are limitations. One limitation concerns the static nature of logic models. The logic models included in this evaluation framework represent ICES’ understanding of the 22 initiatives at the time of the logic models’ creation. With further program discovery, consultation, and development and implementation of the initiatives, the current logic models may change over time. The second limitation concerns the linear fashion in which information is presented in a logic model. Logic models are limited in their ability to demonstrate feedback processes and context. Furthermore, their diagrammatic presentation of the models should not be interpreted to indicate causal relationships in all cases.

The complexity of creating an evaluation framework for a cross-government collaborative strategy that contains multiple initiatives, of which some have multiple sites and services, interventions and focus, is a significant undertaking – one that requires a phased approach.

The Ontario Child and Youth Mental Health strategy funding is directed at 22 separate initiatives that share the same vision and strategic goals. Development of the initiative-level logic models was Phase I of the evaluation framework and is a critical first step because these models illustrate how each of the activities and processes involved in each initiative is related to the intended outputs and objective(s) (Exhibit 4).

Exhibit 6. Process for logic model development.



Program discovery

To understand the activities and objectives of the 22 initiatives within the Child and Youth Mental Health Strategy, a process of program discovery and logic modeling (Exhibit 6) was undertaken. Logic models were then used to transform the information gathered into diagrammatic form that demonstrates the sequence of activities and expected outcomes. Thus, in addition to being a visual tool, logic models provide a useful analysis of the outcomes of a policy, program or initiative.

Four sources of information were consulted during the program discovery process:

- the original policy documents for the CYMH Strategy, including “Open Minds, Healthy Minds” and the map of the CYMH Strategy;
- information provided by key informants (see Appendix C for a list of program discovery meetings held to date);
- internal government documents including Service Description Schedules; and documents for internal reporting purposes that were provided by policy and program staff; and
- documents publicly available from the Internet.

The program discovery process is iterative and involves frequent and ongoing consultation with stakeholders to collect and review the information so that the stakeholders and ICES have a shared understanding of the strategy initiatives.

Development of initiative-level logic models – Phase I

In total, 17 initiative-level logic models were created (see Appendix E) – in some cases, initiatives were combined into one logic model when it was demonstrated that they were intrinsically linked. In their first

iterations, only information that was obtained in preliminary Strategy discussions and/or in initial strategy documents was included. At this point, further information, clarification and feedback on the logic models was obtained through key informant interviews with the Ministry staff responsible for the policy and program development. The logic models were reviewed for their content (correctness), comprehensiveness, presentation and logic. This review process allowed Ministry staff to identify the objectives and contextual factors that influenced the development and implementation of the initiative.

Development of system-level logic models – Phase II

The 22 initiatives identified in the Strategy share the same vision and strategic goals as outlined in the strategy, but the individual processes of achieving these goals may differ between initiatives with respect to program activities, program sites, target populations, as well as short and long-term outcomes. In addition, many of the Ministries have historically conducted their activities and programs in isolation, without the knowledge of the programs and activities conducted by the other Ministries. However, as the initiative-level logic models demonstrate, many of the initiatives have the same short and long-term outcomes and/or contribute to outcomes that must be measured by other Ministries (e.g. service transitions, wait-times). As reflected in these models, the development of a system-level evaluation framework is complex (Exhibit 4).

The purpose of Phase II is to develop three system-level logic models to address the three overarching goals of access, early identification and intervention, and closing service gaps for vulnerable populations. This phase is designed to capture the overall vision of the strategy, while taking into account the various approaches adopted by individual initiatives to achieve particular outcome objectives. Furthermore, it is designed to derive explicit connections and interactions among the strategy initiatives by mapping out activities whose outcomes must be evaluated by other Ministries and cross-cut Ministry accountabilities.

The first step in Phase II is to map all initiatives to their respective activities and outcomes. This step will be informed by the initiative-level logic models developed in Phase I. Step two will be to use this map to associate the initiative-level activities and outcomes to the three overarching strategic goals (access, early identification and intervention, close critical service gaps for vulnerable populations). This will allow the assessment all of the activities relevant to each goal across multiple initiatives and with a system-level lens. It will also inform the final step which is to develop three separate system-level logic models (one for each strategic goal). This will enable us to see the common activities, objectives, designs, and measurement approaches across diverse programs that share the same ultimate goals of the strategy (Exhibit 4). The system-level logic models will be presented to Ministry staff at an upcoming symposium (scheduled for September 2012).

Upon completion, review, and approval of the system-level logic models, ICES will be able to apply the measurement and empirical layer to the evaluation framework. The development of system-level evaluation questions is a critical step to this process. These questions will direct and inform key

components to be included in the baseline scorecard as well as set the directives for future evaluation projects.

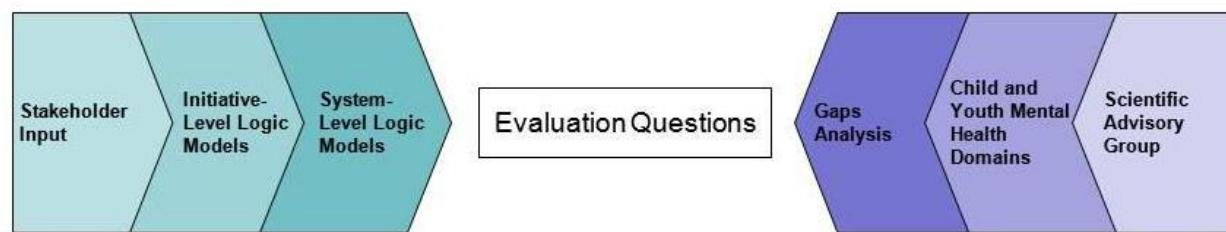
2.3 Evaluation Questions

Development of evaluation questions

Comprehensive system-level evaluation questions will be informed by the Strategy's system-level logic models and developed by ICES' mental health team in collaboration with external experts (Exhibit 4). ICES will convene a Scientific Advisory Committee of experts in the field of child and youth mental health and development (see Appendix A for Advisory Group members). It is expected that this group will also identify (1) knowledge gaps in measurement and (2) key domains pertinent to the field of children and youth mental health. More specifically guidance will be sought on the linkages of system-wide domains of a) process (i.e., prevention/early detection/early intervention, access, assessment), b) outcomes (i.e., children and youth mental health conditions), and c) contextual factors (i.e., family, school, community) to inform sophisticated modeling of relevant child and youth outcomes over time. This Scientific Advisory Committee will be shared with the Centre for Addiction and Mental Health (Service Collaboratives initiative).

Exhibit 7 depicts the activities that will be used to inform the development of the evaluation questions. These questions will be developed with the intention of measuring system level outcomes and will be reflected in the baseline scorecard. Some questions may require more in-depth multivariable analysis accounting for trends over the time of the strategy. These cannot be included in a baseline scorecard and consequently will be out of scope for the current evaluation but will be facilitated by the data acquisition strategy. The final framework will include a list of suggested questions to prioritize for future evaluation projects

Exhibit 7. Inputs to the Evaluation Questions



The evaluation questions may vary on a number of characteristics, including

- Level of relevance – system, service organization, program or individual;
- Unit of analysis – aggregated at program, service organization or system levels;
- Indicator type – input, process or outcome; and

- Time frame – short term, intermediate term, long term, or ongoing.

A number of additional evaluation projects related to the Child and Youth Mental Health Strategy are also under development by various stakeholders. The following activities will inform our system-level evaluation:

- The Centre for Addiction and Mental Health is developing and evaluating 18 Service Collaboratives. ICES and CAMH share a close working relationship. In addition to sharing a Scientific Advisory Group, meetings occur bi-weekly between project leads from ICES and CAMH, and informal connections are also made between project staff members on a regular basis.
- The ASSIST program, funded through the Ministry of Education, has incorporated an evaluation into their program framework.
- The Ministry of Children and Youth Services is developing an evaluation framework for a system data transformation project.

2.4 Measurement Framework

Scorecard

The balanced scorecard was originally developed for the business sector but has since been adapted for health care and the public sector.³⁶ Domains and indicators are presented in four quadrants and are derived from the strategy goals and evaluation framework:

- service delivery (access, utilization)
- outcomes (effectiveness)
- system integration (coordination)
- resources (efficiency)

The development and selection of indicators for the scorecard are guided by four principles:

- selection of indicators is evidence-informed;
- the indicators will demonstrate the outcomes of individual initiatives as well as the cumulative impact across multiple initiatives;
- the indicators are reported at multiple units of analysis (e.g., individuals, families, agencies, school boards, communities, LHINs and provincially); and

- they will allow for a staged approach to monitoring over time (short-, intermediate-, long-term goals and impact).

Exhibit 8 outlines the steps required to develop the metrics of the evaluation.

Exhibit 8. Indicator development process.



Scanning: Indicator literature review

A review of the grey literature has been completed for child and youth mental health indicators. A number of databases and websites were examined including:

- Open Grey;
- Fade Library;
- Canadian Evaluation Society;
- American Evaluation Association;
- Websites of Canadian provincial, territorial and national governments and websites of international governments;
- Google general;
- Google Scholar; and
- Other websites identified through a cascade approach (i.e. linking from one website to another).

Search terms used included but were not limited to: “scorecard,” “evaluation,” “indicators,” “mental health,” “child,” “youth,” and “adolescent.” For the most part, searches were restricted to the last 15 years (1997-2012) and included documents in the English language only. Information from this grey literature review was used to populate an inventory of child and youth mental health indicators (Appendix F).

Indicator development process

From approximately 30 sources, the ICES team has completed an extensive inventory of more than 700 mental health indicators specific to children and youth (Appendix F). The inventory is organized to identify

whether the indicator is core or supplementary, the stage of development (feasibility of collecting data), and level of priority. Indicators have also been aligned to key domains identified by the system-level evaluation questions. An internal review and revision of the list of indicators will be completed in preparation for the next step in the process – a modified Delphi panel.

A Delphi panel technique is a systematic method that combines evidence and expert opinion using an iterated consensus procedure.^{37,38} The purpose of the Delphi is to generate a short-list of indicators relevant to the system-level evaluation. Delphi approaches have proved useful in obtaining consensus from a diverse group of stakeholders over a range of relevant mental health indicators.^{32,39,40} The final output of this process is an agreed-upon list of indicators to be included in the evaluation (i.e. baseline scorecard), in addition to the identification of measurement and data gaps.

Development of baseline scorecard

Once the Delphi panel process is complete and an agreed-upon set of indicators has been produced, the baseline scorecard can be developed (Exhibit 4). The baseline scorecard is an empirical ‘snapshot’ that describes:

1. the contexts of the population at risk (e.g. children/youth in care);
2. current processes of mental health care delivery to children and youth in Ontario (e.g. assessment wait times);
3. children and youth mental health outcomes (e.g. rates of self-harm, youth justice involvement, school suspensions); and
4. early progress of strategy initiatives (e.g. # of youth mental health court workers deployed, K-12 resource guide for educators developed, decrease in eating disorder patients requiring out-of-province services).

Additionally, the baseline scorecard contains placeholders for progress indicators of the individual initiatives and the cumulative strategy outcomes. Linked cross-sectoral data will enable tracking of outcomes of children and youth served by the initiatives (e.g. emergency department visits for self-harm for those waiting for mental health services, improvements in functioning for treatment centre clients, school completion for youth justice involved clients). This sets the stage for ongoing monitoring and evaluation of the strategy as implementation of the initiatives and the linked data strategy progresses.

Section III – Data Strategy

Section Summary

-
- The data strategy involves collaborating with partners who collect data needed to evaluate the child and youth mental health strategy.
 - The data include information about children at risk; social, educational, youth justice and health services; and outcomes.
 - We have proposed the development of the Child and Youth Linkable, De-identified Data Repository (ChYLD) - an integrated repository of *record level, linkable & de-identified data* on Ontario children and youth.
 - A cross-Ministry Privacy Impact Assessment is being conducted to identify privacy risks and develop mitigation strategies and recommendations for data sharing.
-

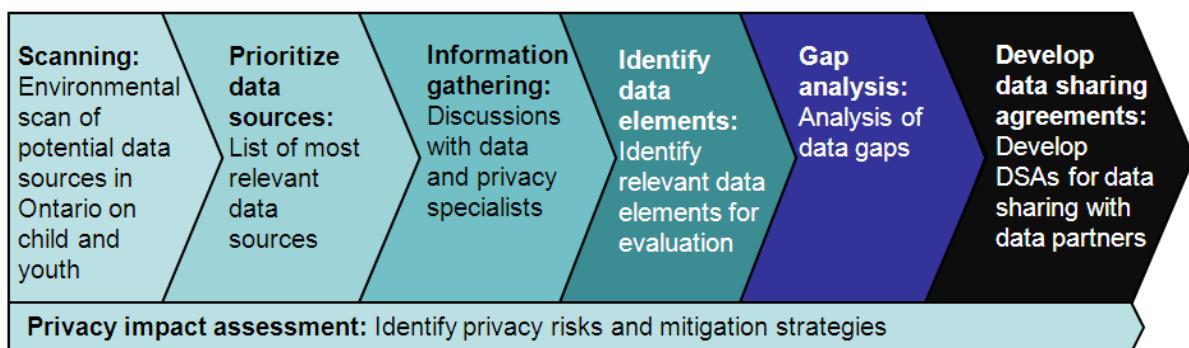
3.1 Data partnership development and integration

ICES collects, de-identifies and anonymously links a wide variety of data bases for the monitoring and evaluation of the health care system. Most of these data are originally collected by governments, organizations and agencies for the purpose of health care system administration. Due to the complexities of mental health issues and the number of ministries and relevant service sectors, a wide variety of multi-sector population-based data will be required to evaluate the most relevant outcomes and assess the effectiveness of mental health prevention, treatment programs and strategies for children and youth.

The data required to fully inform the Evaluation Framework and Scorecard as outlined in the Child and Youth Mental Health Strategy include:

- a) information about the population at risk;
- b) social determinants of health (e.g., family status, social assistance, crown wards, learning disabilities, educational attainment, etc.);
- c) community, health and social service provider contacts (e.g., mental health assessment and treatment, primary health care use, youth programs, special education etc.);
- d) outcomes (e.g. validated mental health assessments, justice involvement, graduation rates, police encounters, etc.) and;
- e) system measures.

Exhibit 9. Key components of the data strategy.



3.2 Implementation of data strategy

We propose the development of a Child and Youth Linkable, De-identified Data Repository (ChYLD). The ChYLD concept is an integrated repository of *record level, linkable & de-identified data* focused on Ontario children and youth. The data contents would initially include *extracts* of routinely collected data about children and youth provided by MOHLTC, MCYS, MED, MTCU, MCSS (and MAG, MCSCS, MTO, where applicable), or by partner organizations funded by these Ministries, as well as strategically identified data held within the ICES data repository and primary data collection where required.

There are seven guiding principles for the development of the ChYLD repository:

1. Collaboration and transparency
2. Relevance to the assessment of child and youth mental health in Ontario
3. Privacy and security
4. Alignment with government priorities
5. Alignment with scientific strategy
6. Appropriate approvals, access and use
7. Use of data that are available, record-level and linkable

The ChLYD repository is important for the following reasons:

- Is essential for the evaluation of the Child and Youth Mental Health Strategy.
- Will provide a robust, central data repository for child and youth services policy development, planning and research in the Mental health and other fields..

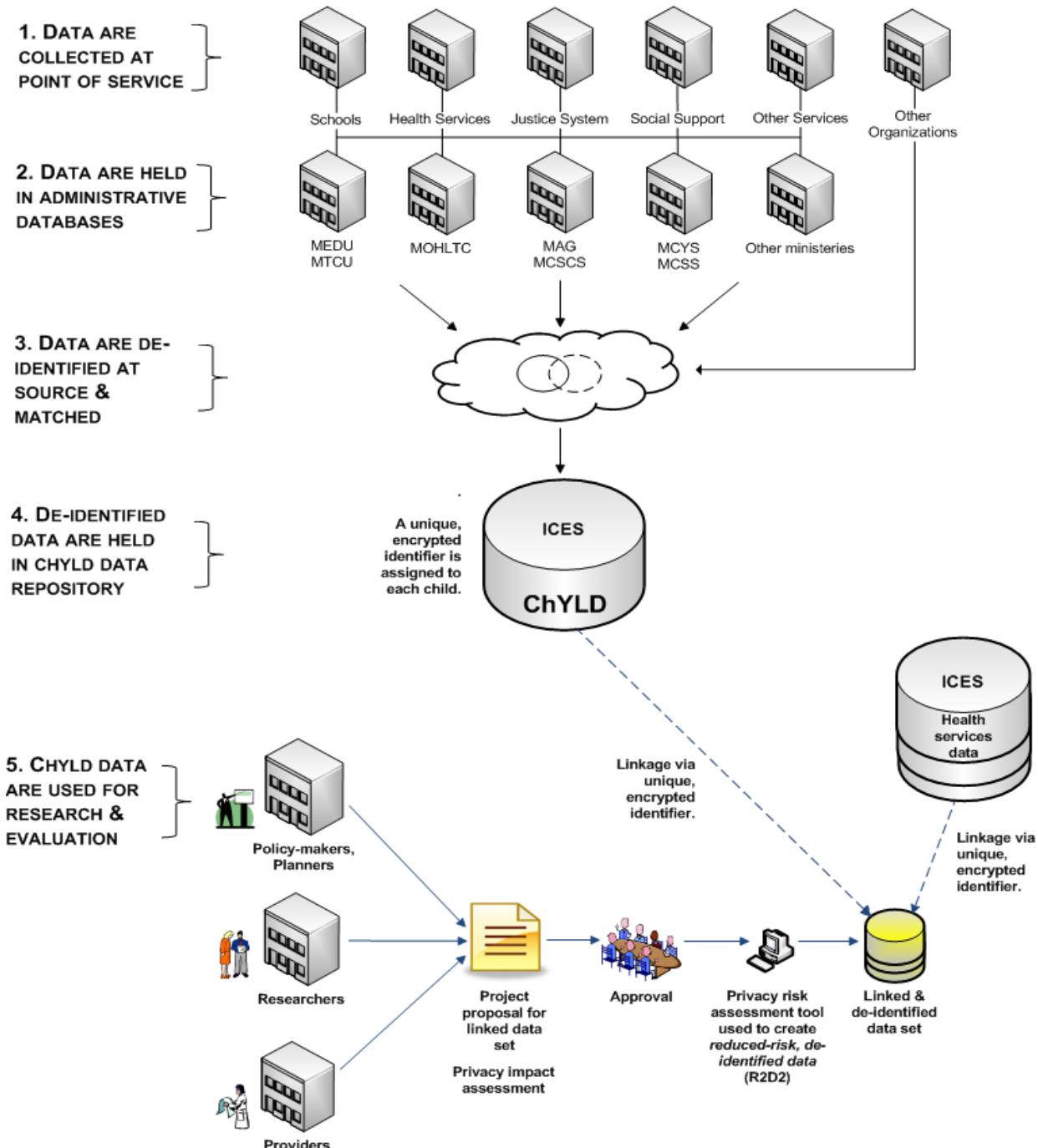
- Will provide an opportunity for collaboration across government ministries and organizations and the development of an integrated system for children and youth mental health.
- Will facilitate the opportunity for scientific input into cross-sector system evaluation and requisite data.

The ChYLD repository will

- be a collaborative effort across Ministries and data partners;
- include Ministry and government privacy professionals and offices;
- be vetted by the Information and Privacy Commissioner's Office;
- provide broader access to de-identified and linked data about child and youth services for policy development, planning and decision-making, and research;
- be led by ICES, given ICES' success and expertise in:
 - its current leadership role in the collaborative development of the Child and Youth Strategy Evaluation and Scorecard;
 - working with government to translate policy-relevant questions into evidence using routinely collected, de-identified and linkable data;
 - its relationship with the IPC, given ICES' designation as a prescribed entity in Ontario [and ICES' IPC-approved policies, practices and procedures that protect the Privacy of Ontarians (latest approval October 2011)];
 - developing a variety of data partnerships, including those where the data are governed outside of PHIPA (e.g. MCSS; Vital Statistics; Ministry of Transportation; Citizenship and Immigration Canada; Chiefs of Ontario);
 - conducting large Privacy Impact Assessments (PIAs) that address data governance, privacy legislation and risk mitigation;
 - de-identifying large numbers of records containing personal and personal (health) information that can be anonymously linked;
 - building infrastructure to use large linkable data sets;
 - applying analytic knowledge and capacity to use large linkable data sets; and
 - increasing access to de-identified data across the province.

Exhibit 10 is a concept diagram of the ChYLD repository, illustrating data collection, data integration, and data use for a variety of purposes, including the evaluation of the Strategy.

Exhibit 10. Child and Youth Linkable De-identified Data Repository (ChYLD).



The ChYLD repository includes extracts of data collected by Ministries and partner organizations, for administrative or other purposes. Data in the ChYLD repository are stored in a de-identified format and linkable at a record-level using a unique, encrypted identifier relating to each child in Ontario.

The Data Partnership Team at ICES is currently collaborating with the scientific evaluation teams and Ministerial partners to answer the following questions (Exhibit 11):

1. How will this collection of data be characterized?
2. What data will be integrated?
3. How will the data be collected and used?
4. Under what authorities will the data be collected and used?
5. Data gaps analysis

Exhibit 11. Guiding questions for data development.

| | |
|---|---|
| 1. Characterization of the ChYLD repository | <ul style="list-style-type: none">• Children and Youth-focused• Linkable and de-identified; used for policy-making, planning and evaluation• Collaboration across Ministries• Expanded access subject to privacy and approvals processes |
|---|---|

| | |
|---|---|
| 2. Data to be integrated (Existing data that are linkable) | <ul style="list-style-type: none"> • Relevant to scope of Strategy • Subject matter experts consultation • Population-based, individual-level, linkable • Prioritized data sources for inclusion in the ChYLD repository: <p><u>MCYS</u></p> <ul style="list-style-type: none"> ◦ Adoption/Crown Ward (A/CW) ◦ Youth Offender Tracking Information System (Y-OTIS) ◦ Mental health program level data as available <p><u>MEDU</u></p> <ul style="list-style-type: none"> ◦ Ontario School Information System (OnSIS) ◦ Education Quality and Accountability Office (EQAO) <p><u>MOHLTC</u></p> <ul style="list-style-type: none"> ◦ Ontario Common Assessment of Need (OCAN) – part of Community Care Information Management (CCIM) ◦ Better Outcomes Registry and Network (BORN) ◦ Drug and Alcohol Treatment Information System (DATIS) ◦ Eating Disorders Data <p><u>MCSS</u></p> <ul style="list-style-type: none"> ◦ Ontario Disability Support Program (ODSP) - Eligibility File ◦ Ontario Disability Support Program (ODSP) - Drugs <p><u>Data held at ICES</u></p> <ul style="list-style-type: none"> ◦ Physicians claims from Ontario Hospital Insurance Plan (OHIP) Claims Database ◦ Discharge Abstract Database (DAD) ◦ National Ambulatory Care Reporting System (NACRS) from CIHI ◦ Ontario Mental Health Reporting System (OMHRS) ◦ Ontario Drug Benefits from MOHLTC ◦ MOMBABY data (derived at ICES) ◦ Condition-based cohorts derived from linked data algorithms developed at ICES (e.g., schizophrenia) ◦ Vital Statistics Death Register ◦ Citizenship and Immigration Canada |
| 3. Collection & Use of Data | <ul style="list-style-type: none"> • Include extracts of data collected by Ministries and partner organizations, for administrative or other purposes • De-identified data storage and linkable at a record-level using a unique, encrypted identifier • Defined data access protocols defined with collaborating partners |
| 4. Authorities for Data Collection & Use | <ul style="list-style-type: none"> • ChYLD Privacy Impact Assessment (PIA) • Advice and recommendations from Office of the Information and Privacy Commissioner (spring 2012) |

| | |
|--------------|--|
| | <ul style="list-style-type: none">• Development of Data Sharing Agreements pending appropriate authorities and governance, and obligations |
| 5. Data gaps | <ul style="list-style-type: none">• Analysis of relevant data gaps in conjunction with Ministry partners |

Section IV - Conclusion

The Child and Youth Mental Health and Addiction Strategy is unprecedented in its collaboration between four Ministries (Child and Youth Services, Education, Health and Long-term Care, and Training, Colleges and Universities). The involvement of multiple ministries is appropriate because mental health and addictions are not limited to the jurisdiction of one ministry. The creation of an evaluation framework, scorecard, and data strategy to support the evaluation of this strategy is similarly complex.

To date, ICES has engaged the four core ministries, as well as other Ministries (Community and Social Services, and Community Safety and Correctional Services) to inform them of ICES' function and capacity and to understand the nature of their initiatives within the strategy. The nature of this strategy naturally involves complicating factors; specifically, evaluating outcomes from initiatives that span Ministries and jurisdictions and are in varying stages of implementation is extremely complex.

ICES has mapped logic models for all the initiatives listed in the strategy. The next steps in creating the evaluation framework will be to integrate the individual logic models in a way that describes the strategy as a whole. Additionally, indicator development for the scorecard will evolve from a process of examining the logic models and evaluating the existing literature for indicators that have been used to measure child and youth mental health and addictions interventions. Finally, a Delphi process will yield a final list of indicators that will populate the scorecard.

The evaluation requires a tremendous amount of data much of which currently exists but in large part is unusable or inaccessible in its present state. The Data Strategy, outlined above, is an extremely ambitious endeavour with the goal of linking as much relevant individual-level data into an anonymous, linked Child and Adolescent data repository (CHyLD). This will require a very extensive privacy impact assessment and a vast amount of work identifying the types of data collected at the various ministries and agencies. Inevitably there will be data gaps critical to the evaluation process that will be identified by the Data Strategy process. Having a clearly defined Data Strategy will permit the acquisition of data currently non-existent to facilitate the evaluation process. The quality and relevance to planning and policy of the evaluation will only be as good as the quality of the data available. The output from the scorecard will be contingent on the success of the Data Strategy to integrate data from a large variety of disparate data sources.

This draft evaluation framework is to be viewed as a formative document. The nature of the work is iterative and reflexive – the strategy will likely be shaped by the evaluation framework and scorecard development in addition to the evaluation framework and scorecard development being derived from the strategy. The process to date has been highly collaborative, with excellent engagement from the various ministries and CAMH.

The goal of the Child and Youth Mental Health and Addiction Strategy is ultimately to improve outcomes for child and youth – to prevent mental health and addiction problems from occurring and to provide timely and excellent service when these problems occur. The evaluation framework and scorecard are critical to providing feedback to the ministries to ensure that this goal is ultimately met.

Appendix A. MHASEF Scientific Advisory Group Members

| Organization | Representative |
|--|-----------------------|
| Centre for Criminology, University of Toronto | Anthony Doob |
| Children's Health Research Institute | Bill Avison |
| The Hospital for Sick Children | Bruce Ferguson |
| Mental Health Commission of Canada | Simon Davidson |
| Offord Centre for Child Studies | Peter Szatmari |
| Ontario Centre of Excellence for Child and Youth Mental Health at CHEO | Ian Manion |
| Sunnybrook Research Institute | Amy Cheung |

Appendix B: Environmental Scan of Mental Health and Addictions Evaluation Frameworks

| # | Evaluation Summary | Intentions | Creating an Evaluation Framework How? | Evaluation Framework | |
|---|--|------------|--|---|--|
| | | | | What? (object & scope) | How: method, scales, format |
| 1 | <p>scope: provincial mental health system</p> <p>evaluates: service; outcomes; non-med determinants (working, living conditions; personal resources); system capacity: human resources, governance, funding, technology</p> <p>=comprehensive approach, taking into account not just service and outcomes but also non-med and system capacity factors</p> <p>eval method: survey, report, admin data, govt stats, scales, program docs</p> <p>conceptual basis: unspecified</p> | | | <p>provincial mental health system</p> <p>province of Alberta</p> | <p>1 satisfaction survey</p> <p>2 wait time reports; types of services; existence of protocol; surveys</p> <p>3 Provincial Mental Health Promotion program reports; survey; consumer reports; level of care reviews; discharge wait list results; hospital reporting (discharge abstracts)</p> <p>4 surveys; ER reporting; hospital reporting (discharge abstracts); regional action plan; vital stats reports; pre/post symptom measurement scales (e.g., GAF); Quality of Life scale; pre/post level of functioning scales; screening</p> <p>5 budget reports; costing exercises/expenditure reporting; accreditation status; ER reporting; existence of protocol</p> <p>6 narrative report/s; training/refresher report/s</p> <p>7 average wait time to enter housing; survey; capacity report</p> <p>8 payer coverage report; survey; client survey; Canadian Commun Health Survey</p> <p>9 regional action plan; vital stats reports</p> <p>10 educ reports; disability reports; human resources records; workforce plan updates</p> <p>11 funding methodology; existence of framework; progress reports</p> <p>12 staff surveys; clinical telehealth reports; telelearning reports; reports of innovation</p> <p>format: table</p> |

| | | | | | |
|---|---|---|---|--------------------------------|---|
| 2 | <p>scope: 27 communities within province; mental health program for children & families</p> <p>evaluates: site performance (service) =from primarily administrative perspective; program-focused</p> <p>eval method: site & program documents, interviews, surveys</p> <p>conceptual basis: logic model</p> | <p>~key informant interviews with partnering agencies, school administrators, and the Alberta Heath Services/Alberta Education leadership team</p> <p>~site visits with each of the pilot sites, including interviews with project coordinators</p> <p>~document review</p> | <p>Mental Health Capacity Building for Children and Families – Expansion Initiative</p> | <p>community / provincial:</p> | <ul style="list-style-type: none"> • Review of site documentation and background documents; • Review and revision of the logic model; • Review of the formative and summative evaluation frameworks; • Formative assessment of the 27 Mental Health Capacity Building expansion sites, including: <ul style="list-style-type: none"> o Site visits/ documentation review; o Key informant interviews; and o Partner and school administrator surveys. <p>format: text</p> |
|---|---|---|---|--------------------------------|---|

| | | | | | |
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| 3 | <p>scope: provincial mental health & housing program</p> <p>evaluates: participant outcomes, policy and service delivery, finances =more comprehensive (though less than <i>Performance Monitoring Framework</i> above): including housing/accom info as crucial non-med determinant of mental health</p> <p>eval method: program data set, financial & admin data, site interviews & observation</p> <p>conceptual basis: program theory logic model - describes relationship betw service delivery and client outcomes</p> | <p>~assess the effectiveness of HASI as a whole program, & each stage</p> <p>~participant outcomes, policy and service delivery model and economic analysis</p> | <p>~evaluation framework is based on program theory, which describes the relationship between the service delivery model and individual client outcomes</p> | <p>HASI</p> <p>provincial: New South Wales, Australia</p> | <p>~mixed method, longitudinal approach</p> <p>~Secondary financial and administrative data relevant to the initiative will be analyzed, along with additional primary field study data collected in three fieldwork sites (interviews with key stakeholders supplemented by participant observation)</p> <p>Program data: HASI Minimum Data Set (MDS)</p> <p>Secondary data: datasets managed by NSW Health and Housing NSW, & Financial and administrative data on the costs of the program</p> <p>Interviews-clients</p> <p>Interviews-family</p> <p>Interviews-stakeholders</p> <p>Observation: at each of the three fieldwork sites observing the different contexts</p> <p>Policy and document analysis</p> <p>format: text and tables: outcome type; variables; sources; comparison</p> |
| 4 | <p>scope: provincial mental health and housing program</p> <p>evaluates: housing profile and outcomes, physical and mental health outcomes, social and community participation, costs</p> <p>eval method: multi-method, admin and survey data</p> <p>conceptual basis: program logic model</p> | as above | as above | <p>HASI</p> <p>provincial: New South Wales, Australia</p> | <p>sources:</p> <p>HASI Minimum Data Set (MDS)</p> <p>Housing NSW data</p> <p>NSW Health data · Kessler Psychological Distress Scale (K-10);</p> <ul style="list-style-type: none"> · Health of the Nation Outcome Scale (HONOS); · Life Skills Profile (LSP-16); and · Activity and Participation Questionnaire (APQ-6). <p>Mental Health Ambulatory (MH-AMB) Data Collection MDS supplement</p> <p>HASI MDS data</p> |

