



RESEARCH ARTICLE

Measuring Children's Mental Health in Ontario: Policy Issues and Prospects for Change

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Abstract

Children's mental health in Canada is characterized by high needs coupled with stark service shortfalls. In Ontario and in many provinces, addressing these shortfalls is hampered by the absence of a measurement system, something that researchers have long called for. This commentary aims to review the issues and suggest prospects for improving the measurement of children's mental health in Ontario and elsewhere. As background, we first describe the children's mental health needs; outline the rationale for a measurement system; describe previous attempts to introduce such systems, including in Ontario; and discuss the current Ontario situation. We then explore some of the issues that constrain policy and that need to be overcome, and suggest prospects for change – for advancing the measurement of children's mental health in Ontario and Canada.

Key Words: *children's mental health, measurement, Ontario, policy development, monitoring*

Résumé

La santé mentale des enfants au Canada est caractérisée par des besoins élevés doublés de pénuries de services marquées. En Ontario et dans beaucoup de provinces, combler ces pénuries est entravé par l'absence d'un système de mesure, que réclament les chercheurs depuis longtemps. Ce commentaire vise à examiner les enjeux et suggère des pistes de solution pour améliorer la mesure de la santé mentale des enfants en Ontario et ailleurs. Nous offrons un contexte en décrivant d'abord les besoins de santé mentale des enfants; nous présentons la raison d'être d'un système de mesure; nous décrivons les tentatives antérieures d'instaurer de tels systèmes, y compris en Ontario; et nous discutons de la situation actuelle en Ontario. Nous explorons ensuite certains des enjeux qui contraignent les politiques et qu'il faut surmonter, et nous suggérons des perspectives de changement – pour faire progresser la mesure de la santé mentale des enfants en Ontario et au Canada.

Mots clés: *santé mentale des enfants, mesure, Ontario, élaboration des politiques, surveillance*

Acronyms

BC: British Columbia

BCFPI: Brief Child and Family Phone Interview

CAFAS: Child and Adolescent Functional Assessment Scale

CFSA: Child and Family Services Act

CMHO: Children's Mental Health Ontario

CPRI: Child and Parent Resource Institute

EDI: Early Development Instrument

ICES: Institute for Clinical Evaluative Sciences

MCFD: BC Ministry of Children and Family Development

MCYS: Ontario Ministry of Children and Youth Services

MHASEF: Mental Health and Addictions Scorecard and Evaluation Framework

MOE: Ontario Ministry of Education

MOHLTC: Ontario Ministry of Health and Long-Term Care

PHO: Public Health Ontario

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Introduction

Children's mental health in Canada is characterized by high needs coupled with stark service shortfalls (Waddell, Shepherd, Schwartz, & Barican, 2014; Offord et al., 1987). In Ontario and in many provinces, addressing these shortfalls is hampered by the absence of a standardized system for measuring child mental health, something researchers have long called for (Barwick, Boydell, Cunningham, & Ferguson, 2004; Barwick, 2006; Junek 2012a, 2012b; Waddell, Shepherd, Chen, & Boyle, 2013). This commentary aims to review the issues and suggest prospects for improving the measurement of children's mental health in Ontario and elsewhere. We first describe the current state of children's mental health needs in Canada. We then define what a children's mental health measurement system is, outlining essential characteristics as well as the rationale for instituting such systems. Next, we summarize previous attempts to implement measurement systems, and discuss the current Ontario situation. We then explore some of the issues that constrain policy and that need to be overcome, and suggest prospects for change. Our overall aim is to contribute to the improved measurement of children's mental health in Ontario and elsewhere in Canada – as a means of improving children's mental health and addressing the service shortfalls. (Throughout, "child/ren" refers to young people from birth up to age 18.)

Children's mental health need in Canada

According to estimates derived from well-designed prevalence surveys in other wealthy countries, approximately 12.6% of Canadian children aged 4–17 years have clinically-important mental disorders at any given time – yet only 31% of these children receive treatment services (Waddell et al., 2014). In Ontario specifically, the most recent estimates show similar patterns with disorder prevalence at 18.1% and with only 16% of children with disorders receiving services (Offord et al., 1987) as defined in the 1983 Ontario Child Health Study. More recently in Quebec, Renaud et al. (2014) reported that despite 90% of youth suicide victims suffering from mental health problems, fewer than 50% were in contact with a mental health professional in the year preceding their death. The high prevalence coupled with stark service shortfalls has led to arguments that mental disorders are the leading health problems facing Canadian children (Waddell et al., 2014). Without effective treatment, mental disorders then typically persist into adulthood – with adverse long-term consequences for children, their families and Canadian society (Waddell, McEwan, Shepherd, Offord, & Hua, 2005). The economic costs are also considerable, with mental disorders in aggregate estimated to incur burdens exceeding \$59 billion annually

(2017 Canadian dollar equivalency; Lim, Jacobs, Ohinmaa, Schopflocher, & Dewa, 2008).