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| 5 | <p>scope: international comparison - OECD nations' mental health care</p> <p>evaluates: treatment (mostly focused on depression, substance abuse), follow-up, limited outcome (mortality for severe psychotic disorders); clearly indicated limitations/exclusions</p> <p>= limited indicators, since focused on consensus about and accessibility of standardized measures</p> <p>eval method: expert consensus, voting</p> <p>conceptual basis: feasible, consensual international benchmarking established by experts</p> | <p>To identify quality measures for international benchmarking of mental health care that assess important processes and outcomes of care, are scientifically sound, and are feasible to construct from preexisting data</p> | <p>~consensus development process with a panel of international experts drawing on established procedures and based on a framework for quality-measure selection</p> <p>~Indicators drawn from OECD member countries' initiatives, conducted by national health departments, payers, accreditors, researchers, and other stakeholder organizations. Specific sources included the Canadian Mental Health Advisory Network, the United Kingdom Department of Health, the Center for Quality Assessment and Improvement in Mental Health's National Inventory of Mental Health Quality Measures, numerous US stakeholder initiatives, and published research reports</p> <p>~134 candidate measures; criteria [quality-focused, system level, technical (not interpersonal) quality, constructed from pre-existing admin data, single-item]: chose 23; rated for indicator import. & sci soundness; 12 recommended</p> | <p>nations' mental health care</p> | <p>format: text</p> |
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| 6 | <p>scope: national mental health policy and plan</p> <p>evaluates: [input, process, output, impact] policy; plan - strategies, outcomes =hypothetical framework for application in developed nations; very comprehensive; extremely detailed step by step methodology from start to finish</p> <p>eval method: observation; interviews; document review; health info system survey; checklist using standardized instruments; survey; focus group</p> <p>conceptual basis: contextual understanding of mental health w/in nation - including structure, resources; detailed methodology, including checklists. adaptable to any developed nation</p> | | <p>~create overall logic model, linking: MH POLICY: vision (values+principles) -> objectives -> areas for action (coordination, hum resources & training, orgn of services, leg & hum rights, promotion prevention treatment & rehab, essential meds procurement & distrib, advocacy, quality improvement, info systems, financing, intersectoral collab, research & eval) -> MH PLAN: strategies -> targets -> indicators [table of linked 1 areas for action; 2 strategy 3 activity; 4 responsible person/s; 5 cost; 6 budget; 7 resources; 8 outputs]</p> <p>~1 clarify purpose & scope of monitoring/eval 2 ID funding & evaluators 3 assess, manage ethical issues 4 prepare + implement eval framework</p> | national mental health national | <p>~operational PLAN for MONITORING and EVALUATING the strategies: strategy (i.e.. Outcome) -> type of monitoring /eval -> time frame -> research/collation required -> sources/methods of data collection [observation; interviews; document review; health info system survey; checklist using standardized instruments; survey; focus group]</p> <p>CHECKLIST table for MH policy eval: process/content issues -> rating -> comments -> action required</p> <p>CHECKLIST table for MH plan eval: process/content issues -> rating -> comments -> action required</p> <p>options: experimental designs; non-exp designs (surveys, case studies, subjective exper, observation, focus groups, ethnography); econ eval - cost minimization, cost-effectiveness, cost-utility, cost-benefit; data collection - routine data from health info systems, standardized instruments, interviews, document review; rapid appraisal</p> <p>SUMMARY ANALYSIS: of objectives -> strategies -> targets and indicators... -> findings recommendations + conclusions</p> <p>format: tables</p> |
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| 7 | <p>scope: program (suicide prevention and contributing factors), targeting national aboriginal population</p> <p>evaluates: implementation (process) and outcomes</p> <p>eval method: representative eval subcommittee - overall & micro-initiative eval: table of questions - sources: program documents, interviews, Qnaire survey, case study, focus group, content analysis</p> <p>conceptual basis: cross-cultural, participatory eval framework</p> | <p>~cross-cultural & participatory evaluation strategies firmly grounded w/in cultural context of community</p> | <ol style="list-style-type: none"> 1. NAYSPS national mtg - 15 national and regional reps, 2006: participatory eval concepts&strategies; fed gov eval expectations 2. documents from FNIHB: NAYSPS program framework & guides to implementation - reviewed 3. set of eval Qs based on 2006 mtg (above) - 1ry, 2ry, 3ry prevention + knowledge devt - asked to stakeholders: (national, regional, community representatives - provincial&territorial govt & community orgns) 4. regional & nat'l stakeholder mtg, 2007: response to draft framework 5. lit review of empirical program eval in aboriginal communities, accommodating cultural differences | <p>National Aboriginal Youth Suicide Prevention Strategy -- logic model</p> <p>national: aboriginal youth population</p> | <p>~document analysis ~interviews ~questionnaire survey ~case study ~focus group ~content analysis</p> |
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| 8 | <p>scope: national MH program</p> <p>evaluates: overall program process, implementation; & initiatives initial outcomes (improved perception of MH issues; integration of MH programs, efforts, resource linkages) intermed outcomes: more of above + reduced stigma & improved awareness ultimate outcomes: transformed, efficient MH system; improved health outcomes/ quality of life and able to live meaningful, productive lives</p> <p>eval method: doc review, data collection tool, survey, interviews, focus groups -- [mostly MHCC-reliant, small n sample population surveyed]</p> <p>conceptual basis: ~logic model: level 1 model - assumptions, inputs/resources, processes/activities, outputs, audiences, impacts& outcomes; level 2 models = initiative-specific</p> | | <p>Charis + four sector experts to advise on logic model and eval framework</p> <ul style="list-style-type: none"> -methodology workshop (MHCC exec, senior leaders, invited partners) -review key project documents (MHCC business plans, funding, background, operational policies; key initiatives, Advisory Committees documents) -interviews w key informants from specified target audiences (key stakeholders, identified w input from MHCC project leads: stakeholders = all MHCC, plus one rep from Health Canada) -> for validation of logic model and eval Qs | <p>Mental Health Commission of Canada (MHCC)</p> <p>national: Canada</p> | <p>~document review: to provide compreh understanding of context, activities, objectives, mandate of MHCC; to show rel'p betw intentions and data collection evidence</p> <p>~data collection tool dev't & implementation: online survey</p> <p>~key informant interviews (n=29)</p> <p>~focus groups</p> <p>format: text</p> |
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| 9 | <p>scope: regional (one LHIN); multi-organization-based</p> <p>evaluates: service user eval: service and "way of being" outcomes, focused on user experience and well-being; user-defined outcomes: short->intermed->long term</p> <p>eval method: longitudinal, multiple method</p> <p>conceptual basis: recovery-based, integrative (provider and consumer mental health org'ns), logic model specifying relationships between "activities" and "outcomes"</p> | <p>~prioritization of recovery-focused outcomes by mental health systems</p> | <p>~logic model prep:</p> <ul style="list-style-type: none"> 1 review existing eval & accountability frameworks - i.e., MOHLTC <i>Intensive Case Mgmt Standards</i> (2005) 2 review general lit on mental health recovery to decide on outcomes <p>~group-based logic model sessions; including stakeholders (service users + mental health staff) in the local mental health system</p> <p>~one consolidated model w 2 components:</p> <ul style="list-style-type: none"> 1 service / system 2 service user <p>~arrive at "Activities" and "outcomes" 80; show logical connections between them in diagrams 81</p> <p>then, model presented to committee to identify priority activities & outcomes</p> <p>then, generated key Qs to be addressed by evaluation</p> | <p>~mental health regional: local regions of Waterloo & Wellington-Dufferin</p> | <p>~eval of service user logic model: "process"/way-of-being outcomes framework based on service-users' own understandings of recovery, and MH staff's understandings of recovery: activities -> short term -> intermed -> long term outcomes (94)</p> <p>longitudinal study measuring key outcomes; multiple method examin of developmental quality of org partnership; impact of, & stakeholder reactions to, recovery training; implement of recov action planning... (including qual narratives)</p> <p>examples:</p> <ul style="list-style-type: none"> -Community Integration Scale Social Support Scale (adapted Cutrona et al, 1987) -Dependence & Independence/Interdependence Scales (customized, Centre for Community Based Research) -Making Decisions Empowerment Scale (Rogers et al, 1997) -Staff Relationship Scale (Hornik et al. 1999) -Mental Health Recovery Scale (Young et al, 1999) <p>format: table: recovery-focused outcomes (from logic model), and corresponding measurement tools</p> |
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| 10 | <p>scope: mental health project, in 2 counties ; population-based</p> <p>evaluates: needs (broadly community-based), process (awareness and attitude), impact (reach), outcome (focused on suicide and depression)</p> <p>eval method: multimethod - observation, interview, survey, reports, feedback</p> <p>conceptual basis: continual info flow from formative & process evaluation from all sectors of community to fine-tune programmes interventions & respond to changing circumstances</p> | <p>continual info flow from formative & process evaluation to fine-tune programmes interventions & respond to changing circumstances</p> | <ul style="list-style-type: none"> -initial needs assessment survey & focus groups in both communities AND in reference (control) community; & feasibility study -feedback from community members on research findings -relate intended outcomes to programme implementation actions | <p>Rural Mental Health Project (Ireland)</p> <p>two border counties</p> | <p>2 process eval: document all mtgs, correspondence, inter-agency links, community participation; regular process reports; Qaires to participating members; research team - direct observ; phone interviews w steering committee</p> <p>3 impact eval: survey all participants for SES & project impact; Qaires; structured programmes assessed by pre/post controlled design; JOBS programme eval'd by quasi-experimental research design</p> <p>4 original needs assessment survey readministered at interims cross-sectionally in both counties and a reference (control) community to assess progress; cross-border rel'ps "tracked"</p> <p>format: text</p> |
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| 11 | <p>scope: community program (ACT), seriously mentally ill</p> <p>evaluates: context (external factors - i.e., policy), process, treatment, implementation, supports, intermed & ultimate (quality of life) outcomes takes account of effect of client characteristics and family & natural support on treatment</p> <p>eval method: mixed, multi-, repeated measures, & at least 2year followup</p> <p>conceptual basis: cause-effect pathway and links among delivered treatment variables, the implementation system, external factors, and intermediate and longer term outcomes; validated by stakeholder input</p> | | <p>~hypothesis: cause-effect pathway and links among delivered treatment variables, the implementation system, external factors, and intermediate and longer term outcomes</p> <p>~framework was further validated and modified through stakeholder input</p> | <p>Assertive Community Treatment (ACT)</p> <p>regional, specific pop'n: seriously mentally ill (SMI) clients, in ACT in Southwestern Ontario</p> | <p>~baseline patient data</p> <p>~admin data</p> <p>~Overall CCAR score; CCAR substance use subscale; CCAR level of functioning subscale; CCAR housing data; CCAR employment status</p> <p>~Present State Exam (PSE) - insight score</p> <p>~Dartmouth ACT Scale (DACTS)</p> <p>~Working Alliance Inventory (WAI); Empowerment Scale; Drug Attitude Inventory (DAI-10); Medication Adherence Scale</p> <p>mixed-method, multi-measures, repeated measures approach with at least a two-year follow-up period is used as a way to enhance validity via convergence of findings, to assess the plausibility of identified threats to validity, and to enhance the interpretability of the causal paths</p> <p>format: table: framework element - variable - operational def'n or instrument - frequency - description</p> |
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| 12 | <p>scope: specific program (rehab veteran+family) population within one city</p> <p>evaluates: case mgmt, impact eval, focused on service delivery; comparative</p> <p>eval method: focus groups, case studies, observation, file review</p> <p>conceptual basis: case mgmt approach, evaluate impact, discuss alternatives</p> | <p>improve the quality of client service & ensure efficiencies are gained</p> <p>~document the new case management approach and the objectives of the pilot project, to establish potential evaluation issues, to establish appropriate evaluation methodology and options for ongoing data collection</p> | <p>~consultations with key informants from the program area, along with a review of documentation</p> | <p>pilot project, Rehab case mgmt</p> <p>specific pop'n: Halifax - Canadian Forces (CF) Members, Veterans, and family members undergoing rehabilitation</p> | <p>~use baseline performance information on the Halifax DO prior to the implementation of the pilot and compare it to performance information after implementation of the pilot</p> <p>~comparison of a similar district office's performance</p> <p>~case mgmt eval via tool: eligibility of clients for case planning, evidence and appropriateness of interdisciplinary consultation, development of case plans, and coordination of services for the client</p> <p>~impact eval: focus groups, interviews w staff</p> <p>~focus groups</p> <p>~case studies</p> <p>~observation</p> <p>~file review of:</p> <ul style="list-style-type: none"> • program, client and workload data from VAC's Reporting Database (RDB); • business processes for the pilot and associated programs; • financial information contained in the FREEBALANCE financial information system; • minutes of district office meetings; • formal/informal complaints. <p>format: text</p> |
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| 13 | <p>scope: national MH program</p> <p>evaluates: service delivery & outcomes</p> <p>eval method: documents supplied by the Department of Health and Ageing and provider groups, consultations with representatives from Australian Government and State and Territory jurisdictions, key stakeholders and site visits</p> <p>conceptual basis: take into account other initiatives's activities (contextualize); implementation -and outcome-focused</p> | <p>review whether Australia has continued to pursue and make progress implementing the objectives of the Plan, and whether the range of implemented programmes or actions has affected reform of the mental health sector</p> | <p>document review & targeted consultations - arrive at consensus re plan's goals:</p> <ul style="list-style-type: none"> • Promoting mental health and preventing mental health problems and mental illness • Improving service responsiveness • Strengthening quality • Fostering research, innovation and sustainability <p>...in context of:</p> <p>large-scale developments and programs, including the Council of Australian Governments National Action Plan on Mental Health (2006-2011) (COAG)⁹, National Depression Initiative (beyondblue²¹⁻²³) -- with their own specific activities and goals</p> | <p>National Mental Health Plan (2003-2008)</p> | <p>documents supplied by the Department of Health and Ageing and provider groups, consultations with representatives from Australian Government and State and Territory jurisdictions, key stakeholders and site visits</p> <p>format: table of eval focus areas and corresponding outcome eval Qs</p> |
| 14 | <p>scope: Second National Mental Health Plan (1998–2003)</p> <p>evaluates: implementation</p> <p>eval method: interviews</p> <p>conceptual basis:</p> | | <p>~address seven key areas:</p> <ul style="list-style-type: none"> • Consumers and Carers; • Partnership Development; • The Mental Health Workforce; • Specialist Mental Health Services; • Dual Diagnosis; • Underserved Populations; and • Quality, Effectiveness and Accountability | <p>Second National Mental Health Plan (1998–2003)</p> | <p>met with a very wide range of individuals and services including consumers and carers, Non-Government Organisations (NGOs), mental health professionals and their representative organisations, State, Territory and Commonwealth officials, researchers, and a range of service providers</p> <p>two reviewers - two narrative reports, submitted to participants in review for feedback; one final joint report</p> |

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| 15 | <p>scope: community-based, southern and eastern Ontario</p> <p>evaluates: program and outcomes, and link between them</p> <p>eval method: multi-method, baseline and follow-up assessment of outcomes; interview - relationship between program and outcomes; also employed participatory action research</p> <p>conceptual basis: multiple method assessment of various subgroups within consumer population, outcome-focused</p> | <p>assess the effectiveness of community-based mental health services and supports</p> | | <p>communities across Southern and Eastern Ontario</p> | <p>1 six core research studies that evaluated community mental health services and supports (including ACT teams, ICM, crisis response, Consumer/Survivor Initiatives (CSI), and family support organizations); 2 a comparative multisite study;</p> <p>1&2: Data were collected about more than 800 users of community mental health services and supports in communities across Southern and Eastern Ontario, including Toronto, Ottawa, Kingston, Brockville, Kitchener-Waterloo, Hamilton, and the Niagara Region comprehensive client assessment, which included measures of symptoms, functioning, and service use from the perspective of both the participant and independent raters Clients were assessed at entry to the study and after nine and 18 months diversity of participating programs enabled the CMHEI to examine how different types of services can work together to meet client needs</p> <p>3 a complementary project, Explaining Outcomes, to develop tools that can be used to assess the link between program characteristics and client outcomes; focused on the data collection tools useful across a wide range of community support models, practices, and community settings; 42 qualitative interviews to draw on the experiences of consumers, family members, and service providers across 17 different Ontario communities combined with an extensive literature review and were incorporated into a draft instrument for field testing Over 200 consumers then completed the draft tools and provided feedback</p> |
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| 16 | <p>scope: four consumer /survivor initiatives</p> <p>evaluates: activities and outcomes</p> <p>eval method: pariticipatory action research</p> <p>conceptual basis: participatory; based on program logic models of system-level and individual-level activities and outcomes</p> | <p>commitment to power-sharing, relationship-building, and shared ownership and control of the evaluation</p> | <p>program logic model for each CSI, distinguishing system-level (environmental/support) from individual-level activities (direct):</p> <p>main components -> component objectives -> activites -> anticipated outcomes</p> | <p>four Consumer/Survivor Initiatives (CSIs) in southern Ontario</p> | <p>longitudinal follow-up of program participants</p> <p>hired consumer/survivor researchers to recruit participants and conduct the interviews</p> <p>format: INDIVIDUAL quantitative: interviews? qualitative: interviews with a sub-sample of 15 CSI participants and 12 comparison group participants SYSTEM: quantitative: system-level tracking log focus group: interviews with CSI staff and members in each of the four CSIs and 13 individual interviews with service providers and health planners familiar with the CSIs</p> |
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| 17 | <p>scope: all MH and addiction services within district health board (DHB) and NGO services</p> <p>evaluates: inputs, processes, outputs, outcomes</p> <p>eval method: model of info flow - from various data sources and collection methods</p> <p>conceptual basis: provider-led framework, recovery-focused, indicators, supplemented by contextual information</p> | <p>enable services to learn about practices that lead to improved outcomes for service users (provider improvement rather than provider accountability)</p> <p>should be: effective appropriate efficient accessible continuous responsive capable safe sustainable</p> | <ul style="list-style-type: none"> -provider-led framework, referencing work in Australia in 2005 and in Canada 2001-2003 -takes account of existing legislation on inequality -input from skilled sector representatives -detailed diagramming and enumerating of development process -lists key documents informing framework, outlines their contribution -enumerates other MH and addiction projects and initiatives that will impact (this) key perf. indicator framework, diagramming their interdependence -discuss capacity of sector to meet key perf indicator requirements | mental health and addiction services performance | <ul style="list-style-type: none"> -information flow model: data sources enumerated -implementation model; each phase modeled as well -~30 detailed tables of (30) evaluation indicator: domain, salient issue, rationale, definition, scope, technical issues, data sources, allied indicators, notes + list of indicators for future consideration census datamart health pac contract monitoring system DHB financial returns general med services datamart knowing the people planning lab requests and tests datamart maternity datamart MH services datamart outpatients datamart national booking and reporting datamart national consum satisf survey NHI datamart national immuniz datamart national minimum dataset datamart pharmacy datamart primary health datamart price vol schedules rights and protection shared dimensions datamart |
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| 18 | <p>scope: national mental health policy + performance</p> <p>evaluates: policy and performance - input, process, output, outcomes</p> <p>eval method: multi-method admin data + reports</p> <p>conceptual basis: comprehensive, target- (performance) and policy-focused, inform public of MH sector reform</p> | <p>inform the public of the indicators and targets set for measuring governments' performance in relation to the activities and actions identified in the Fourth Plan to continue the progression of mental health sector reform</p> | <p>Measurement Strategy focuses on the policy level performance indicators, and represents the culmination of extensive collaborative work by representatives from jurisdictions, a number of Australian Government agencies, the private and non-government sectors, consumers and careproviders, and clinical experts.</p> <p>Indicator development was underpinned by the following principles:</p> <ul style="list-style-type: none"> • Be inclusive of all components of the mental health sector. • Utilise existing national data and specifications where available. • Indicator specifications should meet recognized quality selection criteria. • Use of interim indicators where new data sources need to be developed. <p>-selection criteria also provided for indicators</p> | mental health policy + performance | <p>tables id'ing: priority area - indicators - targets also, tables indicating priority area, rationale, description, data source, baseline year, freq of data availability, indicator type, future dev'ts, dev't timeframes, target, rationale, level of evidence, output, dev't various data sources, admin + survey, report</p> |
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References for the Environmental Scan of Existing Mental Health & Addictions Evaluation

Frameworks

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Appendix C. Program Discovery and Logic Modelling

Meetings to Date

| DATE | PURPOSE | ATTENDEES |
|-----------|--|---|
| 30-Sep-11 | Review of current mental health & addictions performance indicators | Health Quality Ontario, ICES, University of Waterloo |
| 17-Oct-11 | Ministry of Education (EDU): review of evaluation work conducted to date | ICES: Jennifer Bennie, John Cairney, Astrid Guttmann, Karye Iron, Paul Kurdyak, EDU: Trudy Blugerman, Maureen Cox, Doris McWhorter |
| 1-Dec-11 | Ministry of Health and Long-Term Care (MOHLTC): program discovery | MOHLTC: Anne Bowlby, Bobbi Clifton, Danielle E. Layman-Pleet, Nila Sinnatamby, Ruth Stoddart, John Van Damme, Diane Vermilyea, Chris Higgins, Domenic Della Ventura, Brad McDonald, David Smith, Mary Lou Bozin, Naomi Kasman ICES: Paul Kurdyak, Astrid Guttmann, Jennifer Bennie, Karen MacCon, Kelley Ross, Virginia Waring, Julie Yang |
| 5-Dec-11 | Ministry of Children and Youth Services (MCYS): program discovery | MCYS: Lynn Faris, Pamela Brown, Ingrid McKhool ICES: Paul Kurdyak, Karye Iron, Jennifer Bennie, Kelley Ross, Karen MacCon, Julie Yang |
| 7-Dec-11 | EDU: program and data discovery | EDU: Tadesse Haile, Maureen Cox, Doris McWhorter, Olia Kchik, Stephanie Sutherland, Trudy Blugerman, Caroline Parkin ICES: Paul Kurdyak, Jennifer Bennie, Karye Iron, Karen MacCon, Kelley Ross, Virginia Waring, Julie Yang |
| 20-Dec-11 | Ministry of Training, Colleges and Universities (TCU): program discovery | TCU: Joanne Brown, Martin Hicks ICES: Jennifer Bennie, Astrid Guttmann, Karye Iron, Karen MacCon, Kelley Ross, Virginia Waring, Julie Yang |
| 16-Feb-12 | MCYS: review and feedback on logic models | MCYS: Lynn Faris, Erika Runions MacNeil, Trish Moloughney, Madeleine Davidson, Irene Perro, Shannon Bain, Anne Premi, Julie Mathien, Mary Jo Sullivan, Pamela Brown ICES: John Cairney, Karye Iron, Jennifer Bennie, Karen MacCon, Kelley Ross, Virginia Waring, Julie Yang |

| DATE | PURPOSE | ATTENDEES |
|-------------|---|--|
| 22-Feb-12 | Ministry of Community Safety and Correctional Services (MCSCS): introduction to MHASEF, role of MCSCS in strategy | ICES: Paul Kurdyak, John Cairney, Karye Iron, Jennifer Bennie, Karen MacCon, Kelley Ross, Virginia Waring, Julie Yang, Flora Matheson MCSCS: Wendy Love, Lina Guzzo, Michael McBain, Rosie Zinn, Marilyn Bunton |
| 20-Mar-12 | EDU: review and feedback on logic models | EDU: Kathy Short, Maureen Cox, Trudy Blugerman, Caroline Parkin, Doris McWhorter, Stephanie Sutherland ICES: Karen MacCon, Jennifer Bennie, Julie Yang |
| 20-Mar-12 | MOHLTC: review and feedback on logic models | MOHLTC: Danielle Layman-Pleet, Bobbi Clifton, Nila Sinnatamby, Catherine Ford ICES: John Cairney, Karen MacCon, Julie Yang |
| 28-Mar-12 | MCYS: development of CYMH outcomes measures and data elements | MCYS: Lynn Faris, Ingrid McKhool, Pamela Brown, Angela Batra Jodha, Shannon Fenton, Cynthia Abel ICES: John Cairney, Astrid Guttmann, Julie Yang, Kelley Ross |
| 18-Apr-12 | Ministry of the Attorney General (MAG): introduction to MHASEF, role of MAG in strategy | MAG: Michelle Sherwood, Maura Jette ICES: |

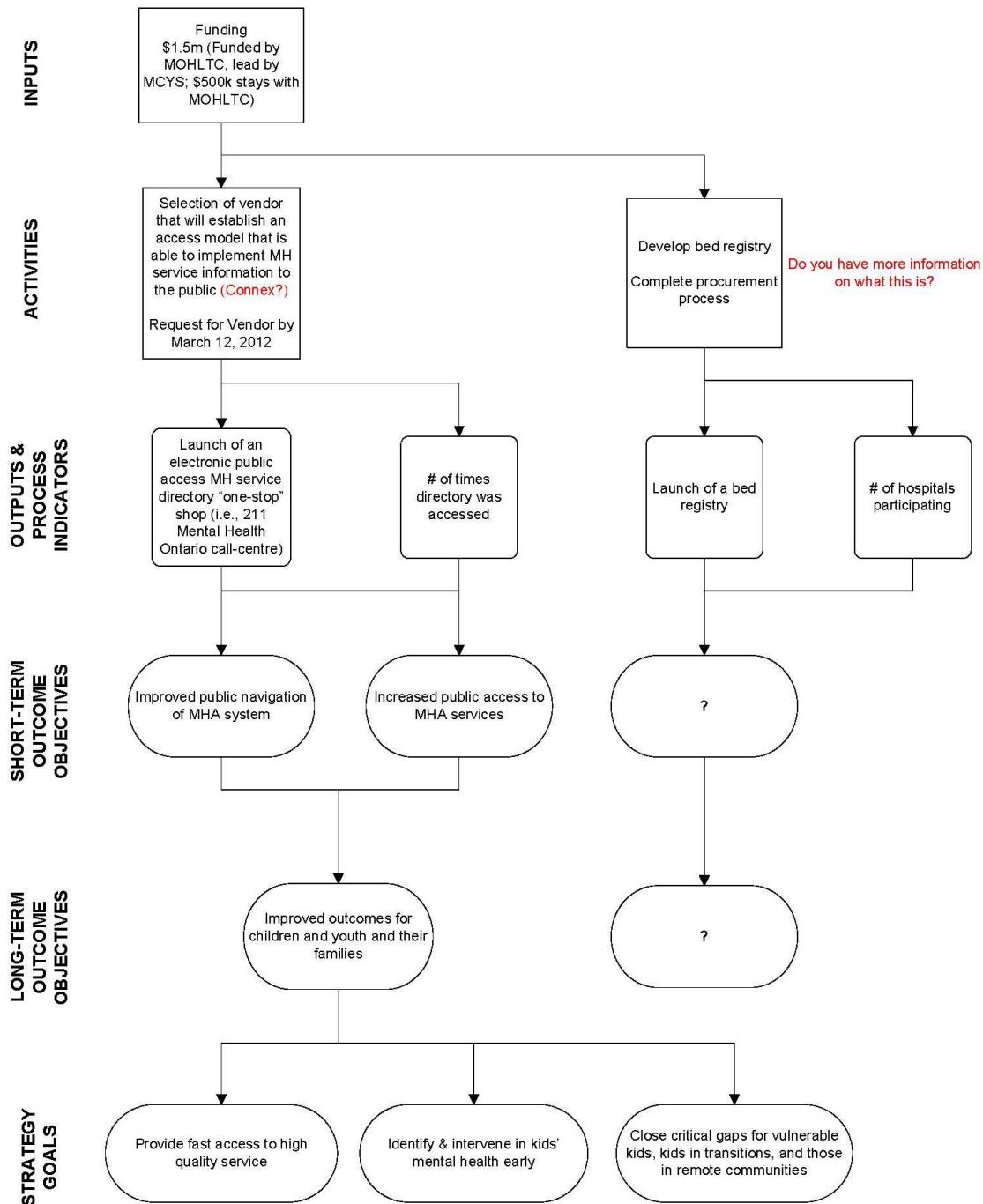
Appendix D. Initiative Implementation Status

| Ministry Responsible | Initiative | Current Status |
|----------------------|---|--|
| MCYS | Improve public access to service information | Final product not yet defined. Work has started on a registry for beds. Initiative at a very preliminary stage |
| | Pilot Family Support Navigator model Y1 pilot | One time funding for 2011-2012 only. No additional funding within the three year strategy. Pilot is in the field. |
| | Funding to increase supply of child and youth mental health professionals | Funding has been released to agencies to hire new workers. Eighty-six agencies hired new workers. |
| | Increase Youth Mental Health Court Workers | Funding announced just recently. Workers have yet to be hired. |
| | Reduce wait times for service, revise service contracting, standards, and reporting | In process of developing a strategic framework and developing outcome domains. System transformation initiative requires an analysis of the structure of the sector. Work is at the preliminary stage. |
| | Combined initiative { | Implement Working Together for Kids' Mental Health |
| | | Will be implemented in 11 communities by the end of year 1. Will be implemented in 50 communities by the end of year 3. |
| | | Implement standardized tools for outcomes and needs assessment |
| | Provide designated mental health workers in schools | Preliminary discussions have begun. Final product not yet defined. |
| | Enhance and expand Telepsychiatry model and services | Service description schedules have been developed. Currently, MHA agencies are negotiating with school boards on what services to provide. |
| | Hire new Aboriginal workers, Implement Aboriginal Mental Health Worker Training Program | Expansion in process (stage of implementation unknown). |
| | Improve service coordination for high needs kids, youth and families | Status unknown. |
| TCU | Provide support at key transition points | In preliminary stage. |
| | | Final product not yet defined. |