Definition, characteristics and rationale for a children's mental health measurement system

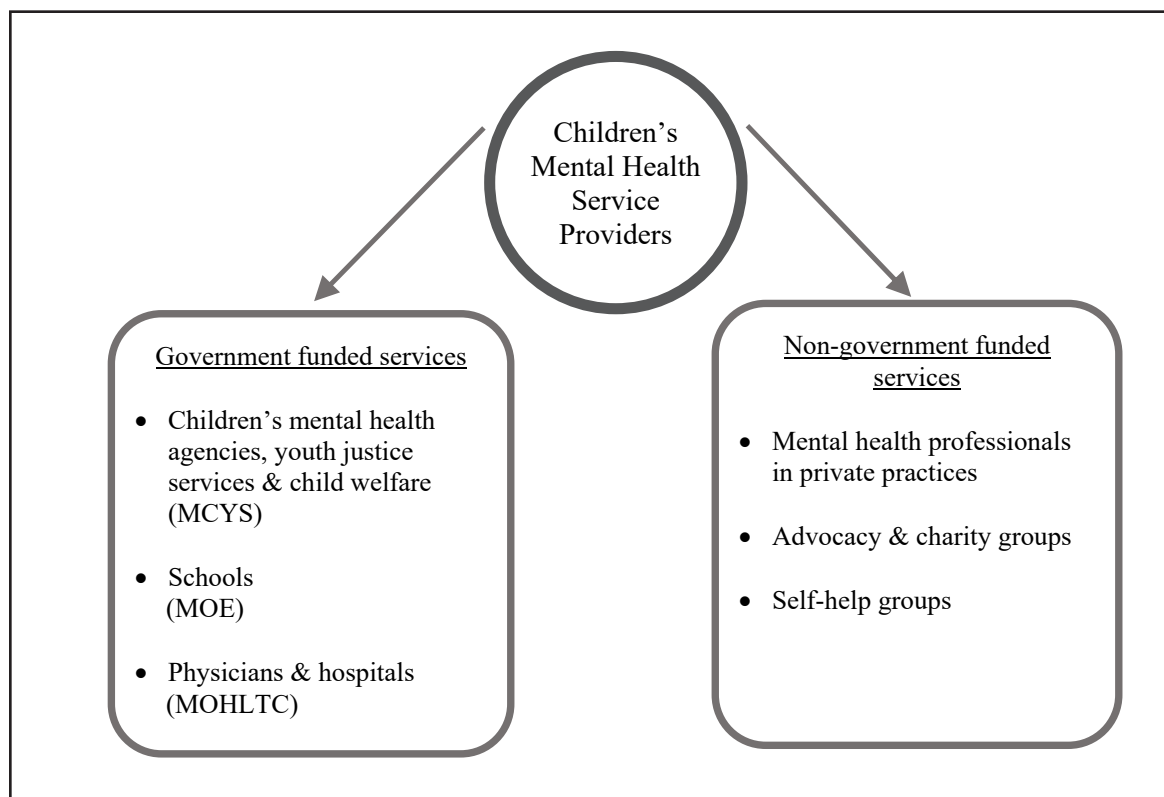
A children's mental health measurement system is defined as the comprehensive and standardized collection of information about mental health problems experienced by children and youth. To merit implementation, such a system should be: (a) psychometrically sound (i.e., shown to be reliable, valid and useful for its intended purposes); (b) satisfy an array of practical requirements (i.e., acceptable to practitioners and families in terms of burden, cost, transparency and protection of privacy); and, (c) function as an information system that has the ability to provide ongoing feedback to policymakers and practitioners in the child mental health sector. The basic rationale for such a system is to provide information that can be used for planning and evaluating programs and services – including tracking outcomes and effectiveness – thereby forming the foundation for addressing children's mental health challenges in the population (Buelher, 2008). This type of data collection: (a) allows monitoring and assessment of child mental health status, service use and outcomes; (b) enables comparisons across populations, programs and communities over time; and, (c) provides essential data to guide the planning and ongoing evaluation and monitoring of children's mental health programs and services.