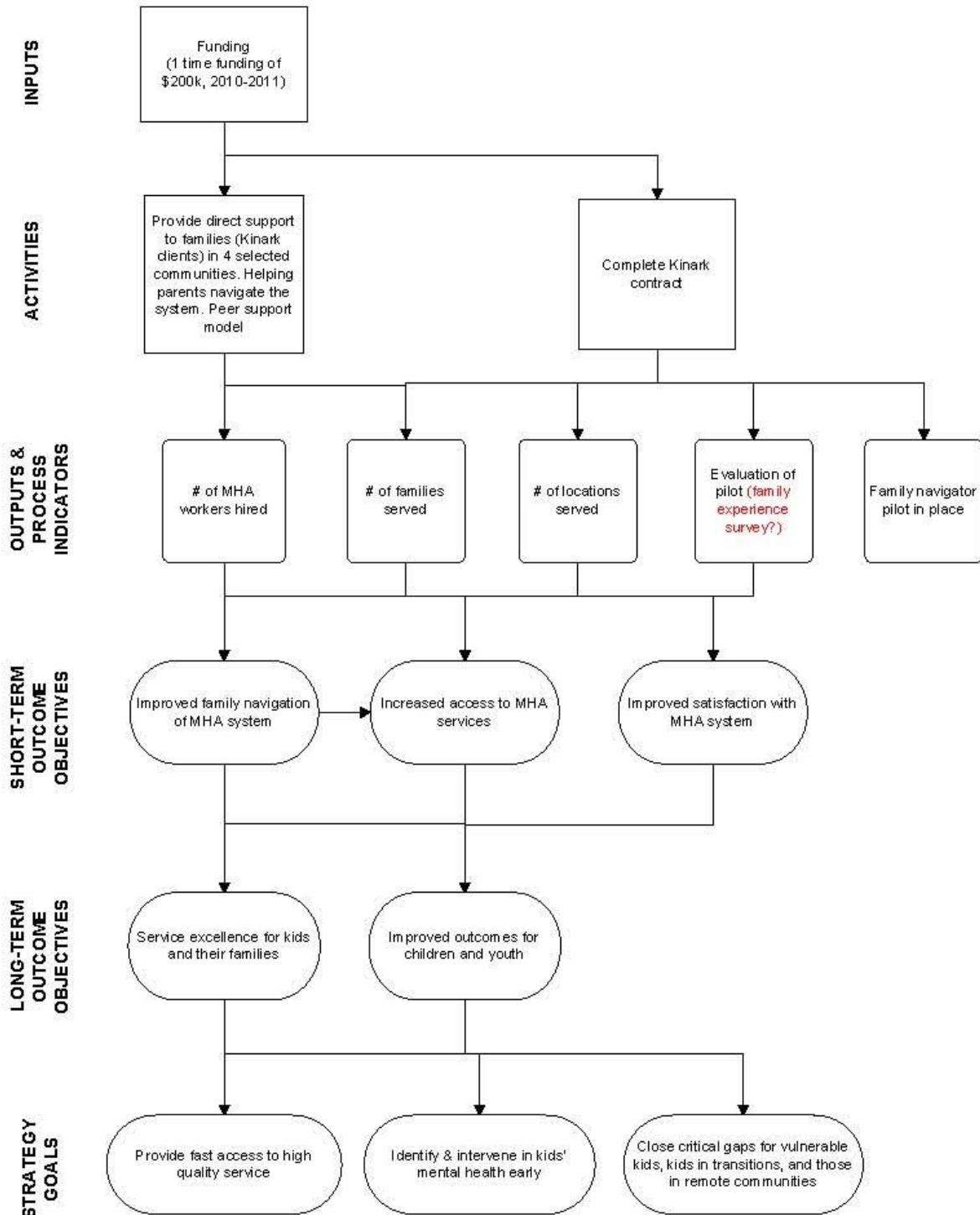
| Ministry Responsible | Initiative | Current Status |
|-----------------------------|---|--|
| EDU | Amend education curriculum to cover mental health promotion and address stigma | Currently preparing for the amendment that begins next year. The curriculum cycle typically takes 6-7 years. |
| | Develop K-12 resource guide for educators | Will be released in draft form in 2012, to be finalized at a later date. |
| | Combined initiative { Implement school mental health ASSIST program and mental health literacy provincially | Pilot has begun in 15 school boards. |
| | Implement Mental Health Leaders in selected School Boards | All 15 Mental Health Leaders have been hired. A baseline survey is currently being conducted. |
| MOHLTC | Provide nurses in schools to support mental health services | Nurses to be hired in Year 2 of the Strategy. |
| | Combined initiative { Expand inpatient/outpatient services for child and youth eating disorders | In progress. |
| | Hire Nurse Practitioners for eating disorders program | Hiring is in progress. |
| | Create 16-18 service collaboratives | Four service collaboratives will be rolled out by CAMH by September 2012. |
| | Combined initiative { Outcomes, indicators and development of scorecard | In progress by ICES. |
| | Strategy Evaluation | In progress by ICES. |

Appendix E. Initiative-Level Logic Models

MCYS Initiative: Improve public access to service information DRAFT – NOT FOR DISTRIBUTION



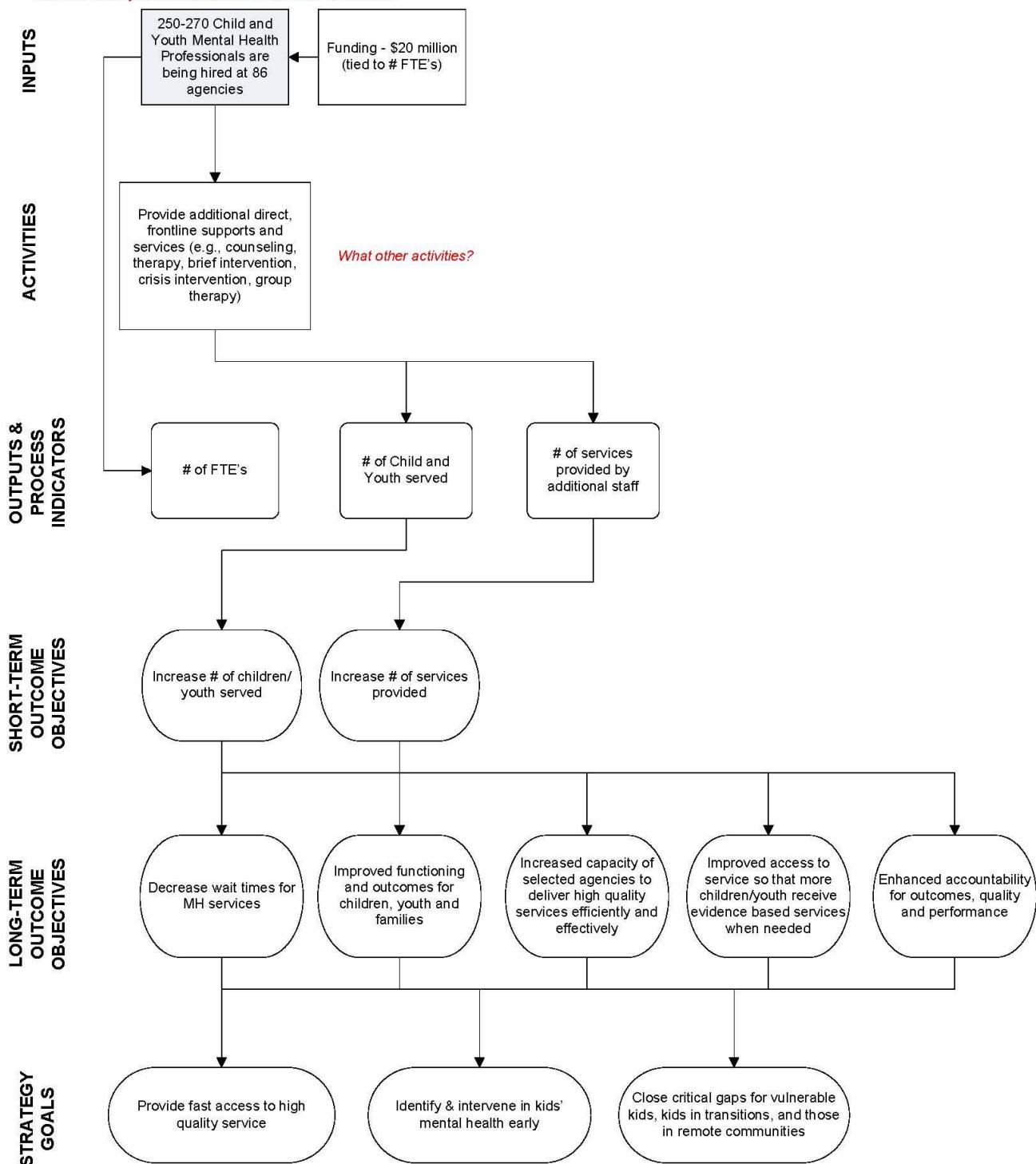
MCYS Initiatives: Pilot Family Support Navigator model Y1 pilot DRAFT – NOT FOR DISTRIBUTION



MCYS Initiative: Funding to increase supply of child and youth mental health professionals

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What kinds of workers? Which agencies? Are any of these workers included in the youth court workers or workers in schools?

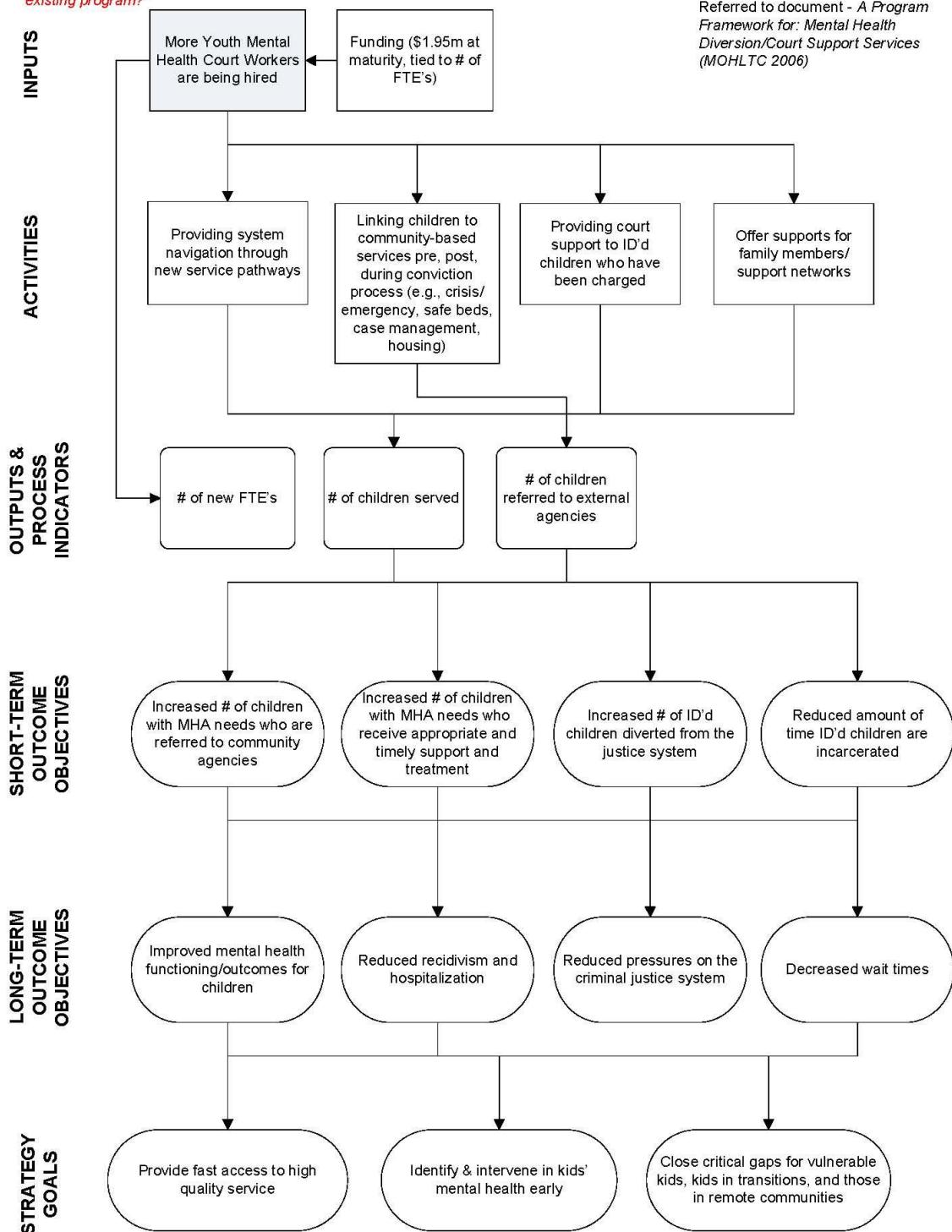


MCYS Initiative: Increase Youth Mental Health Court Workers

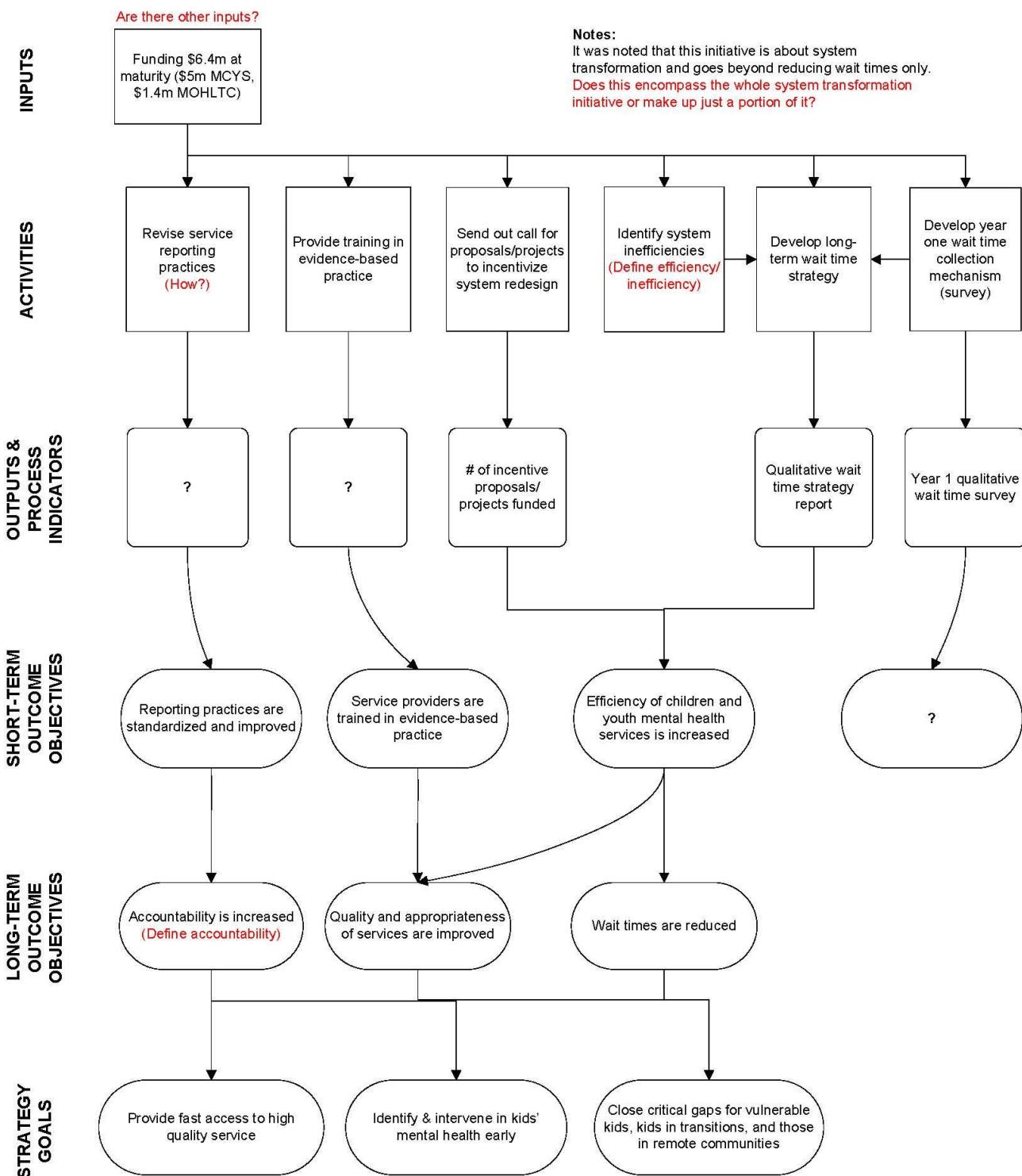
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*How many new workers?
Is this an expansion of an existing program?*

Notes:
Referred to document - *A Program Framework for: Mental Health Diversion/Court Support Services (MOHLTC 2006)*

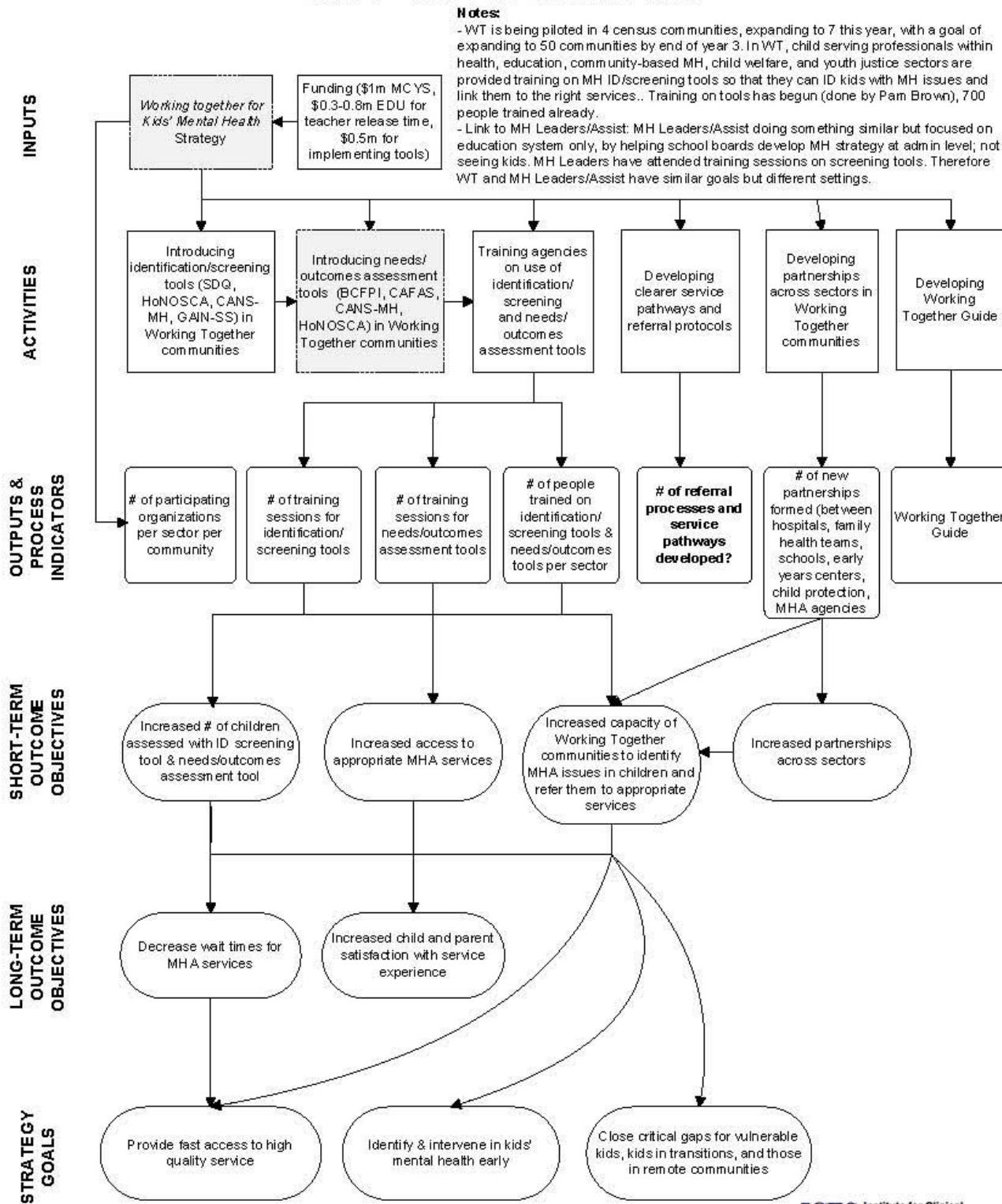


MCYS Initiative: Reduce wait times for service, revise service contracting, standards, and reporting
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MCYS Initiatives: Implement Working Together for Kids' Mental Health & Implement standardized tools for outcomes and needs assessment

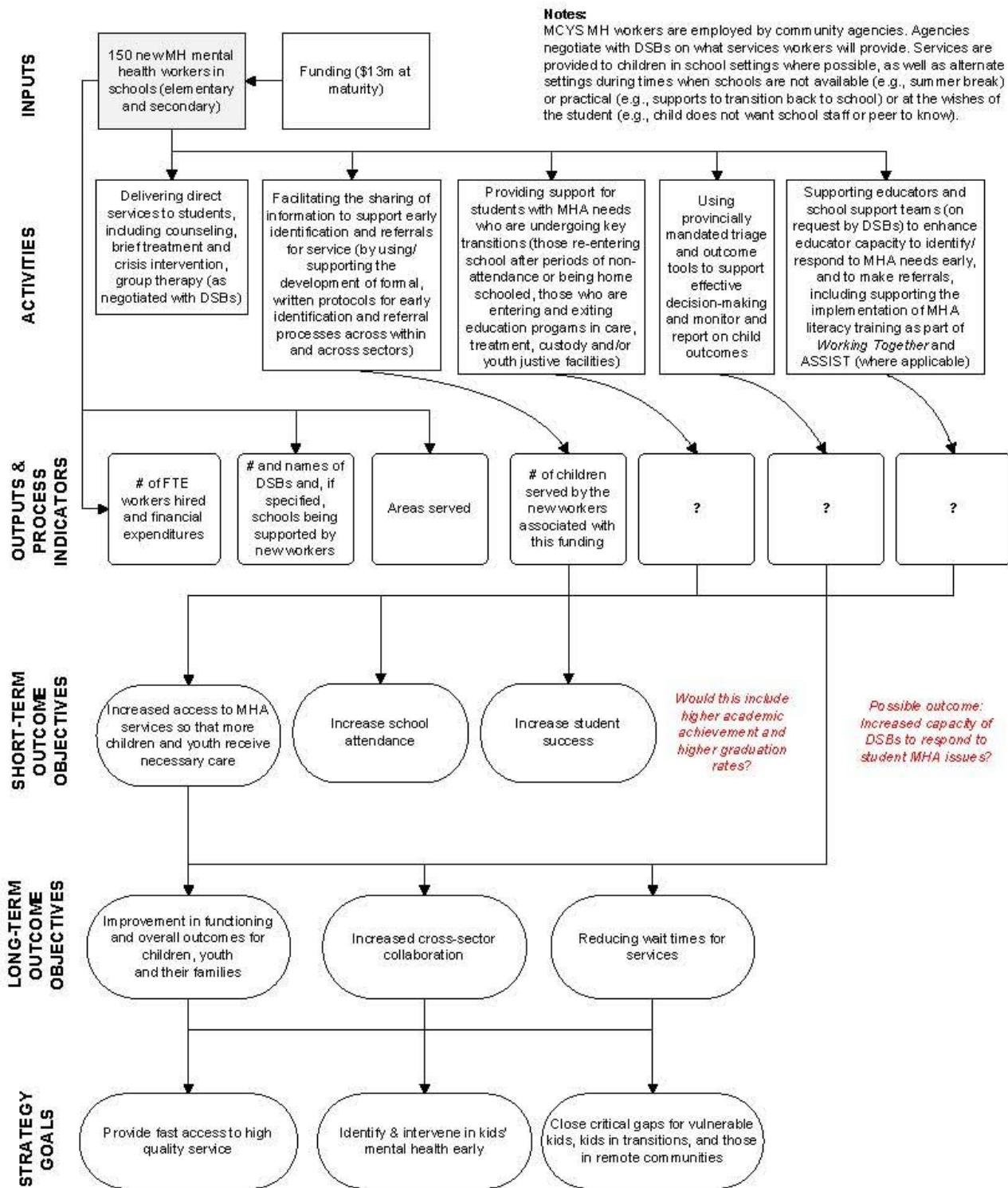
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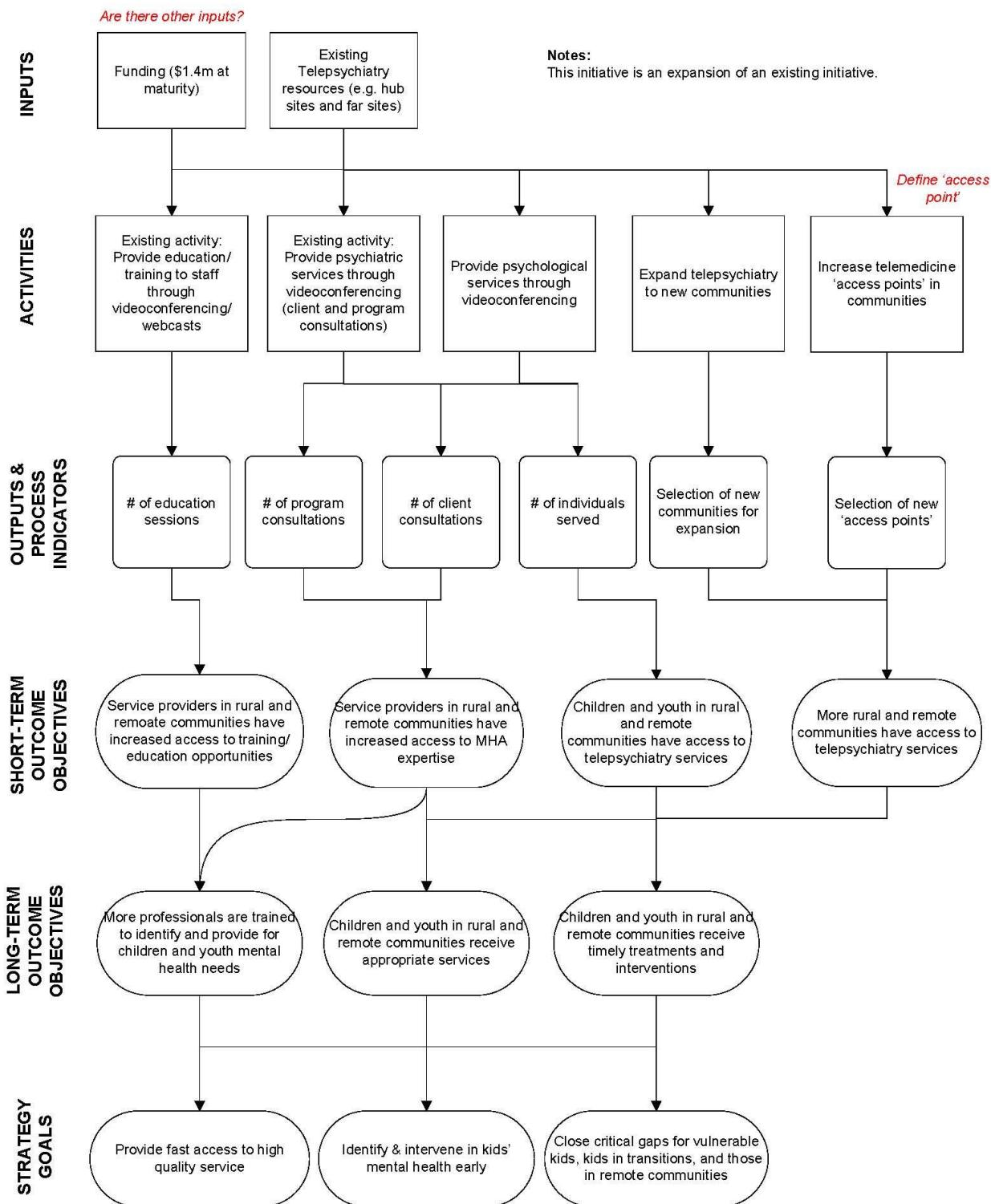
MCYS Initiative: Provide designated mental health workers in schools

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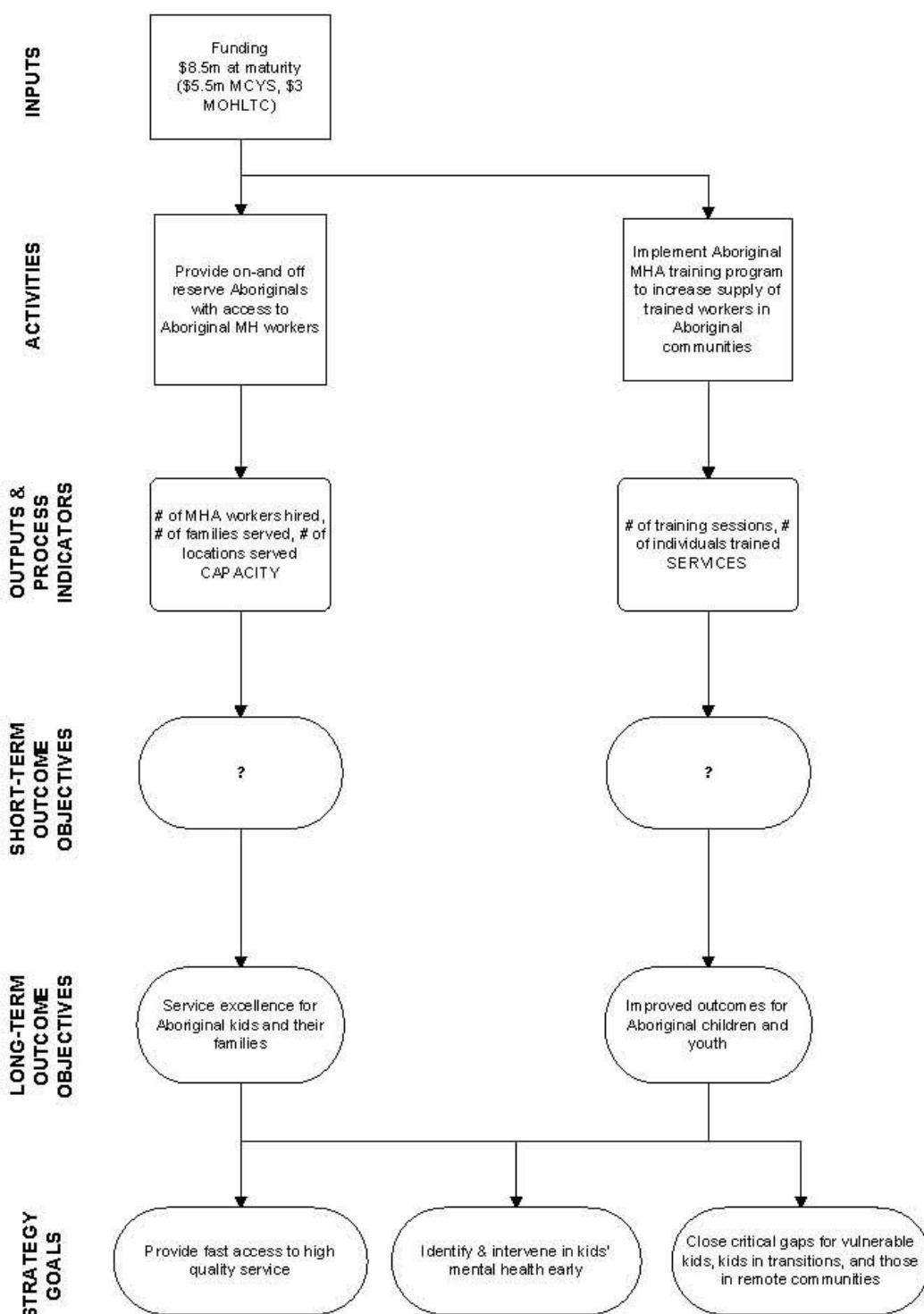


MCYS Initiative: Enhance and expand Telepsychiatry model and services

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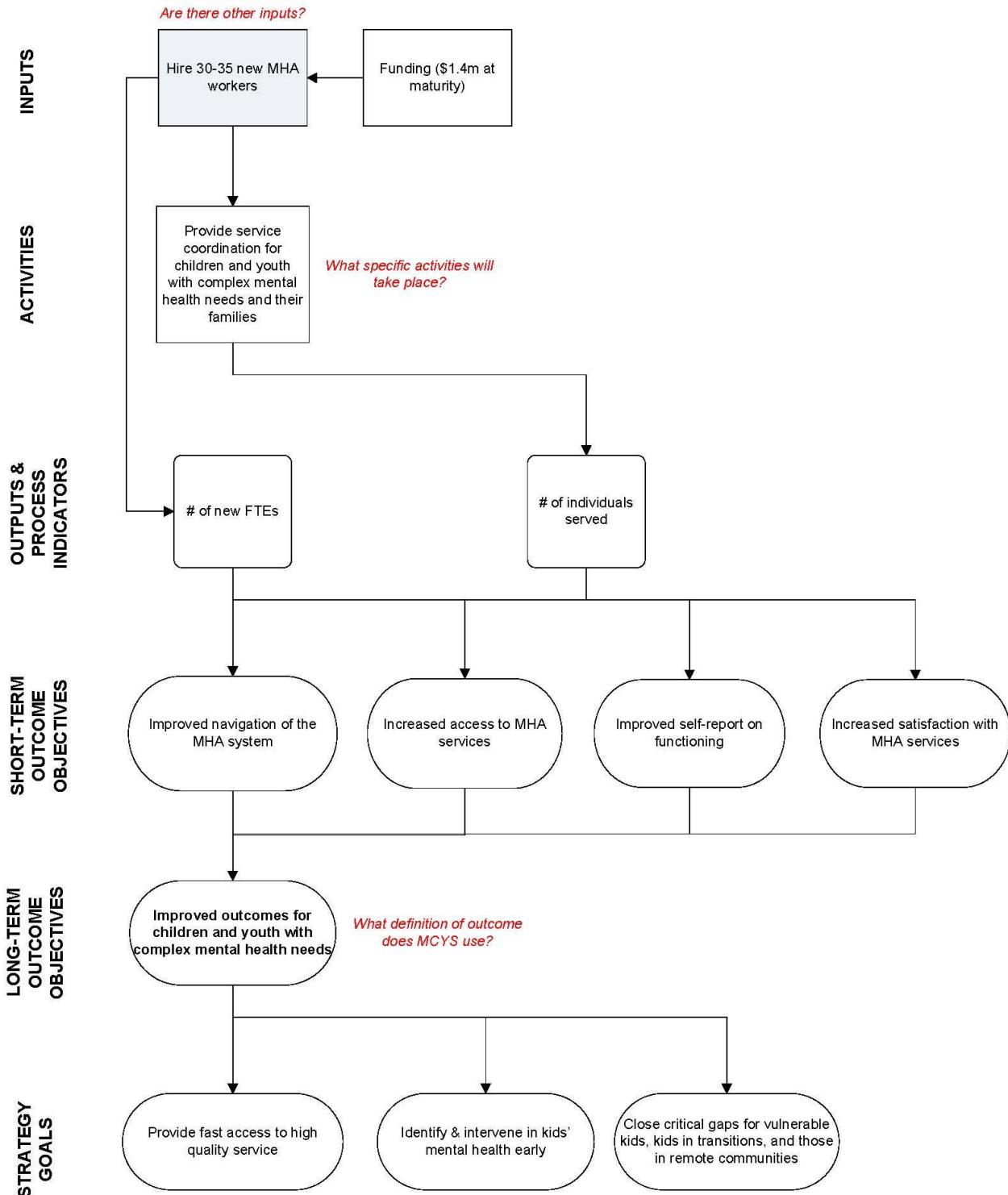


MCYS Initiative: Hire new Aboriginal workers, implement Aboriginal Mental Health Worker Training Program
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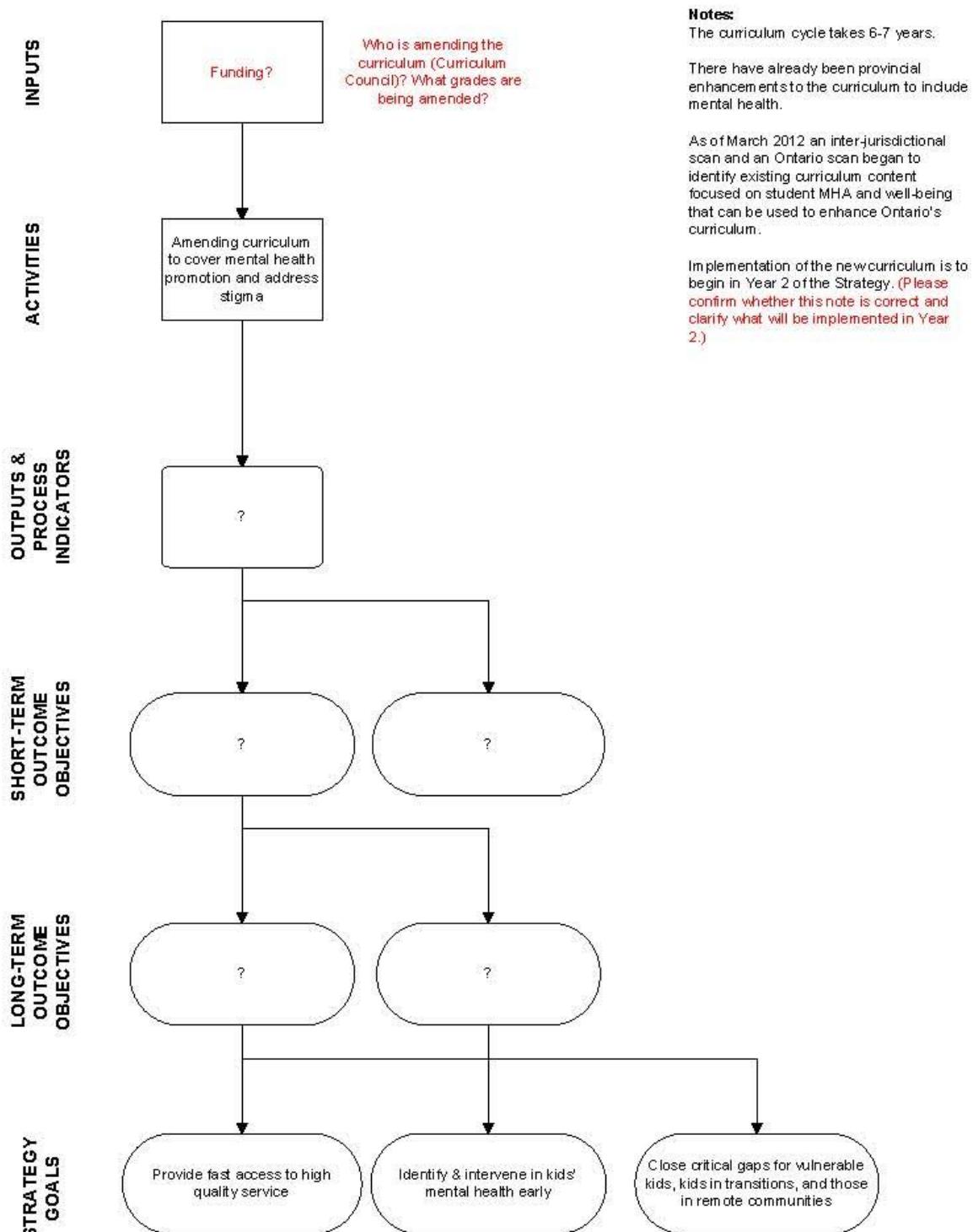


MCYS Initiative: Improve service coordination for high needs kids, youth and families

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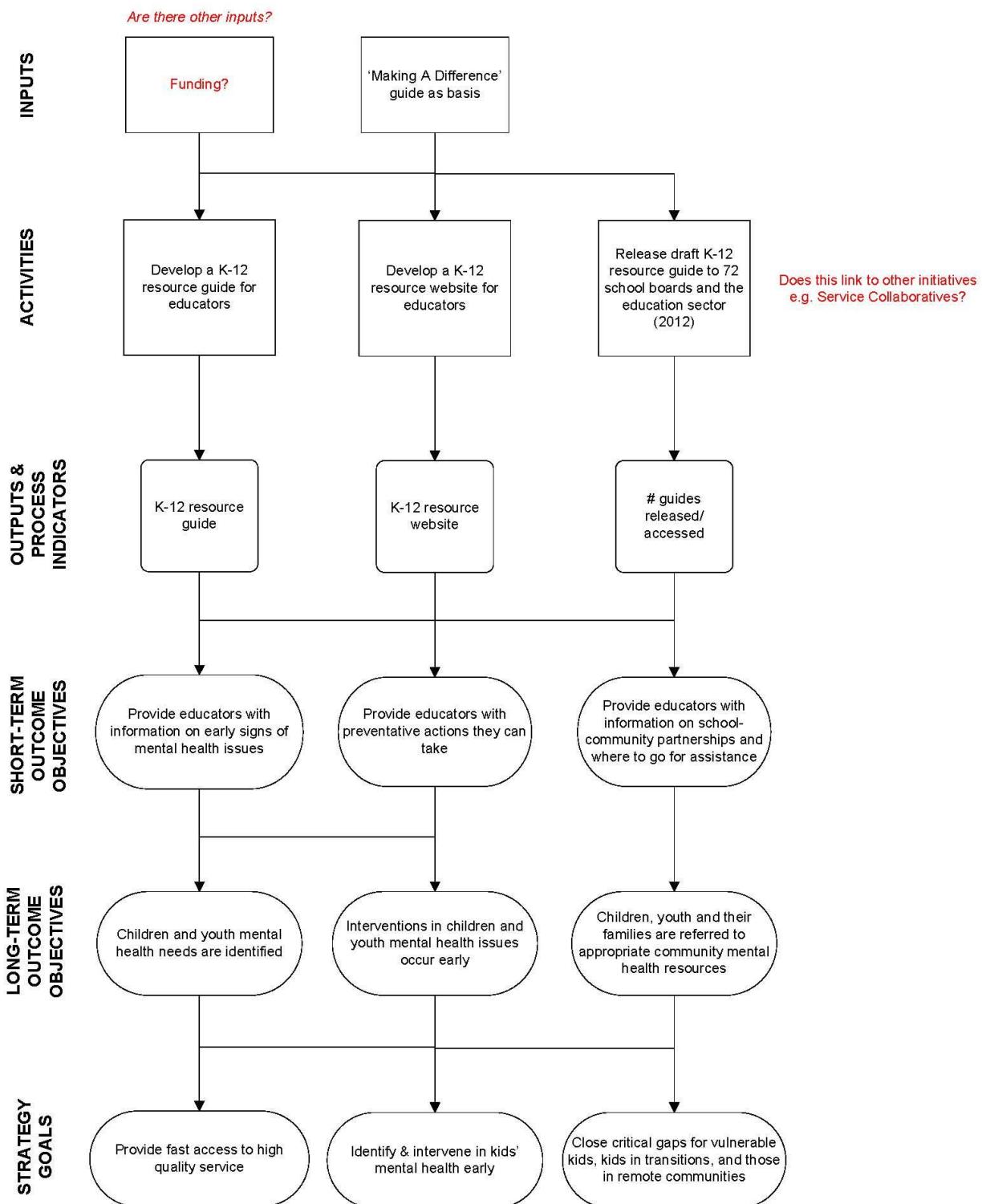


EDU Initiative - Amend education curriculum to cover mental health promotion and address stigma
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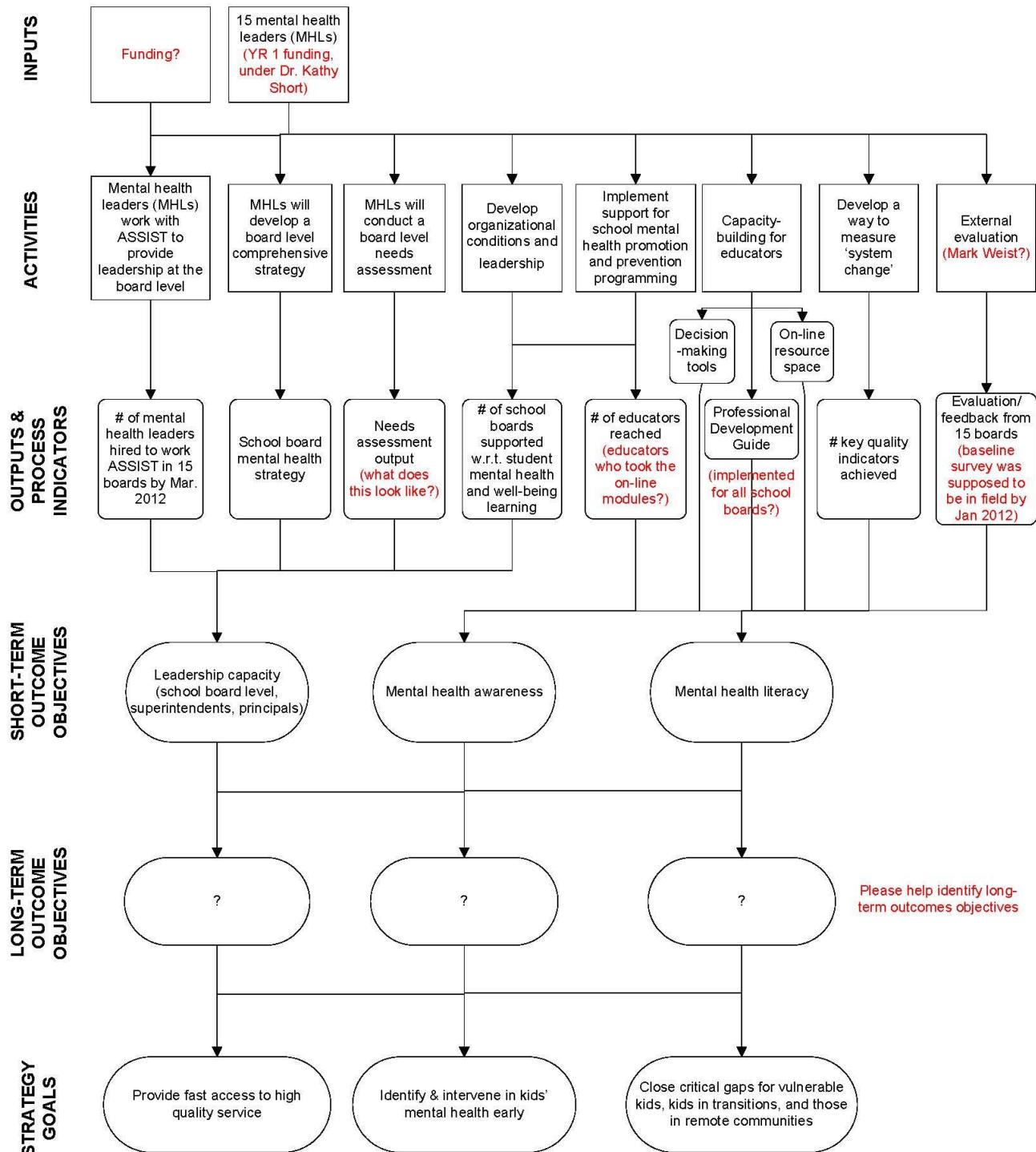
EDU Initiative: Develop K-12 resource guide for educators

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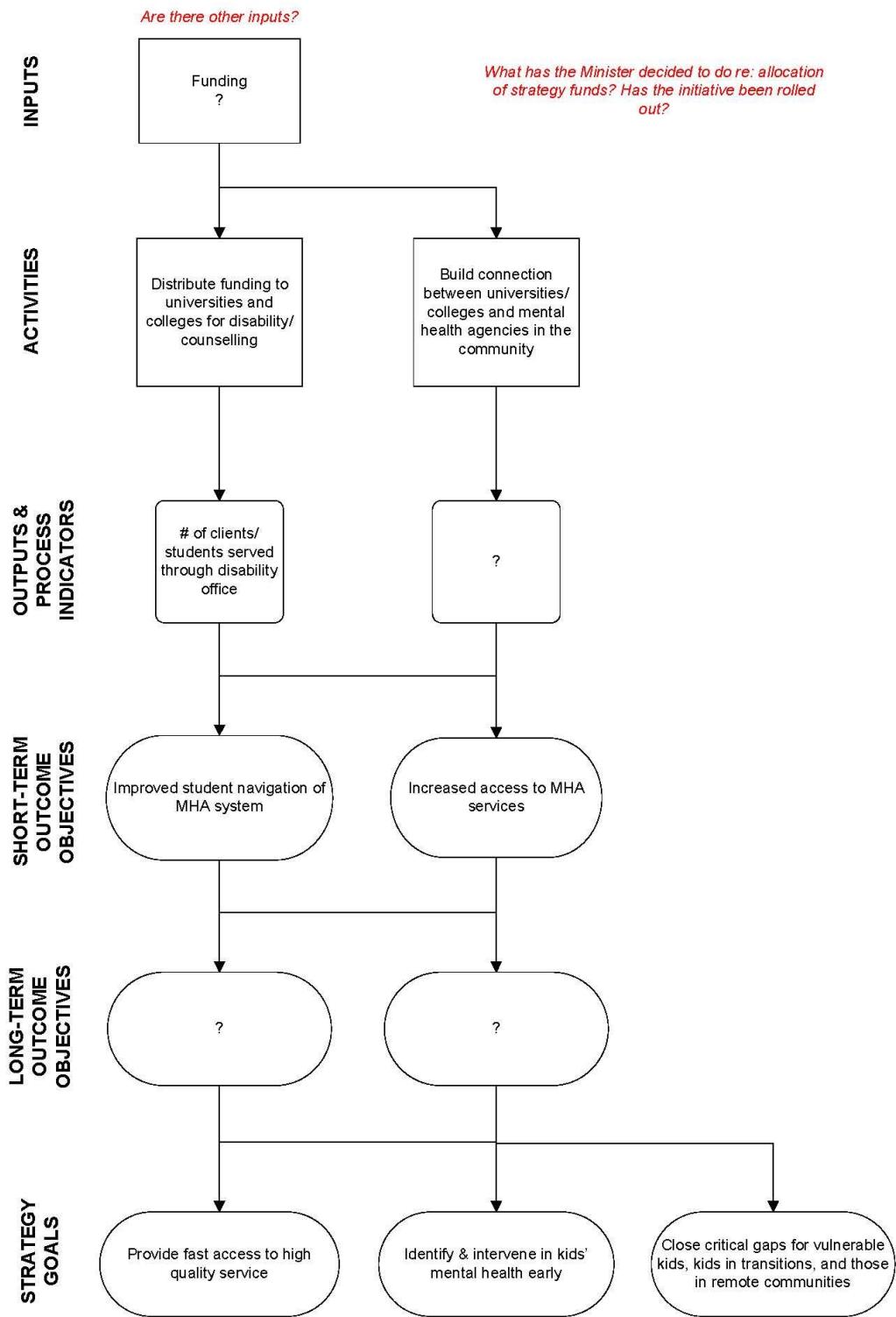
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EDU Initiatives: Implement school mental health ASSIST program and mental health literacy provincially & Implement Mental Health Leaders in selected School Boards
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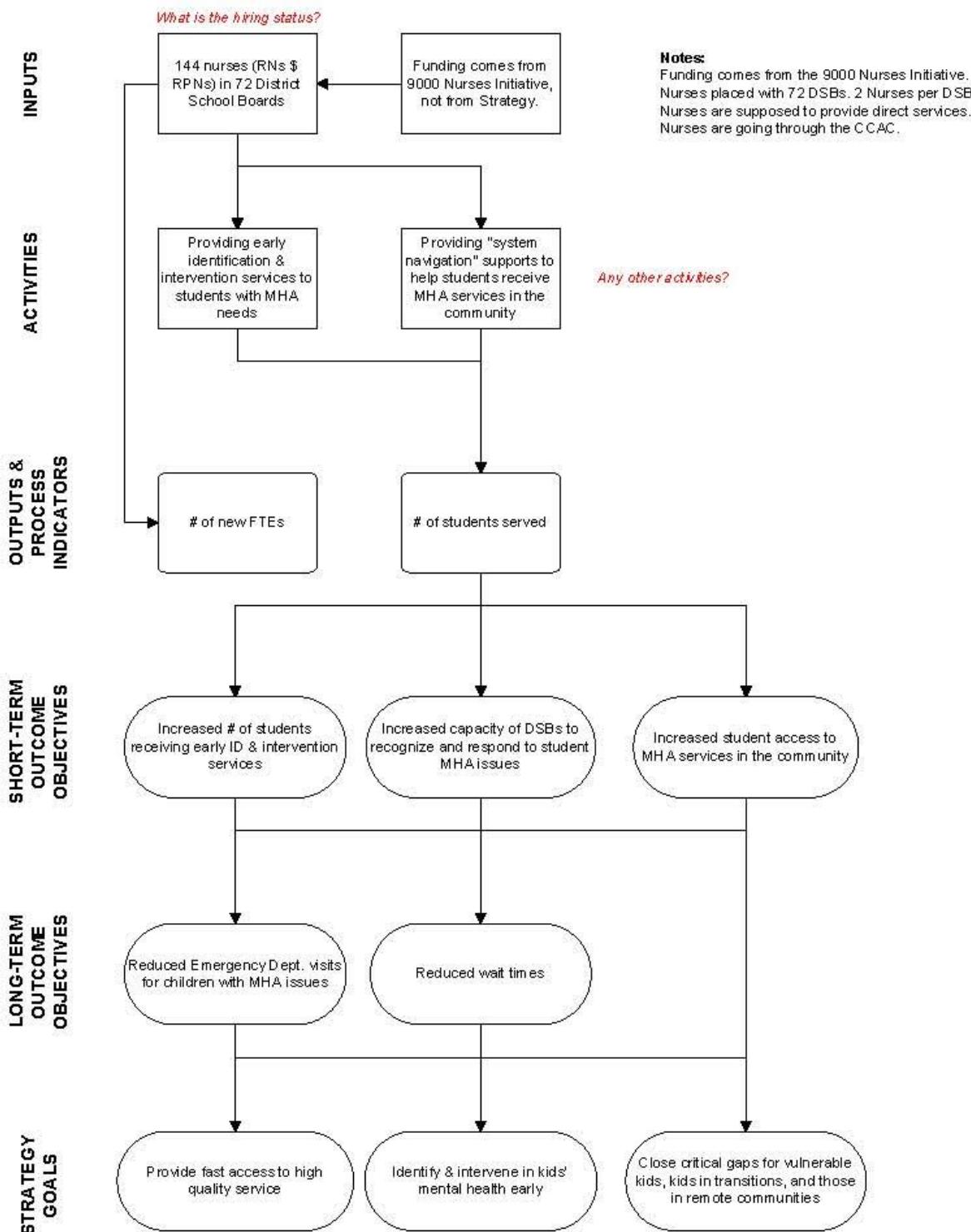
TCU Initiative: Provide support at key transition points

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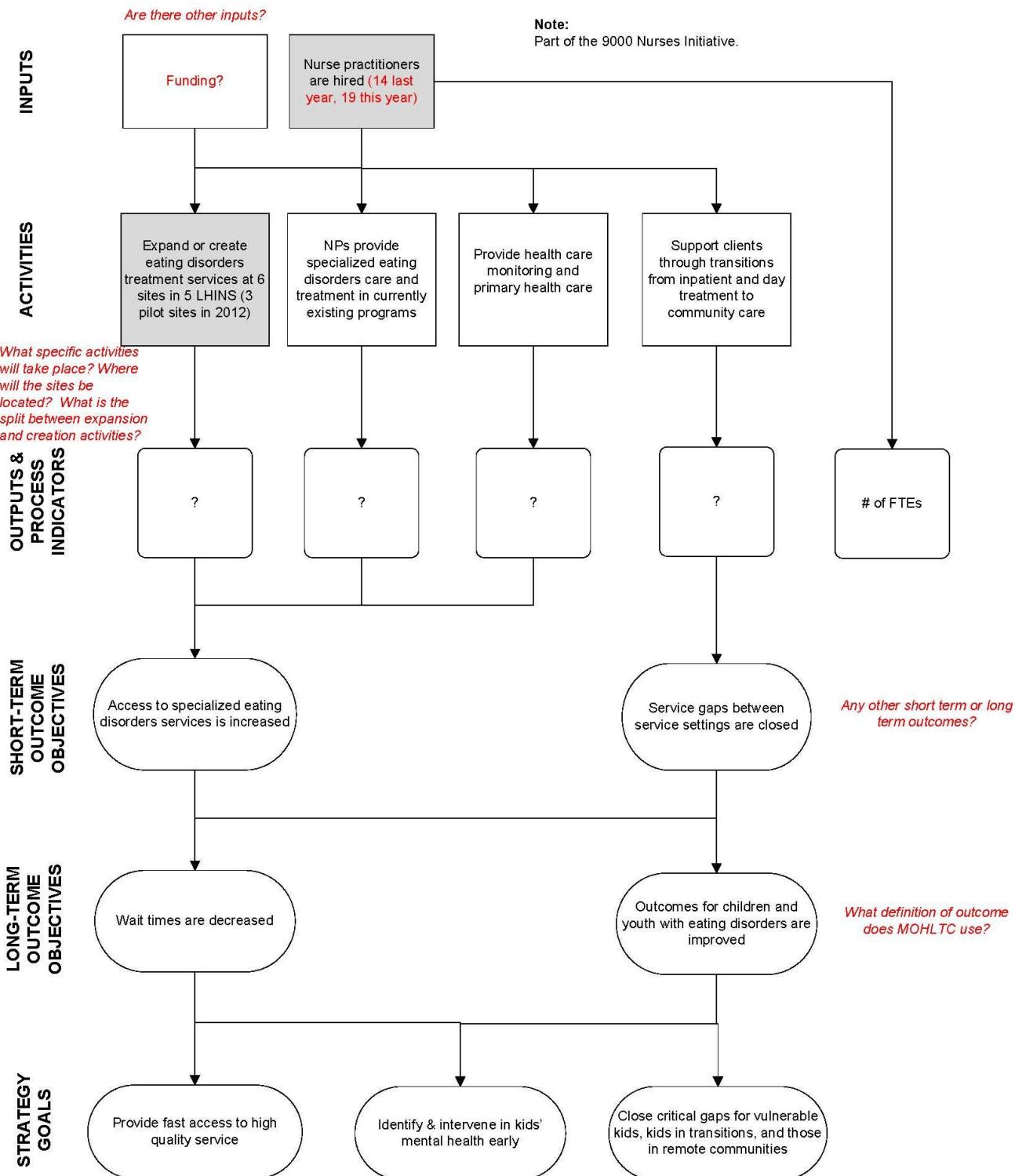


MOHLTC Initiative: Provide nurses in schools to support mental health services

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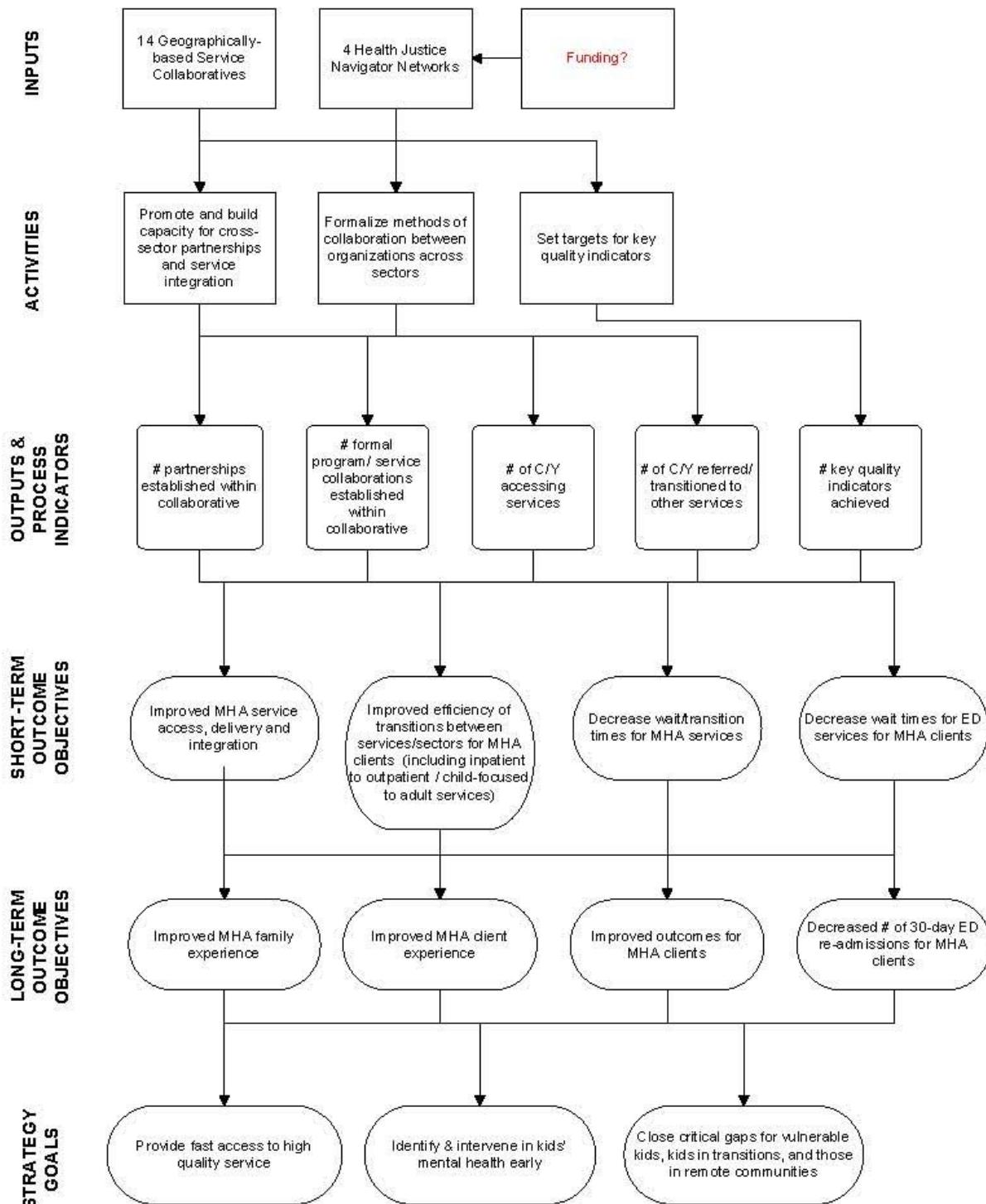
MOHLTC Initiatives: Expand inpatient/outpatient services for child and youth eating disorders & Hire Nurse Practitioners for eating disorders program
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MOHLTC Initiative: Create 16 – 18 service collaboratives

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Appendix F. Child and Youth Mental Health Indicator Inventory

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|-----------------------------|--|--|-----------|-------------|--|
| Acceptability | Client satisfaction | % of clients indicating overall satisfaction with mental health services | | | | Alberta Mental Health Board, 2008 |
| Acceptability | Client satisfaction | % of families indicating overall satisfaction with mental health services (for relevant programs such as: Child, Geriatric, Rehabilitation). | | | | Alberta Mental Health Board, 2008 |
| Acceptability | Client satisfaction | % of referral sources indicating overall satisfaction with mental health services | | | | Alberta Mental Health Board, 2008 |
| Acceptability | Client/consumer involvement | consumers are involved in Regional Mental Health Advisory Councils | | | | Alberta Mental Health Board, 2008 |
| Acceptability | Client/consumer involvement | # and % of clients that are involved in their treatment planning | | | | Alberta Mental Health Board, 2008 |
| Acceptability | Client/consumer involvement | RHA Boards have a mechanism to obtain consumer influence | | | | Alberta Mental Health Board, 2008 |
| Acceptability | Client/consumer involvement | Consumers are involved in program planning | | | | Alberta Mental Health Board, 2008 |
| Acceptability | Client/consumer involvement | Consumers provide self help services to other mental health consumers | | | | Alberta Mental Health Board, 2008 |
| Acceptability | Cultural sensitivity | # and % of clients who indicate that service received were sensitive to their culture, ethnicity and language | | | | Alberta Mental Health Board, 2008 |
| Acceptability | | Consumer/ family satisfaction with service received | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Acceptability | | Consumer/ family involvement in treatment decisions | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Acceptability | | Formal complaints | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Acceptability | | Patient bill of rights | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Acceptability | | Consumer/ family involvement in service delivery and planning | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Acceptability | | Cultural sensitivity | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Acceptability | | Consumer/ family choice of services | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Acceptability | | Consumer/family satisfaction with services received | Percentage of consumers/families satisfied with services as measured by valid method | | | McEwan and Goldner, 2001 |
| Acceptability | | Formal complaints | Existence of a clear process for filing complaints | | | McEwan and Goldner, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|------------|---|--|-----------|-------------|--------------------------|
| Acceptability | | Formal complaints | Number of complaints received by Complaints Commissioner, Mental Health Advocate, Ombudsperson (or equivalent offices), consumer advocacy associations, regional health authority, etc. concerning mental health services and supports | | | McEwan and Goldner, 2001 |
| Acceptability | | Formal complaints | Average time between receipt of complaint and satisfactory resolution | | | McEwan and Goldner, 2001 |
| Acceptability | | Formal complaints | Percentage of consumer (and families) satisfied with resolution of complaints | | | McEwan and Goldner, 2001 |
| Acceptability | | Charter of rights | Existence of a consumer/family charter of rights that has been endorsed by the appropriate health authority and/or government body | | | McEwan and Goldner, 2001 |
| Acceptability | | Consumer/family involvement in treatment decisions | Proportion of consumers and families within a service provider population of persons with serious mental illness who actively participate in decisions concerning their treatment | | | McEwan and Goldner, 2001 |
| Acceptability | | Consumer involvement in service delivery and planning | Proportion of communities within region with established regional consumer advisory groups | | | McEwan and Goldner, 2001 |
| Acceptability | | Consumer involvement in service delivery and planning | Total amount of resources allocated to support consumer advisory structures and their activities as a percentage of total mental health budget | | | McEwan and Goldner, 2001 |
| Acceptability | | Consumer involvement in service delivery and planning | Proportion of regional health authorities within province/territory that have a designated person at the management level to facilitate partnerships and involvement of consumers and families | | | McEwan and Goldner, 2001 |
| Acceptability | | Consumer involvement in service delivery and planning | Number of consumer/family self-directed initiatives | | | McEwan and Goldner, 2001 |
| Acceptability | | Cultural sensitivity | Proportion of consumers within service provider population of persons with serious mental illness who report that staff are sensitive to their language and ethnic/cultural background | | | McEwan and Goldner, 2001 |
| Acceptability | | Cultural sensitivity | Proportion of service staff who are culturally "literate"; i.e. knowledgeable about the history, traditions and beliefs of ethno-cultural minorities | | | McEwan and Goldner, 2001 |
| Acceptability | | Client Satisfaction | Proportion of clients indicating overall satisfaction with mental health services | | | Pasmeny and Slomp. 2008 |
| Acceptability | | Client Satisfaction | Proportion of families indicating overall satisfaction with mental health services (for relevant programs such as: Child, Geriatric, and Rehabilitation). | | | Pasmeny and Slomp. 2008 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|--------------------------------|---|---|---|---|--|
| Acceptability | | Client Satisfaction | Proportion of referral sources indicating overall satisfaction with mental health services | | | Pasmeny and Slomp. 2008 |
| Access | | Penetration/utilization rates | Utilization rates per 100,000 population derived from unduplicated count of all individuals served each year, by break-outs by age (0-12, 13-17, 18-30, 31-45, 46-64, 65-74, 75+), ethnicity (White, African-American, Asian or Pacific Islander, Native American, Hispanic), gender, diagnosis, adults with serious mental illnesses or children with serious emotional disturbances, and setting (inpatient and community services). | Unduplicated number of persons (in a category) served during the year | State population in each of the standard 16-State Study reporting categories (age, sex, race/ethnicity). For diagnosis, the denominator is currently the total state population | Lutterman et al, 2003 |
| Access | | Family member/child and adolescent perception of access | If one of the Youth Services surveys are used, perception of the access to services will be measured by responses to the following items: Good Access to Service: <ul style="list-style-type: none">The location of services was convenient for us.Services were available at times that were convenient for us. Scoring: <ol style="list-style-type: none">Exclude respondents with two or more missing values.Calculate the mean of the items for each respondent.Calculate the percent of scores greater than 3.5. (percent agree and strongly agree). | Total number of respondents with an average scale score > 3.5 | Total number of respondents | Lutterman et al, 2003 |
| Accessibility | Acceptable period | # and % of individuals served within "acceptable time", by program | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Acceptable period | # of days for client to see a mental health specialist (psychiatrist), after a referral from a family physician/general practitioner ("Referral date" to "First Contact Date"). | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Acceptable period | # and % of children served within an acceptable time period | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Appropriateness; Effectiveness | Criminal justice system involvement | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | Geographic distance | % of people in each region who have access to non-emergency mental health services within 60 minutes travel, by usual means | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Innovation | # of clients whose access was improved through innovation | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Innovation | # of days that wait time was reduced through innovation. | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Innovation | Description of innovations | | | | Alberta Mental Health Board, 2008 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|-----------------------|--|----------------------|-----------|-------------|--|
| Accessibility | Leading/Best practice | # and % of programs that have implemented a central intake point according to guidelines in leading/ best practices | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | % of clients registered through a central intake process | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # and % of ACT programs that have implemented services according to leading/ best practices. | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # and % of applicable clients that receive assertive community treatment | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # and % of crisis services that have been implemented according to leading/ best practices | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # of residents that have access to a 24/7 crisis response line | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | Relationships and protocols exist between mental health, emergency rooms, crisis services and police | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # and % of shared care programs that have been implemented according to leading/ best practices | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # and % of clients receiving shared care services | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # of family physicians participating in shared care programs | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # of community mental health staff involved in shared care programs | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # and % of family physicians who indicate satisfaction with access to mental health therapists and specialists | | | | Alberta Mental Health Board, 2008 |
| Accessibility | Leading/Best practice | # and % of single session mental health services that have been implemented according to leading/ best practice guidelines | | | | Alberta Mental Health Board, 2008 |
| Accessibility | | Access to psychiatrists and other mental health professionals | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Wait times for needed services | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Availability of after hours care | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Availability of transportation | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Denial of service | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Consumer/ family perception of accessibility | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Service reach to persons with serious mental illness (SMI) | | | | MOHLTC, 2003, Mental Health Accountability Framework |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|------------|--|--|-----------|-------------|--|
| Accessibility | | Service reach to the homeless | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Access to continuum of mental health services | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Identify human resource gaps | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Access to primary care | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Early intervention | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Accessibility | | Service reach to persons with Serious Mental Illness (SMI) | Treated prevalence of serious mental illness (proportion of individuals receiving at least one insured health service compared to the estimated number of persons with SMI in the region) | | | McEwan and Goldner, 2001 |
| Accessibility | | Service reach to persons with Serious Mental Illness (SMI) | Treated prevalence of schizophrenia (proportion of individuals receiving at least one insured health service for this diagnosis compared to estimated number of individuals in the region with this disorder) | | | McEwan and Goldner, 2001 |
| Accessibility | | Service reach to persons with Serious Mental Illness (SMI) | Treated prevalence of bipolar disorder (proportion of individuals receiving at least one insured health service for this diagnosis compared to estimated number of individuals in the region with this disorder) | | | McEwan and Goldner, 2001 |
| Accessibility | | Service reach to the homeless | Number of homeless clients receiving assertive community treatment as a proportion of the estimated number of homeless people with SMI | | | McEwan and Goldner, 2001 |
| Accessibility | | Access to psychiatrists | Services per 10,000 population by region | | | McEwan and Goldner, 2001 |
| Accessibility | | Access to primary care | Proportion of persons with SMI who had at least one physician visit for non-psychiatric reasons during the last year | | | McEwan and Goldner, 2001 |
| Accessibility | | Access to primary care | Proportion of persons with SMI registered with a primary care physician | | | McEwan and Goldner, 2001 |
| Accessibility | | Access to primary care | Number of primary care outreach services provided to persons with SMI | | | McEwan and Goldner, 2001 |
| Accessibility | | Access to primary care | Proportion of consumers within a mental health service provider population of persons with SMI who are screened for physical health problems | | | McEwan and Goldner, 2001 |
| Accessibility | | Access to primary care | Number of emergency room presentations for medical problems which could be managed in primary care setting | | | McEwan and Goldner, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|------------|--|--|-----------|-------------|---------------------------|
| Accessibility | | Wait-times for needed services | Average time (in days) from expression of desire for service by the client, or referral from another provider, to first face-to-face contact by mental health provider | | | McEwan and Goldner, 2001 |
| Accessibility | | Wait-times for needed services | Average wait-time (in days) from referral to admission to inpatient facility (acute and tertiary care) | | | McEwan and Goldner, 2001 |
| Accessibility | | Wait-times for needed services | Proportion of urgent referrals that are assessed within 48-hours | | | McEwan and Goldner, 2001 |
| Accessibility | | Availability of after-hours care/transportation | Proportion of communities within a region with 24-hour mental health coverage | | | McEwan and Goldner, 2001 |
| Accessibility | | Availability of after-hours care/transportation | Proportion of communities within a region with extended hours (evenings, weekends) mental health coverage | | | McEwan and Goldner, 2001 |
| Accessibility | | Availability of after-hours care/transportation | Services that arrange transportation for clients and their families | | | McEwan and Goldner, 2001 |
| Accessibility | | Denial of service | Number of persons with SMI requesting community mental health service who are refused service | | | McEwan and Goldner, 2001 |
| Accessibility | | Denial of service | Reasons why clients are refused service documented and addressed at a planning level | | | McEwan and Goldner, 2001 |
| Accessibility | | Early intervention | Duration of untreated symptoms (self and/or family defined) | | | McEwan and Goldner, 2001 |
| Accessibility | | Early intervention | Mean age at first treatment contact for persons with psychotic disorders | | | McEwan and Goldner, 2001 |
| Accessibility | | Early intervention | Proportion of clients whose first contact with the system is through emergency departments | | | McEwan and Goldner, 2001 |
| Accessibility | | Early intervention | Dissemination of information to public about symptoms of mental illness and available resources | | | McEwan and Goldner, 2001 |
| Accessibility | | Consumer/family perception of accessibility | Proportion of consumers with SMI satisfied with access to services and supports. May be measured as one component of client satisfaction | | | McEwan and Goldner, 2001 |
| Accessibility | | Percent increase in number of children who access targeted prevention programs | | | | Danseco and Manion, 2004. |
| Accessibility | | Rate of utilization of mental health services by cultural group and demographic characteristics of clients | | | | Danseco and Manion, 2004. |
| Accessibility | | Service outcomes assess increased percentage of children who return to/stay in school | | | | Danseco and Manion, 2004. |
| Accessibility | | Proportion of dollars spent on prevention to dollars spent on treatment services | | | | Danseco and Manion, 2004. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|--------------------------|---|--|---|--|---|
| Accessibility | | Response time for child crisis intervention teams | | | | Danseco and Manion, 2004. |
| Accessibility | | Wait time for child case management services (and other child and youth mental health services) | | | | Danseco and Manion, 2004. |
| Accessibility | | Number of children & youth treated and supported in community settings and number of children & youth in residential settings | | | | Danseco and Manion, 2004. |
| Accessibility | | Standardized assessment of responsiveness – Community Action Program for Children (CAPC) Knowledge of Services Questionnaire | | | | Danseco and Manion, 2004. |
| Accessibility | | Wait-times for services | Count and proportion of adults served within an “acceptable time”, by program | | | Pasmeny and Slomp. 2008 |
| Accessibility | | Wait-times for services | Count of days for client to see a mental health specialist (e.g., psychiatrist) after referral from a general practitioner, i.e., “Referral date” to “First Contact Date”. | | | Pasmeny and Slomp. 2008 |
| Accessibility | | Wait-times for services | Count and proportion of children served within an acceptable time period | | | Pasmeny and Slomp. 2008 |
| Accessibility | | Shared care | Number of family physicians participating in shared care programs | | | Pasmeny and Slomp. 2008 |
| Accessibility | | Shared care | Number and proportion of clients receiving shared care services | | | Pasmeny and Slomp. 2008 |
| Accessibility | | Shared care | Number and proportion of shared care programs that have been implemented according to best practices | | | Pasmeny and Slomp. 2008 |
| Accessibility | | Shared care | Number of community mental health staff involved in shared care programs | | | Pasmeny and Slomp. 2008 |
| Accessibility | | Shared care | Number and proportion of family physicians who indicate satisfaction with access to mental health therapists and specialists | | | Pasmeny and Slomp. 2008 |
| Accessibility | | Access to psychiatrists | Dollars spent per 10,000 population on psychiatry services including fee-for-service, sessional services, outreach services by local health region | | | McEwan and Goldner, 2001 |
| Accessible | Access for those in need | Population receiving care | Percentage of persons resident in the mental health service organisation's defined catchment area who received care from a public sector ambulatory mental health service. | Number of persons resident in the defined MHSO catchment area who are recorded as receiving one or more ambulatory service contact from a public sector mental health service organisation in the reference period. | Number of persons resident in the defined MHSO catchment area within the reference period. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------------------|--------------------------|--|---|---|---|--|
| Accessible | Access for those in need | New client index | New clients as a proportion of total clients under the care of the mental health service organisation's mental health services. | Number of new clients who received services from the mental health service organisation's specialised mental health services within the reference period. | Number of clients who received services from the mental health service organisation's specialised mental health services within the reference period. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Accessible | Access for those in need | New client index (alternate) | The number of people in contact with the mental health service organization who have never been seen by the organization prior to the first contact during the reference period over the total number of people in contact with the mental health service organization during the reference period. | Number of people in contact with the mental health service organization who have never been seen by the organization prior to the first contact during the reference period | Total number of people in contact with the mental health service organization during the reference period | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Accessible | Local access | Comparative area resources | Per capita recurrent expenditure by the organisation on mental health services (stratified by ambulatory, inpatient and community residential) for the target population within the organisation's defined catchment area. | Recurrent expenditure on mental health services partitioned by ambulatory, inpatient and community residential services. | Total number of persons who were resident in the defined catchment area for the mental health service organisation's services, partitioned by ambulatory, inpatient and community residential services. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Accessible | | Percentage of population receiving mental health care. | Proportion of population receiving clinical mental health care. | Number of people receiving clinical mental health services. | Estimated residential population. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Accessible | | Rates of contact with primary mental health care by children and young people | Proportion of the population <25 years who have contact with primary mental health care services subsidized through the Medicare Benefit Schedule | Number of individual consumers aged <25 years seen by in-scope primary mental health care services subsidized through the Medicare Benefits Schedule | Estimated residential population aged <25 years. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Accountability | | Information management capacity to measure percent of clients demonstrating improvement in function from evidence-based practice changes | | | | Danseco and Manion, 2004. |
| Accountability | | Percentage of CYMH service providers that are accredited/externally evaluated | | | | Danseco and Manion, 2004. |
| Accountability | | Clients reporting doing better as a direct result of the services they received (client perception of care) | | | | Danseco and Manion, 2004. |
| Age 4 years and older | | Child/youth functioning (holistic) | | | | Barwick et al, 2004 |
| Age 4 years and older | | Functioning between caregiver and child/youth | | | | Barwick et al, 2004 |
| Age 4 years and older | | School readiness | | | | Barwick et al, 2004 |
| Age 4 years and older | | School dropout | | | | Barwick et al, 2004 |
| Age 4 years and older | | School functioning | | | | Barwick et al, 2004 |
| Age 4 years and older | | Caregiver functioning | | | | Barwick et al, 2004 |
| Age 4 years and older | | Suicidal behaviour | | | | Barwick et al, 2004 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------------|------------------------------------|--|--|--|--|--|
| Ages 0-3 years | | Functioning between caregiver and child | | | | Barwick et al, 2004 |
| Ages 0-3 years | | Caregiver functioning | | | | Barwick et al, 2004 |
| Ages 0-3 years | | Mental Health conditions - school readiness | | | | Barwick et al, 2004 |
| Appropriate | Capable; Compliance with standards | National service standards compliance (RFP) | <p>Proportion of the mental health service organisation's services (weighted by expenditure) that have been reviewed against the National Standards for Mental Health Services. The indicator grades services into four categories:</p> <ul style="list-style-type: none"> • Level 1: Services have been reviewed by an external accreditation agency and judged to have met all national standards. • Level 2: Services have been reviewed by an external accreditation agency and judged to have met some but not all National Standards. • Level 3: Services: (i) are in the process of being reviewed by an external accreditation agency but the outcomes are not known; or (ii) are booked for review by an external accreditation agency. • Level 4: Mental health services that do not meet criteria detailed under Levels 1 to 3. | <p>Total expenditure by mental health service organisations on mental health services that meet the definition of Level X where X is the level at which the indicator is being measured (either Level 1, Level 2, Level 3 or Level 4).</p> | <p>Total mental health service organisation expenditure on mental health services.</p> | <p>Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011; Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia)</p> |
| Appropriateness | Alternate level of care | Clients needs are reviewed to ensure the least intrusive level of care is provided | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Alternate level of care | # and % of clients on discharge wait list awaiting housing | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Alternate level of care | % of clients waiting for alternate level of care beds. | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Alternate level of care | % of clients admitted to acute hospitals with "May Not Require Hospitalization" status | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Continuity | # and % of programs that have a process in place to follow clients through the continuum of services (ex: clients missing depot injection appointments are followed up). | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Continuity | % of discharged clients provided with follow-up within 30 days. | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Continuity | # and % of readmissions to acute mental health beds within 30 days of discharge | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Efficiency | Community/ institutional balance | | | | MOHLTC, 2003, Mental Health Accountability Framework |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------------|-----------------------|--|----------------------|-----------|-------------|--|
| Appropriateness | Leading/Best practice | # and % of Provincial Mental Health Promotion initiatives and strategies that have been implemented according to leading/ best practices | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | # and % of Albertans that are knowledgeable about mental health and mental illness | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | # and % of Albertans that know where to obtain mental health services | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | # and % of case management programs that have been implemented according to suggested leading/ best practices | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | % of outpatient mental health therapists who are trained in CBT (Cognitive Behavioural Therapy) or IPT (Interpersonal Therapy). | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | % of physicians following minimum treatment guidelines for specific diagnoses (e.g. depression and schizophrenia). | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | # and % of day hospital programs that have been implemented according to leading/ best practices | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | # and % of clients served in partial hospitalization programs. | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | # of new and existing self-help programs/ consumer initiatives that have been implemented according to leading/best practices | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | Ratings of consumer satisfaction regarding support in developing self-help groups | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | Ratings of consumer satisfaction regarding support in developing initiatives | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | Budgets that have been allocated to support family self help groups | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | Mechanisms in place to for family self help groups to participate in planning and evaluation of care (service) delivery. | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Leading/Best practice | # and % of mental health clients with vocational/ educational needs that receive supportive services | | | | Alberta Mental Health Board, 2008 |
| Appropriateness | Safety | Involuntary committal rate | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Existence of best practice core programs | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Fidelity: adherence to best practices | | | | MOHLTC, 2003, Mental Health Accountability Framework |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------------|------------|--|---|-----------|-------------|--|
| Appropriateness | | Hospital readmission rate | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Length of stay in acute care | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Time in community programs | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Level of service and setting appropriate to needs of individual | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Consumer/ family perception of appropriateness | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Best practices services/ supports to persons with SMI | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Treatment protocols for co-morbidity | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Availability of community services | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Use of seclusion/ restraints | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Needs based funding/ spending | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Appropriateness | | Existence of best practice core programs | Existence of, or access to (if unavailable in smaller communities), the following continuum of core programs: -Case management/assertive community treatment -Crisis response/emergency services -Housing -Inpatient/outpatient care -Supported consumer initiatives -Family self-help programs -Vocational/educational programs -Early intervention -Primary care | | | McEwan and Goldner, 2001 |
| Appropriateness | | Fidelity of best practices to established model | Evidence of a process for establishing, adopting, and maintaining best practice core programs and system strategies | | | McEwan and Goldner, 2001 |
| Appropriateness | | Fidelity of best practices to established model | Program audit against established criteria | | | McEwan and Goldner, 2001 |
| Appropriateness | | Receipt of best practices services/supports among persons with SMI | Percentage of persons with SMI (or selected diagnoses) receiving assertive community treatment | | | McEwan and Goldner, 2001 |
| Appropriateness | | Receipt of best practices services/supports among persons with SMI | Percentage of persons with SMI (or selected diagnoses) receiving supported housing | | | McEwan and Goldner, 2001 |
| Appropriateness | | Receipt of best practices services/supports among persons with SMI | Percentage of persons with SMI (or selected diagnoses) in receipt of paid employment, supported employment, or other vocational/educational support | | | McEwan and Goldner, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------------|------------|---|--|-----------|-------------|--------------------------|
| Appropriateness | | Treatment protocols for co-morbidity | Number of community mental health programs that screen for substance use disorders and have an appropriate protocol for treatment and/or referral | | | McEwan and Goldner, 2001 |
| Appropriateness | | Treatment protocols for co-morbidity | Proportion of SMI patients with identified substance misuse receiving addictions treatment | | | McEwan and Goldner, 2001 |
| Appropriateness | | Hospital readmission rate | Number of acute-care readmissions occurring within 30 days of discharge as a proportion of the total number of psychiatric separations per year | | | McEwan and Goldner, 2001 |
| Appropriateness | | Involuntary committal rate | Rate of involuntary committals as a percentage of all hospitalizations per annum | | | McEwan and Goldner, 2001 |
| Appropriateness | | Involuntary committal rate | Proportion of involuntary committals with extended leave provision | | | McEwan and Goldner, 2001 |
| Appropriateness | | Average length of stay | Average length of stay for separations with a primary mental health diagnosis by region | | | McEwan and Goldner, 2001 |
| Appropriateness | | Use of seclusion/restraints | Percentage of clients admitted for inpatient psychiatric care who experience seclusion per facility per year | | | McEwan and Goldner, 2001 |
| Appropriateness | | Use of seclusion/restraints | Hours of seclusion as a percent of total client hours during admission per facility per year | | | McEwan and Goldner, 2001 |
| Appropriateness | | Use of seclusion/restraints | Percentage of clients admitted for inpatient psychiatric care who were restrained at least once per facility per year | | | McEwan and Goldner, 2001 |
| Appropriateness | | Use of seclusion/restraints | Hours spent in restraint as a percent of total client hours during admission per facility per year | | | McEwan and Goldner, 2001 |
| Appropriateness | | Least restrictive setting | Ratio served in inpatient care to outpatient care | | | McEwan and Goldner, 2001 |
| Appropriateness | | Consumer/family perception of appropriateness | Proportion of consumers with SMI who believe the service and supports provided are appropriate to their needs. May be measured as one component of client satisfaction | | | McEwan and Goldner, 2001 |
| Appropriateness | | Continuity of care | Count and proportion of programs that have a process in place to follow clients through the continuum of services | | | Pasmeny and Slomp. 2008 |
| Appropriateness | | Continuity of care | Count and proportion of discharged clients receiving follow-up within 1-7, 8-30, 31+ days | | | Pasmeny and Slomp. 2008 |
| Appropriateness | | Continuity of care | Count and proportion of readmissions to acute mental health beds within 0-7, 8-30, 31+ days of discharge | | | Pasmeny and Slomp. 2008 |
| Appropriateness | | Least intrusive level of care | Client needs are reviewed to ensure the least intrusive level of care is provided. | | | Pasmeny and Slomp. 2008 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-------------------|----------------------|--|--|---|---|--|
| Appropriateness | | Least intrusive level of care | Number and proportion of clients on discharge wait lists awaiting housing. | | | Pasmeny and Slomp. 2008 |
| Appropriateness | | Least intrusive level of care | Proportion of clients awaiting less intensive level of care beds. | | | Pasmeny and Slomp. 2008 |
| Appropriateness | | Appropriate spending | Proportion of total expenditures on service recipients with SMI relative to total expenditures on all persons who have received any insured health service for a mental health problem | | | McEwan and Goldner, 2001 |
| Appropriateness | | Appropriate spending | Proportion of funds spent on preventing crises to funds spent on reacting to crises | | | McEwan and Goldner, 2001 |
| Appropriateness | | Appropriate spending | Proportion of investment in informal and consumer-run supports to the investment in formal supports | | | McEwan and Goldner, 2001 |
| Appropriateness | | Appropriate spending | Proportion of mental health sector expenditures on best practice programs to total sector expenditures | | | McEwan and Goldner, 2001 |
| Assessment | | Assessment Timeliness | Mean time in weeks between Referral and Initial Appointment date | | | Birleson et al, 2001 |
| Assessment | | Assessment Completion Rate | No. Accepted clients with recorded diagnosis and ISP/Total No. Clients accepted | | | Birleson et al, 2001 |
| Building Capacity | | % increase in number of training and education events attended by families and the public | | | | MCFD, 2003 |
| Building Capacity | | Increased access to Family Development and Residential resources | | | | MCFD, 2003 |
| Building Capacity | | Number of service providers including primary care practitioners and schools provided consultation by children's mental health | | | | MCFD, 2003 |
| Building Capacity | | Per cent increase in number of children who access targeted prevention programs | | | | MCFD, 2003 |
| Building Capacity | | Number of families referred to self-help and advocacy groups by clinicians | | | | MCFD, 2003 |
| Building Capacity | | Number of self-help and advocacy groups | | | | MCFD, 2003 |
| Building Capacity | | Demographic characteristics of clients | | | | MCFD, 2003 |
| Building Capacity | | Number of collaborative initiatives | | | | MCFD, 2003 |
| Capable | Outcomes orientation | Outcomes readiness | Proportion of mental health episodes with clinical outcome assessments completed. | Number of episodes of care reported with completed outcome assessments. | Total number of episodes of mental health care. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Capable | | Proportion of total mental health workforce accounted for by consumer and carer workers. | Proportion of the state and territory mental health workforce who are consumer and carer workers. | Number of full time equivalent consumer and carer worker positions within Australian state and territory public mental health services. | Number of full time equivalent clinical positions and customer and carer worker positions within Australian state and territory mental health services. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------------------------|-------------------------|--|--|--|----------------------------------|--|
| Client Access | | % alternate level of care days | # of Alternate Level of Care days during period/ # mental health patient days in period x 100 | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Client Complexity | | # of reasons for admission | % of clients admitted with more than one reason for admission | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Client Complexity | | # of diagnoses | % of clients with more than one diagnosis on discharge | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Client Outcomes | | Readmission rate | % of clients readmitted to the same facility within 30 days of discharge | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Client Outcomes | | Global Assessment of Functioning scores \geq 10 points | % of clients with positive difference of at least 10 points between admission and discharge GAF scores | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Client Safety | | % of inpatient falls with injury | # of inpatient falls with injury of serious nature/ # of total falls in period x 100 | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Client Safety | | Restraint use | Prevalence of physical restraint use - percentage of patients whose RAI-MH quarterly assessment indicate use of physical restraints | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Client Safety | | % unapproved leave of absence days | Unapproved Leave of Absence days/ patient days in period x 100 | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Client Safety | | % inpatient medication reconciliation on admission | Total # of inpatient medication reconciliations on admission/ Total # of admissions x 100 | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Clinical Status | | Level of symptom distress | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Clinical Status | | Number of psychiatric emergencies | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Clinical Status | | Ability to understand, recognize and manage/seek help for symptoms both physical and psychiatric | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Clinical Utilization & Outcomes | Appropriateness of Care | OHIP care within 30 days post-discharge | Number of psychiatric discharges receiving OHIP care within 30 days post-discharge (excluding discharges which were followed by readmissions within 30 days)/ Number of psychiatric discharges x 100 | Number of psychiatric discharges receiving OHIP care within 30 days post-discharge (excluding discharges which were followed by readmissions within 30 days) | Number of psychiatric discharges | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Clinical Utilization & Outcomes | Appropriateness of Care | Emergency department visit wihtin 30 days post-discharge | Number of psychiatric discharges visiting an ED within 30 days post-discharge but not readmitted (excluding discharges which were followed by readmissions within 30 days)/ Number of psychiatric discharges x 100 | Number of psychiatric discharges visiting an ED within 30 days post-discharge but not readmitted (excluding discharges which were followed by readmissions within 30 days) | Number of psychiatric discharges | Lin et al., 2005, Hospital Report 2004 - Mental Health |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------------------------|-----------------------|--|---|---|---|--|
| Clinical Utilization & Outcomes | Outcomes | 30-day readmission rate | Number of psychiatric discharges which are readmissions within 30 days (to any Ontario hospital)/ Number of psychiatric discharges x 100 | Number of psychiatric discharges which are readmissions within 30 days (to any Ontario hospital) | Number of psychiatric discharges | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Clinical Utilization & Outcomes | Outcomes | Repeat inpatients | Number of individuals with more than one psychiatric discharge/ Number of individuals with at least one psychiatric discharge x 100 | Number of individuals with more than one psychiatric discharge | Number of individuals with at least one psychiatric discharge | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Clinical Utilization & Outcomes | Outcomes | Outcome measurement by staff | Number of hospitals reporting procedures for collecting staff ratings of outcome and routine use of such ratings/ Number of hospitals x 100 | Number of hospitals reporting procedures for collecting staff ratings of outcome and routine use of such ratings | Number of hospitals | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Clinical Utilization & Outcomes | Outcomes | Outcome measurement by clients | Number of hospitals reporting procedures for collecting client ratings of outcome and routine use of such ratings/ Number of hospitals x 100 | Number of hospitals reporting procedures for collecting client ratings of outcome and routine use of such ratings | Number of hospitals | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Clinical Utilization & Outcomes | Outcomes | Staff ratings of outcome | <i>Under development</i> | | | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Clinical Utilization & Outcomes | Outcomes | Client ratings of outcome | <i>Under development</i> | | | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Clinical Utilization & Outcomes | Service Accessibility | Number of Ontarians hospitalized (by age, sex, region) | Number of patients in defined subpopulation with a psychiatric discharge/ Number of Ontario residents in defined subpopulation x 100,000 population | Number of patients in defined subpopulation with a psychiatric discharge | Number of Ontario residents in defined subpopulation | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Community capacity | | Proportion of primary and secondary schools with mental health literacy component included in curriculum - Secondary schools | Proportion of secondary schools using MindMatters within their curriculum | Number of secondary schools using one or more aspects of MindMatters in their curriculum. | Number of secondary schools. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Community capacity | | Proportion of primary and secondary schools with mental health literacy component included in curriculum - Primary schools | Proportion of primary schools using KidsMatter or an equivalent mental health literacy program in their curriculum. | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Community capacity | | Proportion of front-line workers within given sectors who have been exposed to relevant education and training. | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Community capacity | | Rates of understanding of mental health problems and mental illness in the community | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Competence | | Resources available to train staff to meet required competencies for role | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Competence | | Resources available for on the job development and continuous learning | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Competence | | Meets provincial certification/ professional standards (where applicable) | | | | MOHLTC, 2003, Mental Health Accountability Framework |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------|------------|---|--|-----------|-------------|--|
| Competence | | <i>While appraisal of competencies among mental health practitioners is a critical aspect of ensuring quality mental health care, the state of definition and measurement within this performance domain is very much at a developmental stage. Given this, it is not possible to identify precise indicators reflecting measurable knowledge, skills, and abilities in this section.</i> | | | | McEwan and Goldner, 2001 |
| Context | | Availability of hospital beds, psychiatrists and GPs | Per capita availability of acute and specialty Schedule 1 psychiatric beds, psychiatrists and GPs | | | Durbin et al, 2007 |
| Continuity | | Continuity mechanisms | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Continuity | | Emergency room visits | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Continuity | | Community follow-up after hospitalizations | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Continuity | | Documented discharge plans | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Continuity | | Cases lost to follow-up | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Continuity | | Clear, visible and available points of accountability | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Continuity | | Continuity mechanisms | Percentage of persons with SMI in contact with health care system in receipt of some form of case management | | | McEwan and Goldner, 2001 |
| Continuity | | Emergency room visits | Number of emergency service contacts for persons with SMI per annum | | | McEwan and Goldner, 2001 |
| Continuity | | Community follow-up after hospitalization | Percentage of hospital separations for primary mental diagnoses who have received at least one community mental health service contact within 30 days of discharge | | | McEwan and Goldner, 2001 |
| Continuity | | Community follow-up after hospitalization | Percentage of hospital separations for primary mental diagnoses who have received at least one psychiatry service contact within 30 days of discharge | | | McEwan and Goldner, 2001 |
| Continuity | | Community follow-up after hospitalization | Average number of days between hospital discharge and service contact for primary mental health separations | | | McEwan and Goldner, 2001 |
| Continuity | | Physician reimbursement mechanism for case consultation | Existence of a fee-item within the fee-for-service schedule that reimburses physicians for case consultation/case management activities | | | McEwan and Goldner, 2001 |
| Continuity | | Physician reimbursement mechanism for case consultation | Proportion of physicians reimbursed through non-fee-for-service mechanisms | | | McEwan and Goldner, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|--------------------|------------|--|--|--|--|--|
| Continuity | | Documented discharge plans | Percentage of patients discharged from acute-care facilities (excluding those discharged against medical advice) who have a documented discharge plan | | | McEwan and Goldner, 2001 |
| Continuity | | Cases lost to follow-up | Proportion of persons with SMI lost to follow-up by community mental health services at six months and one year | | | McEwan and Goldner, 2001 |
| Continuity | | Repatriation of SMI clients | Percentage of clients transferred out of region for acute or tertiary care who return to home community upon discharge | | | McEwan and Goldner, 2001 |
| Continuity | | Single point of accountability | Existence of single mental health authority at local level | | | McEwan and Goldner, 2001 |
| Continuity of Care | | Timely ambulatory follow-up after mental health hospitalisation | % of persons hospitalized for primary mental health diagnoses with an ambulatory mental health encounter with a mental health practitioner within 7 and 30 days of discharge | Number of persons hospitalised for primary mental health diagnoses with an ambulatory mental health encounter with a mental health practitioner within i) 7 days and ii) 30 days of discharge. | Number of persons hospitalised for primary mental health diagnoses. | Hermann et al, 2004; Hermann et al, 2006 |
| Continuity of Care | | Continuity of visits after hospitalisation for dual psychiatric/substance related conditions | % of persons discharged with a dual diagnosis of psychiatric disorder and substance abuse with at least four psychiatric and at least four substance abuse visits within the 12 months after discharge | Number of persons with at least four psychiatric and at least four substance abuse visits within the 12 months following discharge. | Number of hospital discharges for dual diagnosis of psychiatric disorder and substance abuse | Hermann et al, 2004; Hermann et al, 2006 |
| Continuity of Care | | Racial/ethnic disparities in mental health follow-up rates | % of persons with a mental healthrelated visit receiving at least one visit in 12 months after initial visit stratified by race/ethnicity | Number of persons with at least one visit in 12 months after initial visit stratified by race/ethnicity | Number of individuals with a mental healthrelated visit. | Hermann et al, 2004; Hermann et al, 2006 |
| Continuity of Care | | Continuity of visits after mental health-related hospitalisation | % of persons hospitalized for psychiatric or substance-related disorder with at least one visit per month for 6 months after hospitalization | Number of persons with at least one visit per month for six months following hospitalisation | Number of persons hospitalised for psychiatric or substance-related disorder | Hermann et al, 2004; Hermann et al, 2006 |
| Continuity of care | | Timeliness of services | the number of each client's services that were referred to other programs and the number of those services for which the referral was accepted within 30 days | | | SEEI Coordinating Centre, 2009 |
| Continuity of care | | Comprehensive of services | the proportion of needed services that were being used by each client | | | SEEI Coordinating Centre, 2009 |
| Continuity of care | | Intensity of services | the proportion of needed services for which there was a match between the amount of services needed and the amount used by each client | | | SEEI Coordinating Centre, 2009 |
| Continuity of care | | 30-day gaps in services | a 30-day period during which the program lost contact with a client who needed services | | | SEEI Coordinating Centre, 2009 |
| Continuity of care | | Coordination of services | the ratio of referrals that were accepted to those that were made for each client | | | SEEI Coordinating Centre, 2009 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|--------------------------|--|--|---|---|--|---|
| Continuity of care | | Accessibility | the proportion of needed services that were within a one-hour traveling distance of where the client lived | | | SEEI Coordinating Centre, 2009 |
| Continuous | Accessible; Cross-setting continuity | Pre-admission community care | Proportion of admissions to the mental health service organisation's acute psychiatric inpatient unit(s) for which a community ambulatory service contact was recorded in the seven days immediately preceding that admission. | Number of admissions to the mental health service organisation's acute psychiatric inpatient unit(s) for which a public sector community mental health service contact was recorded in the seven days immediately preceding that admission. | Number of admissions to the mental health service organisation's acute psychiatric inpatient unit(s). | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011; Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Continuous | Accessible; Safe; Cross-setting continuity | Post-discharge community care | Proportion of separations from the mental health service organisation's acute psychiatric inpatient unit(s) for which a community ambulatory service contact, in which the consumer participated, was recorded in the seven days immediately following that separation. | Number of in-scope separations from the mental health service organisation's acute psychiatric inpatient unit(s) for which a public sector ambulatory service contact in which the consumer participated, was recorded in the seven days immediately following that separation. | Number of in-scope separations for the mental health service organisation's acute psychiatric inpatient unit(s). | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011; Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Co-occurring disorders | | Prevalence of substance abuse/dependence | | | | CMHEI, 2004. |
| Co-occurring disorders | | Quality of Life – Global Rating | | | | CMHEI, 2004. |
| Co-occurring disorders | | % Visited ER in Past 90 Days | | | | CMHEI, 2004. |
| Coordination of Care | | Case management for severe psychiatric disorders | % of persons with a specified severe psychiatric disorder in contact with the health care system who receive case management (all types) | Number in receipt of case management (all types). | Number of persons with specified severe psychiatric disorder in contact with the health care system. | Hermann et al, 2004; Hermann et al, 2006 |
| Deaths | | Rates of suicide in the community | Proportion of the population for whom suicide was the cause of death. | Number of people who have died by suicide over five year period. | Estimated residential population. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Diversion | | Suicide-related calls to police | Per capita number of calls to the police dispatcher for suicide-related behavior | | | Durbin et al, 2007 |
| Diversion | | Police-citizen incidents that involve suicide | Per capita number of police-citizen incidents where suicidal behavior is present | | | Durbin et al, 2007 |
| Diversion | | Mental Health Act apprehensions | Per capita number of police apprehensions under the Mental Health Act | | | Durbin et al, 2007 |
| Diversion | | Pre-trial diversion | The number of users of court diversion programs with a legal status that suggest possible diversion. | | | Durbin et al, 2007 |
| Early return to hospital | | Early readmission after psychiatric discharge | The rate of psychiatric admissions that occur within 30 days of a previous psychiatric discharge. | | | Durbin et al, 2007 |
| Early return to hospital | | Early return to ER after psychiatric discharge | The rate of psychiatric hospital emergency room visits that occur within 30 days of a psychiatric discharge. | | | Durbin et al, 2007 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|--------------------------|------------------------------|---|--|--|---|---|
| Early return to hospital | | Early return to ER after psychiatric ER visit | The rate of psychiatric hospital emergency room visits that occur within 30 days of a previous psychiatric ER visit. | | | Durbin et al, 2007 |
| Effective | Consumer outcomes | Change in consumers' clinical outcomes | The proportion of episodes of care, or partial episodes, where either: <ul style="list-style-type: none">• significant improvement.• significant deterioration.• no significant change. was identified between baseline and follow-up of completed outcome measures. | Number of episodes or partial episodes with completed outcome measures, partitioned by mental health setting, where either significant change/significant deterioration/no significant change was identified between baseline and follow-up within the reference period. | Number of episodes or partial episodes of care with completed outcome measures, partitioned by mental health setting within the reference period. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011; Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Effective | Continuous; Community tenure | 28 day readmission rate | Proportion of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient units that are followed by readmission to the same or to another public sector acute psychiatric inpatient unit within 28 days of discharge. | Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring within the reference period, that are followed by a readmission to the same or another acute psychiatric inpatient unit within 28 days. | Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring within the reference period. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011; Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Effectiveness | | Community tenure | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Effectiveness | | Mortality | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Effectiveness | | Clinical status | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Effectiveness | | Functional status | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Effectiveness | | Involvement in meaningful daytime activity | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Effectiveness | | Housing status | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Effectiveness | | Quality of life | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Effectiveness | | Physical health status | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Effectiveness | | Community tenure | Aggregated number of days hospitalized for psychiatric reasons plus number of days in custody or incarcerated for service recipients with SMI per annum subtracted from 365 | | | McEwan and Goldner, 2001 |
| Effectiveness | | Community tenure | Number of persons with SMI removed from the community for more than 90 days | | | McEwan and Goldner, 2001 |
| Effectiveness | | Mortality | Crude mortality rate for persons with SMI (or specific diagnostic groups) | | | McEwan and Goldner, 2001 |
| Effectiveness | | Mortality | Standardized mortality ratio for persons with SMI (or specific diagnostic group) | | | McEwan and Goldner, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|------------|-------------------------------------|---|-----------|-------------|--------------------------|
| Effectiveness | | Mortality | Average number of years of life lost for persons with SMI who died in the past year, defined as the difference between age at death and current life expectancy | | | McEwan and Goldner, 2001 |
| Effectiveness | | Criminal justice system involvement | Rate of service provider population with SMI apprehended or incarcerated compared to rate for general population | | | McEwan and Goldner, 2001 |
| Effectiveness | | Criminal justice system involvement | Change in number of arrests within 30 days prior to admission to number of arrests at six and twelve months post-admission | | | McEwan and Goldner, 2001 |
| Effectiveness | | Criminal justice system involvement | Number of mental health related police calls | | | McEwan and Goldner, 2001 |
| Effectiveness | | Clinical status | Percentage of service recipients with SMI experiencing reductions in the number and severity of symptoms between admission and follow-up | | | McEwan and Goldner, 2001 |
| Effectiveness | | Functional status | Percentage of service recipients with improved (or maintained) functioning as measured by a standardized global functioning instrument | | | McEwan and Goldner, 2001 |
| Effectiveness | | Employment status | Percentage breakdown of service recipients with SMI classified according to employment status categories defined by the IAPSRS Toolkit | | | McEwan and Goldner, 2001 |
| Effectiveness | | Employment status | Percent of service recipients with SMI attaining independent competitive (paid) employment | | | McEwan and Goldner, 2001 |
| Effectiveness | | Housing status | Percentage breakdown of service recipient with SMI classified according to residential status categories defined by IAPSRS PSR Toolkit | | | McEwan and Goldner, 2001 |
| Effectiveness | | Housing status | Percent of service recipients with SMI in independent or supported housing | | | McEwan and Goldner, 2001 |
| Effectiveness | | Housing status | Number of persons with SMI on housing wait lists | | | McEwan and Goldner, 2001 |
| Effectiveness | | Financial status | Percentage of service recipients with SMI living above the poverty line | | | McEwan and Goldner, 2001 |
| Effectiveness | | Financial status | Percentage of service recipients with SMI receiving disability benefits | | | McEwan and Goldner, 2001 |
| Effectiveness | | Quality of life | Percent of service recipients with SMI reporting improvements in quality of life as determined by a valid measure | | | McEwan and Goldner, 2001 |
| Effectiveness | | Patients not diagnosed | Percent of active clients of community mental health clinics with a formal psychiatric diagnosis recorded in the administrative and clinical record | | | McEwan and Goldner, 2001 |
| Effectiveness | | Clinical outcomes | Number and proportion of clients that meet expected clinical outcome goals of the program. | | | Pasmeny and Slomp. 2008 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------|------------------------|--|--|-----------|-------------|-----------------------------------|
| Effectiveness | | Clinical outcomes | Number and proportion of acute care clients that show a decrease in symptoms post treatment. | | | Pasmeny and Slomp. 2008 |
| Effectiveness | | Clinical outcomes | Number and proportion of rehabilitation clients that show improved quality of life. | | | Pasmeny and Slomp. 2008 |
| Effectiveness | | Clinical outcomes | Number and proportion of clients that show an improved or maintained level of functioning. | | | Pasmeny and Slomp. 2008 |
| Effective | Clinical effectiveness | # and % of clients that meet expected clinical improvement (outcome) goals of program | | | | Alberta Mental Health Board, 2008 |
| Effective | Clinical effectiveness | # and % of acute care clients that show a decrease in symptoms post treatment | | | | Alberta Mental Health Board, 2008 |
| Effective | Clinical effectiveness | # and % of rehabilitation clients that show improved quality of life | | | | Alberta Mental Health Board, 2008 |
| Effective | Clinical effectiveness | # and % of clients that show an improved or maintained level of functioning | | | | Alberta Mental Health Board, 2008 |
| Effective | Co-morbid conditions | # and % of addictions services that are co-located and integrated with mental health services (same location). | | | | Alberta Mental Health Board, 2008 |
| Effective | Co-morbid conditions | # and % of developmental disability services that are co-located and integrated with mental health services (same location). | | | | Alberta Mental Health Board, 2008 |
| Effective | Public confidence | # of Albertans who indicate confidence in the mental health system. | | | | Alberta Mental Health Board, 2008 |
| Effective | Suicides | Rate of suicidal behaviours per 100,000 | | | | Alberta Mental Health Board, 2008 |
| Effective | Suicides | Rate of Emergency Room visits for self harm per 100,000 (component of overall suicidal behaviour rate). | | | | Alberta Mental Health Board, 2008 |
| Effective | Suicides | Rate of Hospitalizations for self harm per 100,000 (component of overall suicidal behaviour rate). | | | | Alberta Mental Health Board, 2008 |
| Effective | Suicides | # and % of Alberta Suicide Prevention Strategy goals that are implemented | | | | Alberta Mental Health Board, 2008 |
| Effective | Suicides | Suicide rates per 100,000 | | | | Alberta Mental Health Board, 2008 |
| Effective | Suicides | PYLL (Potential Years of Life Lost) rates per 100,000 | | | | Alberta Mental Health Board, 2008 |
| Efficiency | Budget | Per capita mental health budget along mental health continuum | | | | Alberta Mental Health Board, 2008 |
| Efficiency | Budget | Mental health expenditures per capita (including import & export) along health continuum (wherever clients access mental health services). | | | | Alberta Mental Health Board, 2008 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------|----------------------------|--|--|-----------|-------------|--|
| Efficiency | Emergency room utilization | # and % of hospital emergency services that meet accreditation criteria for psychiatric services | | | | Alberta Mental Health Board, 2008 |
| Efficiency | Emergency room utilization | # of individuals per 100,000 utilizing ERs. | | | | Alberta Mental Health Board, 2008 |
| Efficiency | Emergency room utilization | # of visits per 100,000 to ERs | | | | Alberta Mental Health Board, 2008 |
| Efficiency | Emergency room utilization | ERs have established relationship and protocol for the assessment, referral and follow up of mental health clients | | | | Alberta Mental Health Board, 2008 |
| Efficiency | | Budget and tools for evaluation and performance monitoring | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Efficiency | | Budgets | Per capita mental health budget along mental health continuum | | | Pasmeny and Slomp. 2008 |
| Efficiency | | Budgets | Mental health expenditures per capita (including import and export) along health continuum (wherever clients access mental health services). | | | Pasmeny and Slomp. 2008 |
| Efficiency | | Emergency room protocols | Number and proportion of hospital emergency services that meet accreditation criteria for psychiatric services. | | | Pasmeny and Slomp. 2008 |
| Efficiency | | Emergency room protocols | Number of individuals per 100,000 population utilizing ERs | | | Pasmeny and Slomp. 2008 |
| Efficiency | | Emergency room protocols | Number of visits per 100,000 population to ERs | | | Pasmeny and Slomp. 2008 |
| Efficiency | | Emergency room protocols | ERs have established relationships and protocols for the assessment, referral and follow up of mental health clients | | | Pasmeny and Slomp. 2008 |
| Efficiency | | Mental health spending per capita | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Efficiency | | Proportion of staff funding spent on administration and support | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Efficiency | | Needs-based allocation strategy | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Efficiency | | Resource intensity planning tool | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Efficiency | | Unit costs and cost per client | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Efficiency | | Mental health spending per capita | Total sector costs (including all health services: physician services, drug benefit plan costs, community mental health services and supports, and inpatient care) divided by the current total population of the region | | | McEwan and Goldner, 2001 |
| Efficiency | | Labour overhead | Proportion of dollars spent on administrative and support full-time employees (FTEs) to dollars spent on total FTEs | | | McEwan and Goldner, 2001 |
| Efficiency | | Needs based resource allocation strategy | Existence of a regional mental health funding formula reflecting a needs-based resource allocation strategy | | | McEwan and Goldner, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------|----------------|--|---|---|--|--|
| Efficiency | | Community/institutional balance | Ratio of spending on community mental health services to institutional mental health services | | | McEwan and Goldner, 2001 |
| Efficiency | | Resource intensity planning tool | Evidence of an explicit process for systematically incorporating client population levels of need into resource intensity estimates | | | McEwan and Goldner, 2001 |
| Efficiency | | Unit costs and cost per client | Total costs divided by total units of service by program | | | McEwan and Goldner, 2001 |
| Efficiency | | Unit costs and cost per client | Total costs divided by the total number of clients served by program | | | McEwan and Goldner, 2001 |
| Efficiency | | Budget for evaluation and performance monitoring | Percentage of mental health sector budget devoted to supporting the organization capacity to conduct performance monitoring | | | McEwan and Goldner, 2001 |
| Efficient | Community care | Average treatment days per three-month community care period | Average number of community treatment days per three month period of ambulatory care provided by the mental health service organisation's community mental health services. | Number of community treatment days provided by the mental health service organisation's community mental health services within the reference period. | Number of ambulatory care statistical episodes (three month periods) treated by the mental health service organisation's community services within the reference period. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Efficient | Community care | Average cost per three-month community care period | Average cost per three month period of ambulatory care provided by the mental health service organisation's community mental health services. | Total mental health service organisation recurrent expenditure on community mental health ambulatory care services within the reference period. | Total number of ambulatory care statistical episodes (three month periods) treated by the mental health service organisation within the reference period. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Efficient | Effective | Staff activity survey | Proportion of direct care FTE time spent on direct clinical care, indirect clinical care, non-clinical activity and other | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | Effective | Open clients per direct care FTE | Case load of a clinician. Interpretation is dependent on the model of service | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | Inpatient care | Average length of acute inpatient stay | Average length of stay of in-scope overnight separations from acute psychiatric inpatient units managed by the mental health service organisation. | Number of patient days in the mental health service organisation's acute psychiatric inpatient unit(s) accounted for by in-scope overnight separations during the reference period. | Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring within the reference period. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Efficient | Inpatient care | Average cost per acute inpatient episode | Average cost of in-scope overnight separations from acute psychiatric inpatient units managed by the mental health service organisation. | Total recurrent expenditure occurring within the mental health service organisation's acute inpatient unit(s) during the reference period. | Number of in-scope acute inpatient episodes occurring within the mental health service organisation's acute psychiatric inpatient unit(s) during the reference period. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Efficient | Responsive | Did not attend' as a proportion of total contact | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Median length of stay | The middle score within the distribution of length of stay during the reference period. | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------|------------|--|--|---|--|---|
| Efficient | | Proportion of overnight separations with acute length of stay \geq 35 days | Number of in-scope overnight separations with length of stay \geq 35 days during the reference period over the number of in-scope overnight separations during the reference period. | Number of in-scope overnight separations with length of stay \geq 35 days during the reference period | The number of in-scope overnight separations during the reference period. | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Average direct care staff hours per acute inpatient stay | Total direct care staffing hours for in-scope acute psychiatric units during the reference period over the total accrued mental health patient days for in-scope acute psychiatric units during the reference period. | Total number of contact hours reported for in-scope acute psychiatric units | Total number of treatment days reported for in-scope acute psychiatric units | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Average weekly contacts per direct care FTE | Total community ambulatory service contacts within the reference period over the total number of community ambulatory direct care FTE within the reference period multiplied by 44 (assumes 44 working weeks per direct care FTE). | Total community ambulatory service contacts | Total direct care ambulatory FTE x 44 | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Average weekly treatment days per direct care FTE | Total community treatment days within the reference period over the total number of community ambulatory direct care FTE within the reference period multiplied by 44 (assumed 44 working weeks per direct care FTE). | Total community treatment days | Total direct care ambulatory FTE x 44 | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Average contacts per treatment day | Total community ambulatory service contacts within the reference period over the total community treatment days within the reference period. | Total number of community ambulatory service contacts reported | Total number of community treatment days | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Average number of persons seen per year per ambulatory direct care FTE | Number of persons receiving one or more service contacts from in-scope community ambulatory services during the reference period over the total number of community ambulatory direct care FTE during the reference period. | Number of people receiving one or more contacts from in-scope ambulatory service teams | Total direct care ambulatory FTE | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Proportion of single treatment day consumers per three-month community care period | Number of consumers receiving one treatment day only per three month community care period during the reference period over the total 3-month community care periods during the reference period. | Number of consumers receiving one treatment day only | Total 3-month periods of care | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Average contacts per three month community care period | Total community ambulatory service contacts within the reference period over the total 3-month community care periods during the reference period. | Total community ambulatory service contacts | Total 3-month periods of care | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Efficient | | Average cost per contact hour | The cost of providing one "treatment hour" where cost includes salaries, administration and overhead and contact hours is the clinical therapist time devoted to the case. | Total expenditure/funding reported for community services | Total contact hours reported | Benchmarking the cost efficiency of community care in Australian child and adolescent mental health services: Implications for future benchmarking (Furber, Brann & Allison, 2011); National Mental Health Benchmarking Project Evaluation Report July 2009 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------|------------|--|--|--|--|--|
| Efficient | | Cost per episode of care | The cost of providing an episode of care, where episode of care is defined as any contact that occurred between the referral and the discharge date and contact time is the total clinical therapist time devoted to the case. | Average cost per "treatment hour" x # of contact hours in the episode of care | | Benchmarking the cost efficiency of community care in Australian child and adolescent mental health services: Implications for future benchmarking (Furber, Brann & Allison, 2011) |
| Efficient | | Total in-scope expenditure | Sum of all in-scope expenditure during the reference period | All in-scope expenditure reported (millions) | | |
| Efficient | | Inpatient expenditure and funding per capital differentials | -Total inpatient expenditure over total catchment population -Total inpatient funding over total catchment population | Total expenditure/funding reported for in-scope inpatient services (acute and non-acute) | Total catchment population for in scope acute inpatient services | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Ambulatory expenditure and funding per capital differentials | -Total ambulatory expenditure over total catchment population -Total ambulatory mental health funding over total catchment population | Total expenditure/funding reported for in-scope ambulatory services | Total catchment population for in scope acute inpatient services | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Community ambulatory mental health services direct care FTE per 100,000 population | Number of community ambulatory mental health services direct care FTE within the reference period over the total catchment population for in-scope community ambulatory mental health services during the reference period. | Number of ambulatory services dirc care FTE | Total catchment population for in scope acute inpatient services | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Acute beds per 100,000 population | Number of in-scope acute inpatient psychiatric beds available during the reference period over the total catchment population for in-scope acute inpatient mental health services during the reference period. | Number of in-scope acute inpatient beds | Total catchment population for in scope acute inpatient services | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Community residential beds per 100,00 population | Number of in-scope community residential psychiatric beds available during the reference period over the total catchment population for in-scope community residential mental health services during the reference period. | Number of in-scope residential beds | Total catchment population for in-scope residential services | |
| Efficient | | Proportion of indirect expenditure | Total indirect expenditure for all in-scope services during the reference period over the total expenditure for all-in-scope services during the reference period. | Total indirect expenditure reported for all in scope services | Total expenditure reported for all in scope services | |
| Efficient | | Proportion of expenditure on salaries and wages | Total salaries and wages expenditure for all in-scope services during the reference period over the total expenditure for all in-scope services during the reference period. | Total salaries and wages expenditure reported for all in scope services | Total expenditure reported for all in scope services | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Full year cost per acute inpatient bed | Total expenditure for all in-scope acute psychiatric inpatient units during the reference period over the number of in-scope acute psychiatric inpatient beds available during the reference period. | Total expenditure reported for in-scope acute units | Number of in-scope acute inpatient beds | National Mental Health Benchmarking Project Evaluation Report July 2009 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------------------------------|------------------------|--|---|---|---|---|
| Efficient | | Staffing mix per acute patient day | Total direct care staffing hours for nursing/medical/allied health for in-scope acute psychiatric units during the reference period over the total direct care staffing hours for in-scope acute psychiatric units during the reference period. | Total direct care staffing hours for nursing/medical/allied health for in-scope acute psychiatric units during the reference period | Total direct care staffing hours for in-scope acute psychiatric units during the reference period | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Full year cost per community ambulatory direct care FTE | Total expenditure for in-scope community ambulatory services within the reference period over the total community ambulatory mental health direct care FTE within the reference period | Total expenditure reported for in-scope ambulatory services | Number of ambulatory services direct care FTE | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Bed-based services as a percentage of total expenditure | The expenditure on bed-based services during the reference period over the total organizational expenditure during the reference period. | Total expenditure on bed-based services during the reference period | Total organizational expenditure during the reference period | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Average cost per acute inpatient bed day | Total expenditure for in-scope acute psychiatric inpatient units during the reference period over the total accrued mental health days for in-scope acute psychiatric units during the reference period. | Total expenditure reported for in-scope acute units | Total accrued mental health care days reported for in-scope acute units | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Efficient | | Average cost per community treatment day | Total expenditure on community ambulatory mental health services during the reference period over the total number of treatment days during the reference period. | Total expenditure/funding reported for in-scope ambulatory services | Total number of treatment days reported | National Mental Health Benchmarking Project Evaluation Report July 2009 |
| Enablers for the mental health system | Governance and funding | % of mental health funding provided through a single, measurable mechanism | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Governance and funding | An accountability framework outlines roles for the mental health system | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Governance and funding | Provincial and regional mental health plan goals are advanced | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Human resources | # and % of health care staff educated through mental wellness campaigns. | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Human resources | # of staff on disability due to mental illness | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Human resources | Rates of mental health FTE's vacant more than 3 months | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Human resources | # of new hires | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Human resources | # of workforce plan strategies implemented (ie: changes to scope of practice). | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Information technology | % of Clinical Staff (across continuum) indicating satisfaction with the ability to access required clinical information. | | | | Alberta Mental Health Board, 2008 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------------------------------|------------------------------------|---|--|---|---|--|
| Enablers for the mental health system | Information technology: Telehealth | Rate of individuals per 100,000 served through telehealth | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Information technology: Telehealth | # of attendees | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Information technology: Telehealth | # of learning events provided via telehealth technology | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Information technology: Telehealth | # of improvements | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Monitoring and evaluation | % of provincial reporting requirement fields received | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Partnership and collaboration | Stakeholder ratings of effectiveness in partnering and collaboration | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Policy | Evaluation of the implementation of the Provincial Mental Health Plan | | | | Alberta Mental Health Board, 2008 |
| Enablers for the mental health system | Program evaluation and research | Provincial Mental Health Research Plan is implemented | | | | Alberta Mental Health Board, 2008 |
| Financial Performance & Condition | Human Resources | Patient care hours | The percentage of all hospital worked hours for staff who are available to carry out activities that contribute directly to the care of mental health patients. This indicator is reported for only four freestanding specialty mental health hospitals and four provincial psychiatric hospitals. | Nursing Inpatient Services, Ambulatory Care, Diagnostic & Therapeutic Services, Community Services Worked Hours + Purchased Service Hours | Total Operating Worked Hours + Purchased Service Hours, excluding Medical Personnel Hours | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Financial Performance & Condition | Human Resources | Nursing worked hours as a percent of nursing total hours | The percentage of inpatient mental health nursing unit-producing staff (UPP) hours spent engaged in activities related to the provision of patient care | Nursing UPP Worked Hours + Purchased Service Hours | Nursing UPP Total Hours | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Financial Performance & Condition | Human Resources | Nursing purchased service hours as a percent of nursing worked hours | Total purchased service hours as a percent of total worked hours for inpatient mental health nursing staff who provide patient care | Nursing Purchased Service Hours | Nursing UPP Worked Hours + Purchased Service Hours | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Financial Performance & Condition | Human Resources | Management and operational support hours as a percent of total hours | The percentage of staff hours spent engaged in activities related to managing or directly supporting inpatient mental health care but not directly involved in providing patient care | Management and Operational Staff Support Total Hours | Management and Operational Support Staff Total Hours + Nursing UPP Total Hours | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Financial Performance & Condition | Human Resources | Registered nurse hours as a percent of nursing total hours | The proportion of nursing unit-producing activity that was provided by registered nursing staff | Registered Nurse UPP Total Hours | Nursing UPP Total Hours | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Financial Performance & Condition | Human Resources | Full-time registered nurse hours as a percent of total registered nurse hours | The proportion of nursing unit-producing activity that was provided by full-time registered nurses | Full-time Registered Nurse UPP Total Hours | Registered Nurse UPP Total Hours | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Financial Performance & Condition | Human Resources | Nursing worked hours as a percent of inpatient care worked hours | The proportion of all unit-producing staff that are nursing staff on inpatient mental health units | INPATIENT MENTAL HEALTH Nursing UPP Worked Hours + Purchased Service Hours | INPATIENT MENTAL HEALTH Nursing UPP Worked Hours + Nursing Purchased Service Hours + THERAPIES UPP Worked Hours + Purchased Service Hours | Lin et al., 2005, Hospital Report 2004 - Mental Health |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------------------|------------|--|--|--|---|--|
| Fiscal Responsibility | | Balanced budget | % of balanced budgets in last 5 years | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Functional Status | | Identifying, accessing, and using community resources to fulfill needs, such as spiritual, social, cultural, recreational, etc. by participation in organizations which are not primarily mental health organizations | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Functional Status | | Developing and managing interpersonal relationships | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Functional Status | | Managing money | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Functional Status | | Managing personal hygiene and appearance, utilizing skills such as use of public transportation, phone books, grocery store, laundromats, etc. to maintain oneself as independently as necessary, and maintaining a home environment in a safe, healthy and manageable fashion | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Functional Status | | Advocating successfully for self with mental health professionals, landlords, families, public safety personnel | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Functional Status | | Remaining in a home as measured by stability and tenure | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Functional Status | | Engaging in meaningful activity, e.g., work, school, volunteer activity, leisure activity | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Functional Status | | Abiding by the law sufficiently to avoid incarceration | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Funding | | Community mental health funding | Per capita community mental health funding allocated by Ministry of Health and Long Term Care | | | Durbin et al, 2007 |
| Health behaviours | | Rates of use of licit and illicit drugs that contribute to mental illness in young people. | Proportion of the population aged 14 and over that use specific licit and illicit drugs in the preceding 12 months. | People aged 14 and over who have used specific drugs. | Estimated resident population aged 14 and over. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Health conditions | | Prevalance of mental illness among people who are remanded or newly sentenced to adult and juvenile correctional facilities - Adult prison populations. | Proportion of adult prisoners who self report they have been told by a doctor or mental health professional that they have a mental illness. | Number of prison entrants who report that they have been told by a doctor or mental health professional that they have a mental illness. | Total number of prison entrants. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---|------------------|---|--|--|---|--|
| Health conditions | | Prevalance of mental illness among people who are remanded or newly sentenced to adult and juvenile correctional facilities - Juvenile detainees. | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Health conditions | | Prevalence of mental illness | percentage of the population who meet the criteria for a diagnosis of a mental illness in the past 12 months. | Population aged 16-85 years with a diagnosable mental illness. | Estimated resident population aged 16-85 years. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Health Status | Deaths: Suicides | # and % of Alberta Suicide Prevention Strategy goals that are implemented | | | | Alberta Mental Health Board, 2008 |
| Health Status | Deaths: Suicides | Suicide rates per 100,000 PYLL (Potential Years of Life Lost) rates per 100,000 | | | | Alberta Mental Health Board, 2008 |
| Health status | | Depression | Prevalence of depression, based on 27 questions in the personal interview of the National Population Health Survey. | Depression scores are based on responses to 27 questions and a scoring algorithm that establishes the probability of suffering a major depressive episode. Individuals classified as depressed have at least a 90% probability of such an episode. | | Manitoba Health, 2000 |
| Health status | | Suicide | Incidence rate of suicides. | Number of suicides per 100,000. | | Manitoba Health, 2001 |
| Health status | | Psychiatric hospitalizations | Hospital discharges due to the major psychiatric causes including affective psychoses, schizophrenic psychoses, alcohol/drug dependence/psychoses, adjustment reaction, depressive disorder (NEC), senile/presenile conditions. | Rates = discharges in one year/100,000 population. | | Manitoba Health, 2002 |
| Health status and determinant (coping skills) | | Psychological well-being: Sense of coherence scale. | Sense of coherence is a positive measure of health, reflecting a view of the world that a) events are comprehensible, b) challenges are manageable, and c) life is meaningful. Minimum score is 4, maximum is 78. | Each of 13 questions on the National Population Health Survey is scored on a scale of 0 to 6. Total scores on the scale are adjusted for one to two missing responses out of the total 13. | | Manitoba Health, 1999 |
| Hospital emergency room utilization | | Psychiatric emergency room visits | This indicator is based on annual volume of hospital emergency room visits for mental health reasons (see earlier definition for mental health admission). Each visit is assigned to a LHIN, based on the residence of the patient rather than location of the hospital. | # emergency room for mental health reasons visits in geographic region | Number residents in geographic region | Durbin et al, 2006. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-------------------------------------|------------|---|---|---|---|---------------------|
| Hospital emergency room utilization | | Early return to emergency room after psychiatric discharge (within 30 days) | This indicator is based on the number of psychiatric discharges that are followed within 30 days by a visit to an emergency room in any Ontario hospital for mental health reasons (but are not admitted). The episode is assigned to a LHIN, based on the residence of the patient at the return ER visit, not the hospital location. | # ER visits within 30 days of inpatient discharge | Total Number of discharges | Durbin et al, 2006. |
| Hospital emergency room utilization | | Early return to ER after initial ER visit (within 30 days) | This indicator is based on the number of visits to the ER for mental health reasons that are followed within 30 days by another visit to an ER in any Ontario hospital for mental health reasons (but are not admitted). The episode is assigned to a LHIN, based on the residence of the patient at the return visit, not the hospital location. | # ER visits within 30 days of a previous ER visit | Total number of ER visits | Durbin et al, 2006. |
| Hospital emergency room utilization | | Repeat ER visits | This indicator is based on the number of individuals who visit the ER for a psychiatric problem and make at least one more visit to any Ontario hospital for mental health reasons within one year (but are not admitted). The person is assigned to a LHIN based on their residence at the last ER visit, not on the hospital location. | # of individuals with more than one psychiatric ER visit | # of individuals with at least one psychiatric ER visit | Durbin et al, 2006. |
| Hospital inpatient utilization | | Psychiatric inpatient admissions | This indicator measures annual inpatient admissions for mental health reasons (see earlier definition for mental health admission). Each admission is assigned to a LHIN, based on the residence of the patient rather than location of the hospital. | # DAD discharges in geographic region | Number residents in geographic region | Durbin et al, 2006. |
| Hospital inpatient utilization | | Average length of stay – general hospital psychiatric inpatients | This indicator measures average length of stay per inpatient episode of care. Alternative level of care days (i.e., days in hospital after treatment for the acute phase of the illness is completed) are excluded from this calculation. | Total patient days in general hospital psychiatric units for psychiatric discharges | Total # psychiatric discharges | Durbin et al, 2006. |
| Hospital inpatient utilization | | Early readmission after psychiatric discharge (within 30 days) | This indicator measures the number of psychiatric discharges that are followed within 30 days by another psychiatric admission, whether to the same or a different hospital. Transfers are not considered readmissions. The readmission episode is assigned to a LHIN, based on the residence of the patient at readmission, not the hospital location. | Number of psychiatric discharges that occur within 30 days of previous discharge | Total Number of psychiatric discharges | Durbin et al, 2006. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|--------------------------------|------------|--|--|---|--|--|
| Hospital inpatient utilization | | Repeat psychiatric inpatient admissions | This indicator measures the percentage of individuals admitted for a psychiatric problem who are admitted at least one more time for a psychiatric problem during one year. The readmission episode is assigned to a LHIN, based on the residence of the patient at the last readmission, not the hospital location. | # of individuals with more than one psychiatric discharge | # of individuals with at least one psychiatric discharge | Durbin et al, 2006. |
| Hospital inpatient utilization | | Alternate level of care days | This indicator measures the percentage of beds days in general hospitals accounted for by persons designated as ALC. A person is designated as ALC "when the physician or designated other indicates that the patient no longer requires acute care" (Canadian Institute for Health Information, DAD Abstracting Manual 2004). | Number of ALC days | Total number of mental health bed days | Durbin et al, 2006. |
| HR Indicator | | Absenteeism rate | Total paid sick hours/ total paid hours | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Human functioning | | Participation rates by people with mental illness of working age in employment - General population | Proportion of population aged 16-64 years with mental illness who are employed | Number of people aged 16-64 years with a mental illness who are employed. | Number of people aged 16-64 years with mental illness. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Human functioning | | Participation rates by people with mental illness of working age in employment - Public mental health service consumers | Proportion of state and territory mental health consumers aged 16-64 years who are employed | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Human functioning | | Participation rates by young people aged 16-30 with mental illness in education and employment - General population | Proportion of population aged 16-30 years with mental illness who are employed and/or are enrolled for study in a formal secondary or tertiary qualification. | Number of people aged 16-30 years with mental illness with a labour force status of 'employed' and/or still at school and/or at another educational institution (studying full-time or part-time) | Number of people aged 16-30 years with mental illness. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Human functioning | | Participation rates by young people aged 16-30 with mental illness in education and employment - Public mental health service consumers | Proportion of state and territory mental health consumers aged 16-64 years who are employed and/or are enrolled for study in a formal secondary or tertiary qualification. | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| Improving Performance | | % increase in # of diagnosed mentally ill children who are helped each year | | | | MCFD, 2003 |
| Improving Performance | | % of children with service plans developed in collaboration between two or more child serving jurisdictions | | | | MCFD, 2003 |
| Improving Performance | | Capacity to measure the following: • % of standardized assessments • % of evidence-based practice approaches • % of clients demonstrating improvement in function | | | | MCFD, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------------------|------------|--|--|-----------|-------------|----------------------------------|
| Improving Performance | | # of clinicians trained | | | | MCFD, 2003 |
| Improving Performance | | # of families educated | | | | MCFD, 2003 |
| Improving Performance | | # of community education forums | | | | MCFD, 2003 |
| Improving Performance | | # of clients educated | | | | MCFD, 2003 |
| Improving Performance | | % of MH clinicians complying with best practice guidelines (determined through supervision and audits, including chart audits) | | | | MCFD, 2003 |
| Improving Treatment | | # of children treated and supported in the community | | | | MCFD, 2003 |
| Improving Treatment | | Length of stay and patient days | | | | MCFD, 2003 |
| Improving Treatment | | Bed utilization and number of admissions to general hospital beds for mental illness | | | | MCFD, 2003 |
| Improving Treatment | | Standardized functional outcome rating system implemented throughout province | | | | MCFD, 2003 |
| Improving Treatment | | Client and family rated improvement in outcomes | | | | MCFD, 2003 |
| Intake and Triage | | Acceptance Rate | No. Registration / Total No. Referrals | | | Birleson et al, 2001 |
| Intake and Triage | | Disadvantaged Client Rate | No. Disadvantaged / Total clients | | | Birleson et al, 2001 |
| Intake and Triage | | First Attendance rate | No. Clients attending first appoint. / No. Clients accepted | | | Birleson et al, 2001 |
| Integrated health care | Access | ED Wait Time - From ER Arrival to PLN Assessment | This indicator measures the median wait time for MH&A patients from their arrival in the emergency department until their assessment by a Psychiatric Liaison Nurse (PLN). | | | Decision Support Services, 2009. |
| Integrated health care | Access | ED Wait Time - From Admit Decision to Transfer to Inpatient Unit | This indicator measures the median wait time in the emergency department for MH&A patients who have been admitted and are awaiting transfer to an inpatient bed. Wait time data are shown for MH&A patients (MCC17) as well as for all admissions. Cases are excluded for those who were admitted, but who never left the ED. | | | Decision Support Services, 2009. |
| Integrated health care | Access | Leading CMG+ Diagnoses for Inpatients | This indicator measures the top ten mental health and addictions diagnoses by CMG+ (case mix groups based on new algorithms from CIHI) for inpatient separations. Data represent separation rates for mental health and addictions CMG+ diagnoses per 1,000 separation overall (any CMG+ diagnosis) among the specified age group. Based on hospital separations, this indicator cannot identify the number of individuals living with MH/A diagnoses. | | | Decision Support Services, 2009. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------------------|------------|--|---|-----------|-------------|----------------------------------|
| Integrated health care | Access | Inpatient Separation Rates | This indicator measures the total number of separations for mental health inpatients for the following age groups: 'all ages,' 13-18 years old, 19-64 years old, and 65 years and older. For each age group, MH&A separations are expressed as rates per 1,000 separations for any diagnosis. Mental Health and Addiction cases are defined by Major Clinical Category 17. | | | Decision Support Services, 2009. |
| Integrated health care | Access | Community Mental Health Centre Utilization Rates | This indicator measures the indirect age-adjusted utilization rate per 1,000 population for Community Mental Health Centres (CMHC) . Outpatient cases are clients who receive services at CMHCs throughout the province and are reported to the Ministry of Health. Cases are included within geographic regions using the client's postal code recorded in the Client Registry at the time of the service. If no postal code was available for the client, the postal code of the Mental Health Centre was used. | | | Decision Support Services, 2009. |
| Integrated health care | Access | Physical Resources | This indicator measures the total physical resources allocated to the MH&A portfolio. Physical resources include: acute psychiatry beds, tertiary care beds, and mental health housing units. | | | Decision Support Services, 2009. |
| Integrated health care | Continuity | Percentage of Persons (Ages 15-64) Hospitalized for a Mental Health or Addictions Diagnosis Who Receive Community or Physician Follow-up Within 30 Days of Discharge | This indicator measures the proportion of persons ages 15-64 who were hospitalized for a mental health and/or addictions diagnosis who subsequently received at least one follow-up with a community mental health and addictions centre or a fee-for-service general practitioner or psychiatrist within 30 days of discharge. | | | Decision Support Services, 2009. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------------------|-------------------|---|---|-----------|-------------|----------------------------------|
| Integrated health care | Effectiveness | 28-Day Readmission Rates for Inpatients | This indicator measures the number of persons discharged from acute care with a primary diagnosis of mental health and/or substance use disorder who have an unplanned readmission for a similar or related diagnosis as a percentage of total discharges for patients with a primary diagnosis of mental health or substance use disorder. Unplanned readmissions within 28 days are shown for MH&A inpatients ages 13-18, 19-64, 65+, and for all ages. Note: data differences may occur between CAbstract and CIHI Portal data because the CAbstract system is constantly being corrected while the CIHI Portal is stagnant. | | | Decision Support Services, 2009. |
| Integrated health care | Efficiency | Average Length of Stay (ALOS) for Inpatients | This indicator measures the total number of inpatient days for patients with a diagnosis of mental health/addictions divided by the number of separations for these patients. Mental health and addictions cases and days are defined by MCC 17. Note : data differences may occur between CAbstract and CIHI Portal data because the CAbstract system is constantly being corrected while the CIHI Portal is stagnant. | | | Decision Support Services, 2009. |
| Integrated health care | Efficiency | Alternate Level of Care (ALC) Days for Inpatients | This indicator measures the percentage of patient days designated as alternate level of care (ALC) for persons with a mental health and/or addictions diagnosis over the total number of inpatient days for these clients. Note: data differences may occur between CAbstract and CIHI Portal data because the CAbstract system is constantly being corrected while the CIHI Portal is stagnant. | | | Decision Support Services, 2009. |
| Integrated health care | Population Health | Attempted Suicide Rates | This indicator measures the number of hospitalizations with a diagnosis of attempted suicide expressed as a rate per 10,000 population in the community of residence for the patient. Suicide attempts are identified using ICD10 codes: X60-X84 & Y87.0. | | | Decision Support Services, 2009. |
| Integrated health care | Population Health | Suicide Rates (ASMR) | This indicator measures the age-standardized mortality rate for suicide (X60-X84, Y870) expressed per 10,000 population. | | | Decision Support Services, 2009. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------------------|-------------------|---|---|-----------|-------------|----------------------------------|
| Integrated health care | Population Health | Gap in the Youth Suicide Rate Between Status Indians and Other British Columbians | This indicator measures the number of suicide deaths among youth ages 15-24 years, expressed as 5-year aggregate rates per 10,000 population, for Status Indians relative to other residents. The gap is defined as the difference between the Status Indian rate and the rate for other residents. A red asterisk (*) above columns indicates that the gap is statistically significant. Significance was determined by comparing the 95% confidence interval around their respective rates. | | | Decision Support Services, 2009. |
| Integrated health care | Population Health | Illicit Drug Death Rates (ASMR) | This indicator measures the age-standardized illicit drug mortality rates (ASMR) per 10,000 population. LHA and HA comparison data are rates calculated per 100,000 population aged 19-64 years. Illicit drug deaths are placed in the region where the event occurred and do not represent where the individual resided. | | | Decision Support Services, 2009. |
| Integrated health care | Safety | Adverse Event Rates | This indicator measures the number of reported incidents, expressed as a rate per 1,000 separations, for designated psychiatric inpatient units and for Fraser Health overall. Data are presented for "all types" (total), as well as for five specific types of incidents: falls, medication variance, self-harm/suicide, aggression/assault, and patient elopement/wandering. (Note: Data are affected by underreporting and selective reporting. In addition, approximately 5% of incident reports contain spoiled data and these reports are excluded from the analyses.) | | | Decision Support Services, 2009. |
| Integrated health care | Safety | Rate of Adverse Drug Effects for Inpatients | This indicator measures the number of inpatient separations with adverse drug effects (type 2 diagnoses), expressed as a rate per 1,000 mental health inpatient separations for the following age groups: 'all ages', 13-18 years old, 19-64 years old, and 65 years and older. Adverse drug effects were conditions that occurred post-admission and were due to the adverse result of a drug/medication given or taken. The drug/medication could be ingested, injected, inhaled or applied topically. | | | Decision Support Services, 2009. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------------------|------------|---|---|--|--|----------------------------------|
| Integrated health care | Safety | Suicide Attempts and Suicides for Inpatients | This indicator measures the number of in-hospital suicide attempts and suicides, and may include cases who were on approved hospital leave. Data are also expressed as a rate per 1,000 MH/A separations (MCC17). The analysis includes those cases with intentional self harm (X60-X84) and post-admit co-morbidity of injury or poisoning. | | | Decision Support Services, 2009. |
| Integration | | Standardized assessment of integration - Human Services Integration Measure | | | | Danseco and Manion, 2004. |
| Integration | | Standardized assessment of integration - System of Care Practice Review (SOCPR) | | | | Danseco and Manion, 2004. |
| Integration | | Standardized assessment of integration - Service Integration Scale | | | | Danseco and Manion, 2004. |
| Integration | | Number of unplanned departures per patient discharge in 3-month period | | | | Danseco and Manion, 2004. |
| Integration | | Percentage of children and youth within the CYMH system with a formal plan of care which includes transitions | | | | Danseco and Manion, 2004. |
| Integration | | Effective transitions related to treatment and continuity of care - SOCPR | | | | Danseco and Manion, 2004. |
| Integration | | Parents' perceptions of family-centeredness of services using standardized measure – Measure of Processes of Care (MPOC-20) | | | | Danseco and Manion, 2004. |
| Justice system contact | | Sentenced jail admissions with mental illness | This indicator is based on the number of individuals serving sentences (sentenced admissions) in Ontario adult institutions for non-violent offences who have mental health concerns. Sentenced admissions include any sentences to incarceration imposed during the fiscal year. The offender may have been admitted initially on remand and subsequently sentenced, or admitted directly on the sentence. | # of sentenced jail admissions with LSI where record indicates mental health issue | # of sentenced jail admissions with LSI assessment | Durbin et al, 2006. |
| Justice system contact | | Police apprehensions under the mental health act | | | | Durbin et al, 2006. |
| Justice system contact | | Police apprehensions under the MHA for suicide related concerns | | | | Durbin et al, 2006. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------------------------------|--|--|---|-----------|-------------|------------------------------------|
| Justice system contact | | Suicide calls to police | the number of police dispatches for suicidal behavior | | | Durbin et al, 2006. |
| Mental health system capacity | | Community mental health funding | This performance indicator provides information on the capacity of the community mental health sector to deliver service. It includes MoHLTC allocations to transfer payment agencies for delivery of mental health care. | | | Durbin et al, 2006. |
| Mental health system capacity | | Psychiatric inpatient bed availability | This contextual indicator reports availability of acute and specialty psychiatric beds (Total psychiatric Beds = acute beds + specialty beds) | | | Durbin et al, 2006. |
| Mental health system capacity | | General practitioner/psychiatrist availability | This contextual indicator reports availability of psychiatrists and general practitioners. FTE counts obtained directly from ONT Physician Workforce Database. | | | Durbin et al, 2006. |
| Non-medical determinants of health | Living and working conditions: housing | # of people waiting for access to appropriate level of housing | | | | Alberta Mental Health Board, 2008 |
| Non-medical determinants of health | Living and working conditions: housing | # and % of clients satisfied with access to required housing | | | | Alberta Mental Health Board, 2008 |
| Non-medical determinants of health | Living and working conditions: housing | # of spaces available for mental health clients across housing continuum (capacity) | | | | Alberta Mental Health Board, 2008 |
| Non-medical determinants of health | Personal resources: income support | # of mental health clients living under the Canadian poverty level | | | | Alberta Mental Health Board, 2008 |
| Non-medical determinants of health | Personal resources: medications | % of prescribed psychiatric medications covered by payers (ex: Blue Cross). | | | | Alberta Mental Health Board, 2008 |
| Non-medical determinants of health | Personal resources: medications | % of annual income spent on medications by mental health clients (out of pocket). | | | | Alberta Mental Health Board, 2008 |
| Non-medical determinants of health | Personal resources: medications | # of clients reporting financial difficulty related to out of pocket expenses for medications | | | | Alberta Mental Health Board, 2008 |
| Ongoing Management | | The percentage of patients with severe long-term mental health problems with a review recorded in the preceding 15 months. This review includes a check on the accuracy of prescribed medication, a review of physical health and a review of co-ordination arrangements with secondary care | percentage of patients on the mental health register who have been reviewed in the last 15 months | | | National Health Service (UK), 2004 |
| Ongoing Management | | The percentage of patients on lithium therapy with a record of lithium levels checked within the previous 6 months | number of patients being prescribed lithium therapy by the practice | | | National Health Service (UK), 2004 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|--------------------|------------|---|--|---|---|------------------------------------|
| Ongoing Management | | The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 15 months | percentage of patients on lithium therapy with a record of TSH in the last 15 months; percentage of patients on lithium therapy with a record of serum creatinine in the last 15 months | | | National Health Service (UK), 2004 |
| Ongoing Management | | The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range within the previous 6 months | percentage of patients on lithium whose last serum lithium level is in the therapeutic range. The level should have been undertaken in the last 6 months. | | | National Health Service (UK), 2004 |
| Outcome | | Family member/child and adolescent perception of outcomes | If one of the YSS surveys are used, perception of the outcomes of services will be measured by responses to the following items: Positive Outcomes of Services: - My child is better at handling daily life. - My child gets along better with family members. - My child gets along better with friends and other people. - My child is doing better in school and/or work. - My child is better able to cope when things go wrong. - I am satisfied with our family life right now. Scoring: 1. Exclude respondents with 4 or more missing values. 2. Calculate the mean of the items for each respondent. 3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree). | Total number of respondents with an average scale score > 3.5 | Total number of respondents | Lutterman et al, 2003 |
| Outcome | | School improvement (children) | Number of Days Absent from School in Last 30 days, as a percentage of available school days | Sum across all consumers 6 – 17 years old enrolled in school (Absence rate at admission minus Absence rate from school during last 30 days) | Total number of consumers 6 - 17 years old enrolled in school | Lutterman et al, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------|------------|-------------------|---|--|--|-----------------------|
| Outcome | | Employment status | Percentage of non-duplicated consumers 18 to 64 years of age that received one or more public community mental health service who were competitively employed (either full or part time) at their last assessment | The number of unduplicated consumers 18-64 years of age that received one or more public community mental health services in state fiscal year 2000 (latest assessment for multiple admissions) that worked on a full- or part-time basis for which they were compensated in accordance with the Fair Labor Standards Act. A person in the military is included, but competitively-employed, supported, or transitional persons are excluded from the numerator. The numerator for the variables gender, age groups, race/ethnicity, diagnosis, and type of mental illness is the number of unduplicated persons served in each category (e.g., female) that were employed as defined above. | The total number of unduplicated consumers 18-64 years of age that received one or more public community mental health service in state fiscal year 2000. The denominator for the variables gender, age groups, race/ethnicity, diagnosis, and type of mental illness is the total number of unduplicated persons served in each category (e.g., female) as defined above. Persons whose employment status was unknown were excluded from the denominator. | Lutterman et al, 2003 |
| Outcome | | Functioning | Percentage of consumers with improved functioning | Number of persons with functioning change greater than RCI (at time 2) | Number of persons in time 1 cohort [The time 1 cohort could be persons admitted or persons at last evaluation. For new admissions, time 2 – time 1 = 3 months; for persons receiving ongoing care time 2 – time 1 = 6 months. All persons should have measures at admission and discharge.] | Lutterman et al, 2003 |
| Outcome | | Functioning | Percentage of consumers with maintained functioning | Number of persons with functioning change less than RCI (at time 2) | Number of persons in time 1 cohort [The time 1 cohort could be persons admitted or persons at last evaluation. For new admissions, time 2 – time 1 = 3 months; for persons receiving ongoing care time 2 – time 1 = 6 months. All persons should have measures at admission and discharge.] | Lutterman et al, 2003 |
| Outcome | | Symptom relief | Percentage of consumers with reduction in symptoms | Number of persons with symptoms change greater than RCI (at time 2) | Number of persons in time 1 cohort [The time 1 cohort could be persons admitted or persons at last evaluation. For new admissions, time 2 – time 1 = 3 months; for persons receiving ongoing care time 2 – time 1 = 6 months. All persons should have measures at admission and discharge.] | Lutterman et al, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------|------------|---|---|--|--|-----------------------|
| Outcome | | Consumer injuries | Number of Consumer (Client) Injuries per 1,000 Inpatient Days | Total number of reported incidents that resulted in injury to consumers on the inpatient census (including consumers on leave status) during the reporting period. | Sum of the daily census (including consumers on leave status) for each day in the reporting period (client days), divided by 1000. | Lutterman et al, 2003 |
| Outcome | | Elopement | Number of Elopements Per 1000 Inpatient Days | The total number of elopements which occurred during the reporting period. | Sum of the daily census (including consumers on leave status) for each day in the reporting period (client days), divided by 1000. Included populations: all inpatients (inpatients on the last day of the reporting period, inpatients discharged during the reporting period and inpatients who died during the reporting period). | Lutterman et al, 2003 |
| Outcome | | Health status: mortality (Crude Mortality Rate) | Crude Mortality Rate (CMR) for the population of persons who received at least one service from a public mental health system during a year | Number of deaths among persons who received at least one service from the public mental health system during a year. | Total number of persons who received at least one service from the public mental health system during the same year (the service population during the year or unduplicated served). | Lutterman et al, 2003 |
| Outcome | | Health status: mortality (Age-Adjusted Mortality Rate) | Age-Adjusted Mortality Rate for the population of persons who received at least one service from a public mental health system during a year and died during that year. | | | Lutterman et al, 2003 |
| Outcome | | Health status: mortality (Standardized Mortality Ratio) | Standardized Mortality Ratio (SMR) for the population of persons who received at least one service from a public mental health system during a year. The SMR is defined as the ratio of the number of observed deaths in a population to the number of expected deaths based on an overall population, controlling for age and sex. | The number of deaths occurring among persons who received at least one service during the year from a state public mental health system | The number of deaths expected in the state service population of persons, who received at least one service during the year, based on the mortality rate of the overall state population, with adjustment for age and sex. | Lutterman et al, 2003 |
| Outcome | | Health status: mortality (Average Number of Years of Life Lost) | Average Number of Years of Life Lost (YLL) for public mental health service recipients who died during the last year. This measure is defined as the difference between the age at death and life expectancy for an individual. | The sum of the life expectancies at time of death for persons who received at least one service during a certain year | The number of persons who received at least one service in that year who died and whose age of death was available | Lutterman et al, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------|------------|--|--|--|---|-----------------------|
| Outcome | | Recovery | <i>While recovery is emerging as a key, singular concept, there is neither a single agreed-upon definition nor a single way to measure it. In mental health performance measurement systems, the measurement of recovery has been approached through the measurement of related concepts and concepts which are components of recovery such as self-esteem, hope, respect and dignity.</i> | | | Lutterman et al, 2003 |
| Outcome | | Reduced substance abuse impairment - Percentage of Mental Health Consumers with Co-occurring Substance Problems | | Number of persons having a co-occurring substance diagnosis | Total number of mental health consumers | Lutterman et al, 2003 |
| Outcome | | Reduced substance abuse impairment - Percentage of Mental Health Consumers with Co-occurring Substance Problems Who Receive Treatment for Co-occurring Problems | | Number of persons having a co-occurring substance diagnosis and receiving co-occurring treatment | Number of persons having a co-occurring substance diagnosis | Lutterman et al, 2003 |
| Outcome | | Reduced substance abuse impairment - Percentage of Mental Health Consumers with Co-occurring Substance Problems Who Experience a Reduction in Substance Problems | | Number of persons having a co-occurring substance diagnosis at time 1 whose substance problems were not clinically significant at time 2 | Number of persons having a co-occurring substance diagnosis at time 1 | Lutterman et al, 2003 |
| Outcome | | Reduced substance abuse impairment - Percentage of Mental Health Consumers with Co-occurring Substance Problems Who Experience a Reduction in Substance Problems | | Number of persons having a co-occurring substance diagnosis at time 1 that have a change in substance problems greater than the Reliable Change Index (RCI) value for the measure. The RCI is a measure that relates change to the instruments reliability and variance. | Number of persons having a co-occurring substance diagnosis at time 1 | Lutterman et al, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------|------------|---|--|--|---|-----------------------|
| Outcome | | Living situation | | The number of consumers residing in each of the following living situation categories: - Private Residence Combined: Optional detail if available: Private Residence without support Private Residence receiving support - Foster Home - 24-Hour Residential Care - Institutional Setting - Jail/ Correctional Facility - Homeless/ Shelter - Other < Unknown | The total number of consumers reporting a living situation. Consumers whose living situations were "unknown" are excluded from the denominator | Lutterman et al, 2003 |
| Outcome | | Criminal justice | Percentage of consumers with arrests during the treatment year | Number of consumers with at least one arrest during the fiscal year | Total number of consumers receiving service during the fiscal year | Lutterman et al, 2003 |
| Outcome | | Criminal justice | Percentage of consumers with at least one arrest during the year following the treatment year | Number of consumers with at least one arrest during the year following the treatment year | Total number of consumers receiving service during the treatment year | Lutterman et al, 2003 |
| Outcome | | Criminal justice | Percentage of consumers with at least one night in jail during the treatment year | Number of consumers who spent at least one night in jail during the treatment year | Total number of consumers receiving service during the treatment year | Lutterman et al, 2003 |
| Outcome | | Criminal justice | Percentage of consumers with at least one night in jail during the year following the treatment year | Number of consumers who spent at least one night in jail during the year following the treatment year | Total number of consumers receiving service during the treatment year | Lutterman et al, 2003 |
| Outcome | | Criminal justice | Percentage of consumers with at least one night in prison during the treatment year | Number of consumers who spent at least one night in prison during the treatment year | Total number of consumers receiving service during the treatment year | Lutterman et al, 2003 |
| Outcome | | Criminal justice | Percentage of consumers with at least one night in prison during the year following the treatment year | Number of consumers who spent at least one night in prison during the year following the treatment year | Total number of consumers receiving service during the treatment year | Lutterman et al, 2003 |
| Outcome | | the percentage who had experienced one or more admissions to hospital for psychiatric reasons ("psychiatric admissions") during the past nine months (Intensive Case Management, ICM - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who had experienced one or more admissions to hospital for psychiatric reasons ("psychiatric admissions") during the past nine months (Assertive Community Treatment, ACT - new clients) | | | | CMHEI, 2004. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------|------------|--|----------------------|-----------|-------------|--------------|
| Outcome | | the percentage who had experienced one or more admissions to hospital for psychiatric reasons ("psychiatric admissions") during the past nine months (ACT - ongoing clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who had experienced one or more admissions to hospital for psychiatric reasons ("psychiatric admissions") during the past nine months (Consumer/Survivor Initiatives, CSIs - new members) | | | | CMHEI, 2004. |
| Outcome | | the percentage who had one or more visits to a hospital emergency department during the past nine months (ICM - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who had one or more visits to a hospital emergency department during the past nine months (ACT - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who had one or more visits to a hospital emergency department during the past nine months (ACT - ongoing clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who had one or more visits to a hospital emergency department during the past nine months (CSIs - new members) | | | | CMHEI, 2004. |
| Outcome | | the percentage with an unstable housing situation (i.e., three or more moves during the past nine months or currently living in hostels, on the street or in some other temporary situation) (ICM - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage with an unstable housing situation (i.e., three or more moves during the past nine months or currently living in hostels, on the street or in some other temporary situation) (ACT - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage with an unstable housing situation (i.e., three or more moves during the past nine months or currently living in hostels, on the street or in some other temporary situation) (ACT - ongoing clients) | | | | CMHEI, 2004. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------|------------|---|----------------------|-----------|-------------|--------------|
| Outcome | | the percentage with an unstable housing situation (i.e., three or more moves during the past nine months or currently living in hostels, on the street or in some other temporary situation) (CSIs - new members) | | | | CMHEI, 2004. |
| Outcome | | the percentage who worked for pay during the past nine months (full-time, regular part-time, or part-time casual) (ICM - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who worked for pay during the past nine months (full-time, regular part-time, or part-time casual) (ACT - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who worked for pay during the past nine months (full-time, regular part-time, or part-time casual) (ACT - ongoing clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who worked for pay during the past nine months (full-time, regular part-time, or part-time casual) (CSIs - new members) | | | | CMHEI, 2004. |
| Outcome | | the percentage who were mostly satisfied with their quality of life at the time of assessment (ICM - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who were mostly satisfied with their quality of life at the time of assessment (ACT - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who were mostly satisfied with their quality of life at the time of assessment (ACT - ongoing clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who were mostly satisfied with their quality of life at the time of assessment (CSIs - new members) | | | | CMHEI, 2004. |
| Outcome | | the percentage who reported moderate to extreme symptom distress (ICM - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who reported moderate to extreme symptom distress (ACT - new clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who reported moderate to extreme symptom distress (ACT - ongoing clients) | | | | CMHEI, 2004. |
| Outcome | | the percentage who reported moderate to extreme symptom distress (CSIs - new members) | | | | CMHEI, 2004. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|----------------------------|-----------------------------------|--|---|---|--|--|
| Partnerships | Academic and Network Partnerships | Training Events | This indicator measures the number of skills/practice focused training events provided for MH&A staff. Skills/practice focused training events include: skills based training with supervision (cognitive behavioural therapy and dialectical behavioural therapy), skills based training without supervision (recovery-centered clinical system and concurrent disorder) and educational workshops/conferences (e.g., workshops on rehab & recovery, geriatric psychiatry, pharmacology). | | | Decision Support Services, 2009. |
| Patient Outcomes | | Mortality for persons with severe psychiatric disorders | Standardized mortality rate for % of persons in total population with specified severe psychiatric disorders | Standardised mortality rate for persons with specified severe psychiatric disorders | Standardised mortality rate for the total population | Hermann et al, 2004; Hermann et al, 2006 |
| Patient Perception of Care | Appropriateness of Care | Discharged against medical advice | Number of psychiatric discharges against medical advice/ Total number of psychiatric discharges x 100 | Number of psychiatric discharges against medical advice | Total number of psychiatric discharges | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Patient Perception of Care | Appropriateness of Care | User perception of appropriateness | <i>Under development</i> | | | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Patient Perception of Care | Outcomes | User satisfaction with treatment outcomes | <i>Under development</i> | | | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Patient Perception of Care | Participation | User perception of participation in treatment and discharge planning | <i>Under development</i> | | | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Patient Perception of Care | Service Accessibility | User perception of accessibility | <i>Under development</i> | | | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| People Development | People Engagement | Employee Engagement Survey | This indicator reports the mean scores for each of the items on the Gallup Q12 employee engagement survey, as well as the mean score across all 12 items (grand mean). Results are shown for employees in the MH&A portfolio, and for all participating employees across Fraser Health. (note: given that employees from different geographic regions were surveyed during 2007 and 2008, results were combined and averaged over the two years using weighted means to arrive at a total figure) | | | Decision Support Services, 2009. |
| People Development | Workforce Capacity | Human Resources per Capita | This indicator measures the number of budgeted FTEs as a rate per 10,000 population. Base FTE rates are given for nurses, paramedics, facility/community staff, and 'all positions' (which also includes non-contract positions and student placements). | | | Decision Support Services, 2009. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|--------------------|--------------------|--------------------------------|--|-----------|-------------|----------------------------------|
| People Development | Workforce Capacity | Regular Position Vacancy Rates | This indicator measures the number of regular external vacancies older than 90 days as a percentage of total number of active regular positions for a) all positions, b) nurses, c) paramedics and d) facility/community staff in the MH&A portfolio. Regular positions include both full-time and part-time positions. Vacancies older than 90 days are considered difficult to fill vacancies. | | | Decision Support Services, 2009. |
| People Development | Workforce Capacity | Staff Turnover Rates | This indicator measures the number of departed employees at the end of a reporting period as a percentage of total number of employees at the beginning of the reporting period for a) all positions, b) nurses, c) paramedics and d) facility/community in the MH&A portfolio. Departed employees excludes pension leaves and deaths. | | | Decision Support Services, 2009. |
| People Development | Workforce Capacity | Overtime Rates | This indicator measures the number of overtime (OT) hours as a percentage of productive hours for "all positions", nurses, paramedics, and facilities/comm staff in the MH&A Portfolio as well as Fraser Health overall. Productive hours includes hours worked (regular & overtime), less the estimated hours for time off (statutory holidays, vacation, sick days, and other paid leaves). | | | Decision Support Services, 2009. |
| People Development | Workplace Health | Staff Injury Rates | This indicator measures the number of WorkSafe BC (WSBC) claims which have costs attributed to them, either for wage loss, medical or rehabilitation, expressed as a rate per 10,000 productive hours. The leading five causes of WSBC injury claims are also shown, expressed as a rate per 10,000 productive hours. | | | Decision Support Services, 2009. |
| People Development | Workplace Health | Disability Hours | This indicator measures the number of disability hours expressed as a rate per 10,000 productive hours. Rates are presented separately for time lost due to short-term (sickness) and long-term disability (LTD). | | | Decision Support Services, 2009. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------------------------|-------------------------------|--|--|-----------|-------------|----------------------------------|
| People Development | Workplace Health | Disability Costs | This indicator measures the costs associated with disability hours expressed as a rate per 10,000 productive hours. Rates are presented separately for total disability costs and for costs associated with time lost due to short-term disability (sickness), long-term disability (LTD), and WorkSafe BC claims. | | | Decision Support Services, 2009. |
| People Development | Workplace Health | Staff Immunized for Influenza | This indicator measures the percentage of staff members who have been immunized for influenza during the influenza season (October to March). Data are reported for the MH&A Portfolio and for Fraser Health overall. | | | Decision Support Services, 2009. |
| Performance Improvements | Financial Resource Management | Variance to Budget | This indicator measures the net difference between the total "actual" expenditures and the total "budgeted" expenditures for the Mental Health and Addictions portfolio, in accordance with generally accepted accounting principles. Note: this indicator was revised in July 2008 to include hospital based services and more accurately reflects the financial status of the entire MH&A portfolio. Therefore, trend data was recalculated and is not comparable to data presented in previous KPI reports. | | | Decision Support Services, 2009. |
| Quality and evidence-based care | | Increase in community knowledge and understanding of the social determinants of health, impacts of mental health problems/illnesses and the importance of social inclusion of all children and youth | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Percent reduction in suicides and suicide attempts | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Percent of children succeeding in school, being socially engaged, participating in extra curricular activities, family functioning levels | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Standardized functional outcome rating system implemented throughout province – Child and Adolescent Functional Assessment Scale (CAFAS) | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Service needs are measured through standardized assessment of current child functioning, caregiver concerns and expectations – Brief Child and Family Phone Interview (BCFPI) | | | | Danseco and Manion, 2004. |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------------------------|------------|--|----------------------|-----------|-------------|--|
| Quality and evidence-based care | | Service outcomes assess percent increase in number of at-risk children who are identified and receive service | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Service outcomes assess percent reduction in risk factors for identified children high risk children | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Service outcomes are measured through standardized assessment of the family's quality of life – FQOL | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Proportion of children with mental health problems | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Proportion of children with mental health disorders | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Percent increase in number of diagnosed mentally ill children who are helped each year | | | | Danseco and Manion, 2004. |
| Quality and evidence-based care | | Percent of agencies using evidence-based practices | | | | Danseco and Manion, 2004. |
| Quality of Life | | Satisfaction with areas of life including family relationships, social involvement, financial resources, physical health, control over life and choices, individual safety, participation in community living, life situation, productive activity, and overall satisfaction with life | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Quality of Life | | Feeling a sense of overall fulfillment, purpose in life, hope for the future, and personal empowerment | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Quality of Life | | Attainment of personal goals related to culture, spirituality, sexuality, individuality, developmental stage and liberty | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-------------------------|------------|--|---|---|--|-----------------------|
| Quality/Appropriateness | | Consumer participation in treatment planning | <p>From the MHSIP Report Card Consumer Survey, responses to the following items will be combined to create this measure:</p> <p>Measure: MHSIP Consumer Survey: Perception of Participation in Treatment Planning</p> <ul style="list-style-type: none"> - I, not staff, decided my treatment goals - I felt comfortable asking questions about my treatment and medication <p>Scoring:</p> <ul style="list-style-type: none"> A. Recode ratings of "not applicable" as missing values. B. Exclude respondents with more than 1/3rd of the items missing. C. Calculate the mean of the items for each respondent. D. Calculate the percent of scores less than 2.5. (percent agree and strongly agree). | Total number of "agree" or "strongly agree" responses (i.e., number of items marked agree or strongly agree across all respondents). | <p>Total number of possible responses (i.e., number of respondents x 2 items) minus the number of missing values. (Please note that the results of the consumer survey may differ from those published by individual states because the common computational methodology for this study may be different from what individual states use. Individual states may also use different items in their calculations.)</p> | Lutterman et al, 2003 |
| Quality/Appropriateness | | Consumers linked to primary health services | <p>The questions added to the MHSIP Consumer Survey for this indicator were:</p> <p>1 Emergency- In the last year, did you see a doctor or nurse in a hospital emergency room?</p> <p>2 Non-Emergency- In the last year, other than going to a hospital emergency room, did you see a doctor or a nurse for a check-up, physical exam, or because you were sick?</p> | Total number of respondents answering "Yes" to each item. The first question is a clarifier for the consumer, the second is used for the reported performance measure. | Total number of respondents. | Lutterman et al, 2003 |
| Quality/Appropriateness | | Contact within 7 days following hospital discharge | <p>Contacts should be a face-to-face contact occurring in a consumer's home, school, place of employment, or clinic between a consumer and a psychiatrist, other mental health professional, or case manager; no forensic/drug/alcohol or domestic violence contacts should be included.</p> | Total number of persons discharged from any acute care or long-term care psychiatric hospital or psychiatric units of an acute care hospital that is state-operated or contracted that report client data to the state mental health authority who received at least one non-emergency outpatient visit within seven days of their discharge. | Total number of persons discharged from any acute care or long-term care psychiatric unit of an acute care hospital that is state-operated or contracted and that report client data to the state mental health authority. | Lutterman et al, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-------------------------|------------|--|---|---|--|-----------------------|
| Quality/Appropriateness | | Family member/child and adolescent perception of quality/appropriateness | If one of the YSS surveys are used, perception of the access to services will be measured by responses to the following items: Satisfaction with Services: <ul style="list-style-type: none">• Overall, I am satisfied with the services my child received• The people helping my child stuck with us no matter what.• I felt my child had someone to talk to when he/she was troubled.• The services my child and/or family received were right for us.• My family got the help we wanted for my child.• My family got as much help as we needed for my child. Scoring: <ol style="list-style-type: none">1. Exclude respondents with 4 or more missing values.2. Calculate the mean of the items for each respondent.3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree). | Total number of respondents with an average scale score > 3.5 | Total number of respondents | Lutterman et al, 2003 |
| Quality/Appropriateness | | Consumers receiving new generation "atypical" medications | Percentage of Persons with a 295 Diagnosis (Schizophrenia) that Receive Atypical Antipsychotic Medications | The number of persons with a primary 295 diagnosis receiving a scheduled or standing order of one or more atypical antipsychotic medications at any time during their treatment in the fiscal year. | Count of all persons with a primary 295 diagnosis receiving treatment during the same fiscal year | Lutterman et al, 2003 |
| Quality/Appropriateness | | Children living in "family-like" settings | Percent of children and adolescents with SED served by the mental health authority who are living in a family-like setting (Living at home with parents, in a relative's home, or living in foster home. In other words, living in a setting that is not a jail, detention, hospitals, residential treatment setting, group homes, or homeless shelters) while receiving services | The total number of unduplicated children and adolescents with a SED that lived in a family-like setting for the entire reporting period. Youth who spent one day in a non-family-like setting during the reporting period are excluded from the numerator. | The total number of children and adolescents with SED served by the mental health authority during the reporting period. | Lutterman et al, 2003 |
| Quality/Appropriateness | | Children receiving therapeutic foster care services | Percentage of children with a serious emotional disturbance (SED) who resided in a therapeutic foster care setting during the last 6 months. | Total number of children and adolescents with SED in therapeutic foster care at any time during the reporting period. | Total number of children and adolescents with SED in any 24-hour supervised residential setting during the reporting period. | Lutterman et al, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-------------------------|------------|--|---|---|--|-----------------------|
| Quality/Appropriateness | | Family Involvement in treatment for children/adolescents | If one of the YSS surveys are used, perception of the access to services will be measured by responses to the following items: Participation in Treatment: <ul style="list-style-type: none">• I helped to choose my child's services.• I helped to choose my child's treatment goals.• I was frequently involved in my child's treatment. Scoring: <ol style="list-style-type: none">1. Exclude respondents with 2 or more missing values.2. Calculate the mean of the items for each respondent.3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree). | Total number of respondents with an average scale score > 3.5 | Total number of respondents | Lutterman et al, 2003 |
| Quality/Appropriateness | | Readmissions within 30 days and 180 days of discharge | The total number of admissions to any state psychiatric inpatient care that occurred within 30 and 180 days of a discharge from a psychiatric inpatient care during the past year divided by the total number of discharges during the year. | The number of readmissions to a state operated psychiatric hospital inpatient unit within a specified time period after discharge (not duplicated by episode). Discharged is defined as returned to any state hospital without contingency; this would exclude those who were not discharged, including on leave, visits, leaves without consent, and elopements. | The total number of discharges from a psychiatric hospital (not unduplicated by episode). Discharged is defined as released from the hospital without contingency; this would exclude those who are released on leave, including visits, leaves without consent and transfers. | Lutterman et al, 2003 |
| Quality/Appropriateness | | Seclusion: hours and rate | Number of hours spent in seclusion per 1,000 inpatient hours | The total number of hours that all consumers spent in seclusion | Sum of the daily census (excluding consumers on leave status) for each day (client days) multiplied by 24 hours, then divided by 1000 | Lutterman et al, 2003 |
| Quality/Appropriateness | | Seclusion: hours and rate | Percent of consumers secluded to total number of inpatient consumers | The total number of consumers (unduplicated) who were secluded at least once during a reporting period | The total number of unduplicated consumers who were inpatients at the facility during a reporting period | Lutterman et al, 2003 |
| Quality/Appropriateness | | Restraint: hours and rate | Number of hours spent in restraint per 1,000 inpatient hours | The total number of hours that all consumers spent in restraint during a reporting period | Sum of the daily census (excluding consumers on leave status) for each day in a reporting period (client days) multiplied by 24 hours, then divided by 1000 | Lutterman et al, 2003 |
| Quality/Appropriateness | | Restraint: hours and rate | Percent of consumers restrained to total number of inpatient consumers | The total number of consumers (unduplicated) who were restrained at least once during a reporting period | The total number of unduplicated consumers who were inpatients at the facility during the reporting period | Lutterman et al, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-------------------------|------------|---|--|--|---|------------------------------------|
| Quality/Appropriateness | | Medication errors | Number of Medication Errors per 1000 Inpatient Consumers | Total number of medication errors occurring in an inpatient stay during the reporting period | The sum of the total number of consumers on the inpatient census at the end of the reporting period, the total number of discharges during the reporting period and the total number of deaths occurring during the reporting period (duplicated count), then divided by 1000 | Lutterman et al, 2003 |
| Quality/Appropriateness | | Family member perception of cultural sensitivity of providers | If one of the YSS surveys are used, perception of the access to services will be measured by responses to the following items: Cultural Sensitivity: <ul style="list-style-type: none">• Staff treated me with respect.• Staff respected my family's religious/spiritual beliefs.• Staff spoke with me in a way that I understood.• Staff were sensitive to my cultural/ethnic background. Scoring: <ol style="list-style-type: none">1. Exclude respondents with 3 or more missing values.2. Calculate the mean of the items for each respondent.3. Calculate the percent of scores greater than 3.5. (percent agree and strongly agree). | Total number of respondents with an average scale score > 3.5 | Total number of respondents | Lutterman et al, 2003 |
| Records | | The practice can produce a register of people with severe long-term mental health problems who require and have agreed to regular follow-up | | | | National Health Service (UK), 2004 |
| Reducing Risk | | Per cent increase in number of at-risk children who are identified and receive service | | | | MCFD, 2003 |
| Reducing Risk | | % reduction in risk factors for identified children | | | | MCFD, 2003 |
| Reducing Risk | | % improvement in protective factors | | | | MCFD, 2003 |
| Reducing Risk | | Number of early intervention programs and interventions | | | | MCFD, 2003 |
| Reducing Risk | | % reduction in suicides and suicide attempts | | | | MCFD, 2003 |
| Referral | | Referral Rate | No. New Referrals per 10,000 population per Year | | | Birleson et al, 2001 |
| Referral | | Profile of Referral Sources per time period (usually per annum) | | | | Birleson et al, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|------------|--------------------------------|--|--|--|---|--|
| Responsive | Consumer & carer participation | Consumer outcomes participation (RFP) | Proportion of ambulatory episodes of mental health care with completed consumer self-assessment outcome measures. | Number of ambulatory episodes of mental health care reported with completed consumer self-assessment outcome measures. | Number of episodes of ambulatory mental health care in the reference period where an episode is counted for each person seen with two or more treatment days within each of the three month calendar periods. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Responsive | | Average days from referral to assessment | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Responsive | | Average days from referral to treatment | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Responsive | | Average days assessment to discharge | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Responsive | | Average days assessment to last recorded contact | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Responsive | | Average number of contacts (child present) | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Responsive | | Average number of contacts (child not present) | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Responsive | | Average total contact time (child present) | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Responsive | | Average total contact time (child not present) | | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Safe | Consumer safety | Rate of seclusion | Number of seclusion events per 1,000 patient days within a mental health service organization. | Number of seclusion events occurring in the mental health service organization inpatient unit(s) during the reference period, partitioned by acute and non-acute inpatient mental health services. | Number of accrued patient days within the mental health service organization's inpatient unit(s) during the reference period, partitioned by acute and non-acute inpatient mental health service. | Key Performance Indicators for Australian Public Mental Health Services Second Edition 2011 |
| Safe | Efficient | Acute bed occupancy | Total accrued mental health patient days for in-scope acute psychiatric units during the reference period over the number of available bed days during the reference period. | Total accrued mental health care days reported for in-scope acute units | Number of beds reported for in-scope acute inpatient units x 365 | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| Safety | | Complications associated with electro-convulsive therapy (ECT) | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Safety | | Medication errors | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Safety | | Medication side effects | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Safety | | Critical incidents | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Safety | | Suicides | | | | MOHLTC, 2003, Mental Health Accountability Framework |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|--------|------------|--|---|-----------|-------------|--|
| Safety | | Homicides | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Safety | | Risk management practised | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Safety | | Identify research/ practices to reduce adverse events and errors | | | | MOHLTC, 2003, Mental Health Accountability Framework |
| Safety | | Does not want to or does not harm self | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Does not want to or does not die from suicide | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Does not want to or does not harm others | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Free from physical and psychological harm or neglect in the individual's social environment to include home, school, work and service settings | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Person is physically healthy | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Treatment effects, including medication, are more positive than negative | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Safety and health is not threatened due to disabilities, being treated with lack of dignity or discrimination in response to lifestyle or cultural differences | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Person terminates services safely and planfully | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Person who receives little or no service has secure sense that they can obtain more/additional services in a timely manner | | | | Ohio Mental Health Outcomes Task Force, 1998 in McEwan and Goldner, 2001 |
| Safety | | Complications associated with ECT | Percentage of patient undergoing ECT who experience a major medical complication | | | McEwan and Goldner, 2001 |
| Safety | | Medication errors/side effects | Number of medication errors/adverse effects reported by clients with SMI to case managers | | | McEwan and Goldner, 2001 |
| Safety | | Medication errors/side effects | Number of medical services and/or hospital services required as a direct result of psychotropic medication problems | | | McEwan and Goldner, 2001 |
| Safety | | Critical incidents involving inpatients | Incidence of any physical injury requiring medical attention to psychiatric patients and staff by inpatient facility per year | | | McEwan and Goldner, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|---------------------------|------------|--|--|---|---|--|
| Safety | | Critical incidents involving inpatients | Incidence of substantiated reports of sexual assaults on inpatients | | | McEwan and Goldner, 2001 |
| Safety | | Suicides | Suicide rate per 1000 for general population by age and sex | | | McEwan and Goldner, 2001 |
| Safety | | Suicides | Suicide rate per 1000 for persons with SMI (or specific diagnostic groups) | | | McEwan and Goldner, 2001 |
| Safety | | Suicides | Suicide rate per 1000 for aboriginal persons | | | McEwan and Goldner, 2001 |
| Safety | | Suicides | Parasuicide rate from emergency service contact data | | | McEwan and Goldner, 2001 |
| Safety | | Homicides | Number of homicides committed by persons with SMI | | | McEwan and Goldner, 2001 |
| Safety | | Safety procedures and practices | Proportion of existing and new safety initiatives with a mental health focus | | | Pasmeny and Slomp. 2008 |
| Safety | | Safety procedures and practices | Number and proportion of staff trained yearly in non-violent crisis intervention | | | Pasmeny and Slomp. 2008 |
| Safety | | % of existing and new safety initiatives with a mental health focus | | | | Alberta Mental Health Board, 2008 |
| Safety | | # and % of staff trained yearly in non-violent crisis intervention | | | | Alberta Mental Health Board, 2008 |
| Staff Safety | | Lost time injury index: Frequency | Lost Time Injury based on # of WSIB lost time claims started in the reporting period divided by total paid hours x expected paid hours for 100 FTEs (1950 x 100/365 x # days in the quarter) | | | Mental Health and Addictions Quality Initiative Comparison Scorecard (2010-11) |
| Structure/Plan Management | | Consumer/family member involvement in policy development, quality assurance & planning | <i>The Workgroup has not yet recommended any specific operational performance measures for this indicator. Two areas of focus are: the inclusion of consumers on planning boards, and the inclusion of family members on planning boards. However, the workgroup is still analyzing a number of potential measures for this indicator and does not yet have specific measures to recommend</i> | | | Lutterman et al, 2003 |
| Structure/Plan Management | | Expenditures for mental health services per client | The total amounts of direct service expenditures on mental health services in one year divided by (1) the total number of enrolled (or general population) and (2) the total number of persons who received at least one mental health service. Expenditures are depicted by (1) type of service and by (2) the numbers of units of service and (3) cost per unit of service provided. | Total amount of annual direct services expenditures for Inpatient, Outpatient and Total Mental Health | Total number of unduplicated consumers served during the fiscal year in Inpatient, Outpatient, and total services | Lutterman et al, 2003 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------------------------|-------------------|--|--|--|---|--|
| Structure/Plan Management | | Expenditures for mental health services per client | The total amounts of direct service expenditures on mental health services in one year divided by (1) the total number of enrolled (or general population) and (2) the total number of persons who received at least one mental health service. Expenditures are depicted by (1) type of service and by (2) the numbers of units of service and (3) cost per unit of service provided. | Total amount of annual direct services expenditures for Inpatient, Outpatient and Total Mental Health | Total number of days of Inpatient Services provided and units/hours of Outpatient Services provided to the unduplicated consumers served reported under denominator 1 above | Lutterman et al, 2003 |
| System | | Wait lists (time) | | | | Barwick et al, 2004 |
| System | | Training in evidence-based practice | | | | Barwick et al, 2004 |
| System | | Use of best/most promising practices (uptake) | | | | Barwick et al, 2004 |
| System Integration & Change | Appropriateness | Use of guideline care for tracer conditions | Number of hospitals routinely using CANMAT or APA or CPA guidelines for management of one or more of the three tracer conditions/ Total number of hospitals x 100 | Number of hospitals routinely using CANMAT or APA or CPA guidelines for management of one or more of the three tracer conditions | Total number of hospitals | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| System Integration & Change | Appropriateness | Appropriate Care Index | <i>Under development</i> | | | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| System Integration & Change | Appropriateness | Hospitalization for psychotic diagnoses | Number of patients where the primary or most responsible diagnosis is psychotic disorder/ Number of psychiatric patients x 100 | Number of patients where the primary or most responsible diagnosis is psychotic disorder | Number of psychiatric patients | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| System Integration & Change | Participation | Discharge plan completed with client involvement | Sum across all hospitals of percentages of discharge plans with documented consumer involvement/ Total number of hospitals x 100 | Sum across all hospitals of percentages of discharge plans with documented consumer involvement | Total number of hospitals | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| System Integration & Change | Participation | Hospital advisory/steering committees with consumer or family representation | Number of hospitals that report having mental health consumers or family members on steering/advisory committees / Total number of hospitals x 100 | Number of hospitals that report having mental health consumers or family members on steering/advisory committees | Total number of hospitals | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| System Integration & Change | System Management | Average length of stay | Total patient days in hospital across all psychiatric discharges/ Total number of psychiatric discharges x 100 | Total patient days in hospital across all psychiatric discharges | Total number of psychiatric discharges | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| System Integration & Change | System Management | Alternative level of care days | Number of ALC days/ Total number of mental health bed days x 100 | Number of ALC days | Total number of mental health bed days | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| System Integration & Change | System Management | Inter-organizational networking | Total number of points earned/ Total number of possible points x 100 | Total number of points earned | Total number of possible points | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| System Integration & Change | System Management | Notification of hospitalization | Total number of points earned/ Total number of possible points x 100 | Total number of points earned | Total number of possible points | Lin et al., 2005, Hospital Report 2004 - Mental Health |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|-----------------------------|-------------------|---|---|---|--|--|
| System Integration & Change | System Management | Training and continuing education support | Total number of points earned/ Total number of possible points x 100 | Total number of points earned | Total number of possible points | Lin et al., 2005, Hospital Report 2004 - Mental Health |
| Treatment | | Visits during acute phase treatment of depression | % of persons with a new diagnosis of major depression who receive at least three medication visits or at least eight psychotherapy visits in a 12-week period | Number of persons with at least three medication visits or at least eight psychotherapy visits in a 12-week period | Number of persons with a new diagnosis of major depression | Hermann et al, 2004; Hermann et al, 2006 |
| Treatment | | Hospital readmissions for psychiatric patients | % of discharges from psychiatric in-patient care during a 12-month reporting period readmitted to psychiatric in-patient care that occurred within 7 and 30 days | Of the total number of discharges from psychiatric inpatient care during a 12 month reporting period, the total number of readmissions to psychiatric inpatient care that occurred within i)7 days and ii) 30 days. | Total number of discharges from psychiatric inpatient care during a 12-month reporting period | Hermann et al, 2004; Hermann et al, 2006 |
| Treatment | | Length of treatment for substance-related disorders | % of persons initiating treatment for a substance-related disorder with treatment lasting at least 90 days | Number of persons with treatment lasting at least 90 days | Number of persons initiating treatment for a substance-related disorder | Hermann et al, 2004; Hermann et al, 2006 |
| Treatment | | Continuous anti-depressant medication treatment in acute phase | % of persons age ≥ 18 years who are diagnosed with a new episode of depression and treated with antidepressant medication, with an 84-day (12-week acute treatment phase) treatment with antidepressant medication | Number of persons age 18 years and older who are diagnosed with a new episode of depression and treated with anti-depressant medication , with an 84-day (12 week acute treatment phase) treatment with anti-depressant medication. | Number of persons age 18 years and older who are diagnosed with a new episode of depression and treated with anti-depressant medication | Hermann et al, 2004; Hermann et al, 2006 |
| Treatment | | Continuous anti-depressant medication treatment in continuation phase | % of persons age ≥ 18 years who are diagnosed with a new episode of depression and treated with antidepressant medication, with a 180-day treatment of antidepressant medication | Number of persons age 18 years and older who are diagnosed with a new episode of depression and treated with anti-depressant medication, with a 180-day treatment with anti-depressant medication | Number of persons age 18 years and older who are diagnosed with a new episode of depression and treated with anti-depressant medication. | Hermann et al, 2004; Hermann et al, 2006 |
| Treatment - Community | | Mean Service Provision | Total No. Contact Hours / No. New Registered clients entering program during period + Continuing Clients from previous period | | | Birleson et al, 2001 |
| Treatment - Community | | Community Client Drop-out Rate | Default Case Closures / Total Case Closures | | | Birleson et al, 2001 |
| Treatment - Community | | Review Completion Rate | Review completed within 4 weeks of the due date / Clients in continuing care | | | Birleson et al, 2001 |
| Treatment - Day-patients | | Mean Day Patient Service | Day Program Attendances x Day Program Hours / Number of Day Patients | | | Birleson et al, 2001 |
| Treatment - Day-patients | | Day Program Drop-out Rate | Default Non-Attenders / Total Clients accepted | | | Birleson et al, 2001 |
| Treatment - Day-patients | | Day Program Admission Numbers and Rate | No. Day patients x 100 / Total Registered Clients | | | Birleson et al, 2001 |
| Treatment - Inpatients | | Inpatient Admission Rate | No. Admitted clients x 100 / Total Registered Clients | | | Birleson et al, 2001 |
| Treatment - Inpatients | | Involuntary Admission Rate | No. Involuntary admissions / Total No. Admissions | | | Birleson et al, 2001 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|----------------------------------|------------|--|--|---|---|--|
| Treatment - Inpatients | | Mean Length of Stay | Mean length of stay in days | | | Birleson et al, 2001 |
| Treatment - Inpatients | | Bed Occupancy | Mean No. Occupied beds / No. Available beds | | | Birleson et al, 2001 |
| Utilization of hospital services | | Psychiatric inpatient admissions rate | Per capita rate* of psychiatric discharges. | | | Durbin et al, 2007 |
| Utilization of hospital services | | Emergency room (ER) visits rate | Per capita rate* of psychiatric hospital emergency room visits. | | | Durbin et al, 2007 |
| Utilization of hospital services | | Short LOS (developmental) | Portion of psychiatric discharges with a length of stay of three days or less. | | | Durbin et al, 2007 |
| | | Proportion of specialist mental health sector consumers with nominated GP. | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| | | Average waiting times for consumers with mental health problems presenting to emergency departments. | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| | | Proportion of consumers and carers with positive experiences of service delivery. | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| | | Proportion of services publicly reporting performance data. | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| | | Rates of stigmatizing attitudes within the community | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| | | Percentage of mental health consumers living in stable housing | Percentage of public mental health service consumers who are considered, at baseline rating, to have no significant problems with their accommodation as rated on Scale 11 of the HONOS/65+. | Number of baseline collection occasions with a HONOS/65+ SCORE OF 0 OR 1. | Number of baseline collection ratings with a valid HONOS/65+. | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| | | Rates of community participation by people with mental illness | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| | | Prevalence of mental illness among homeless populations | *indicator specs TBD | | | Fourth National Mental Health Plan Measurement Strategy First Edition - May 2011 (Australia) |
| | | Local access to inpatient care | The percentage of separations from acute psychiatric inpatient units for persons resident in the mental health service organisation's defined catchment area where the person was treated within the local inpatient unit. | Total number of acute psychiatric inpatient separations in the reference period for residents of the defined area where the person was treated within the local public sector psychiatric inpatient unit. | Total number of acute psychiatric inpatient separations in the reference period for residents of the defined area who received the acute inpatient service from any public sector mental health service organisation. | Key Performance Indicators for Australian Public Mental Health Services First Edition 2004; Coombs, Walter & Brann, 2011 |
| | | Average weekly contact hours per direct care FTE | Total community ambulatory service contact hours within the reference period over the total number of community ambulatory direct care FTE within the reference period multiplied by 44 (assumed 44 working weeks per direct care FTE) | Total community ambulatory service contact hours | Total number of community ambulatory direct care FTE x 44 | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |

| DOMAIN | SUB-DOMAIN | INDICATOR NAME | INDICATOR DEFINITION | NUMERATOR | DENOMINATOR | SOURCE |
|--------|------------|--|---|-----------|-------------|--|
| | | Diagnosis profile | Diagnosis at separation grouped as percentage within each of the major diagnostic groupings (using ICD-10-AM codes) during the reference period | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| | | Mental Health Outcomes Profile | The following were considered: -Total HoNOSCA score at admission -Average HoNOSCA item score by item at admission -Percentage of clinically significant items by item at admission | | | National Mental Health Benchmarking Project Child & Adolescent Review of Key Performance Indicators 2008 |
| | | Distribution of time spent in direct client activities by program type | | | | CMHEI, 2004. |
| | | Distribution of activities for family self-help members | | | | CMHEI, 2004. |
| | | Number of children screened at birth through Healthy Babies Healthy Children | | | | MCYS, 2010 |
| | | Percentage of children and youth showing improved functioning at exit from Child and Youth Mental Health Services | | | | MCYS, 2010 |
| | | Average wait time from referral to receipt of "regular ongoing" child and youth mental health services | | | | MCYS, 2010 |
| | | Autism Intervention Program – Number of children receiving IBI | | | | MCYS, 2010 |
| | | Community mental health funding (per capita) | | | | SEEI Coordinating Centre, 2007 |
| | | Psychiatric inpatient funding (per capita) | | | | SEEI Coordinating Centre, 2007 |
| | | Psychiatric emergency room visits | | | | SEEI Coordinating Centre, 2007 |
| | | % admissions ≤ 3 days | | | | SEEI Coordinating Centre, 2007 |
| | | Early readmission after discharge (within 30 days) | | | | SEEI Coordinating Centre, 2007 |
| | | Early return to ER after discharge (within 30 days) | | | | SEEI Coordinating Centre, 2007 |
| | | Repeat psychiatric inpatient admissions | | | | SEEI Coordinating Centre, 2007 |
| | | Early return to ER after initial ER visit (within 30 days) | | | | SEEI Coordinating Centre, 2007 |
| | | Repeat ER visits | | | | SEEI Coordinating Centre, 2007 |
| | | Distribution of average monthly costs incurred for clients enrolled in Toronto ICM and ACT for the first nine months | | | | CMHEI, 2001 |

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