Provincial governments across Canada have agreed that a children's mental health measurement strategy is needed (Junek, 2012a, 2012b). Researchers have repeatedly called for such systems to track children's mental health outcomes (Barwick et al., 2004; Waddell et al., 2005; Waddell et al., 2013; Mental Health and Addictions Scorecard and Evaluation Framework [MHASEF] Research Team, 2015). Researchers have also noted the limited data available on the types of problems or disorders that lead children to need and seek service (Barwick et al., 2004), arguing that "monitoring is a crucial means of tracking our collective progress towards improving the lives of all children" (Waddell et al., 2013, p. 25). The MHASEF research team at the Institute for Clinical Evaluative Sciences (ICES), an independent research institute funded by the Ontario Ministry of Health and Long-Term Care (MOHLTC) also produced a report on children's mental health that stated: "A system can be responsive only when performance is measured systematically...Future child and youth mental health performance measurement would be enhanced by widespread, cross-sectoral

| Table 1. Summary of Performance Indicators (Source: Government of Ontario, 2013) | | |
|--|-------------------------|---|
| Question | Domain | Indicator |
| Who are we serving? | Client centeredness | <ul style="list-style-type: none"> • Proportion of child and youth population served • Profile of children and youth served • Age of children and youth served • Profile of clients with complex mental health needs |
| What are we providing? | Efficiency | <ul style="list-style-type: none"> • Service utilization • Service duration |
| How well are we serving children youth and families? | Responsiveness | <ul style="list-style-type: none"> • Clients receiving brief treatment requiring no other services • Clients with positive outcomes • Client and/or parent/caregiver perception of positive outcome • Number of incidents (including serious occurrences and client complaints) |
| How well is the system performing? | Access Effectiveness | <ul style="list-style-type: none"> • Wait times for clients receiving services • Client perception of the service system • Value for investment |

Note: From the Draft Child and Youth Mental Health Service Framework (Government of Ontario, 2013, p44).

Figure 1. Children’s Mental Health Service Providers in Ontario



adoption of standardized assessment” (MHASEF Research Team, 2015, p. 222).

In Ontario, practitioner organizations such as Children's Mental Health Ontario (CMHO) and Public Health Ontario (PHO) have also called for a province-wide common dataset for children's mental health (CMHO, 2013a, 2015; PHO, 2013). CMHO has advised that the system as a whole needs to recognize the importance of mandatory collection of both baseline and outcomes data using standardized measures to create a “common data set”, as well as supporting agency efforts to comply (CMHO, 2014). In the case of children's mental health, measurement may lead to improved outcomes if enhanced program and service planning and evaluation result – understanding that “what gets counted, counts” (Hertzman & Williams, 2009, p. 68). Such monitoring already occurs in other areas, for example, where practitioners are encouraged to track measures such as body weight and where childhood obesity trends are in turn tracked by policymakers for population health surveillance purposes (Canadian Task Force on Preventive Health Care, 2015; Rao, Kropac, Do, Roberts, & Jayaraman, 2016).

Despite arguments that have been made recommending a children's mental health measurement system and noting potential benefits, it should nevertheless be acknowledged that research evidence is limited on whether outcome measurement actually leads to improved outcomes, particularly for children's mental health. Further research is therefore needed to determine optimal approaches to creating and implementing measurement systems and to determine how such systems can be effectively used to improve child outcomes.

Previous attempts to measure children's mental health

Given Canada's federal-provincial governance arrangements, children's mental health falls within provincial jurisdiction, and some provinces have already taken steps towards creating pertinent measurement systems. For example, the Healthy Child Manitoba Strategy spans multiple sectors and government departments, aiming to promote child wellbeing while also supporting population research focused on child development (Santos, 2006). Supporting this effort, the Manitoba Centre for Health Policy at the University of Manitoba houses government data linked to registry, survey and other information relating to population health, including administrative data from the Ministries of Health and Child and Family Services for use in ongoing population monitoring (Chartier, 2016).

Meanwhile, British Columbia's (BC's) Ministry of Children and Family Development (MCFD) implemented the Brief Child and Family Phone Interview (BCFPI) (Cunningham, Boyle, Hong, Pettingill & Bohaychuk, 2009) as a means of monitoring children receiving services in 2005 through its *Child and Youth Mental Health Plan for British Columbia* (Government of BC, 2003). While the untapped potential of the BCFPI for population-wide monitoring has been noted, as opposed to implementation only in service settings (Waddell et al., 2013), this instrument is nevertheless being used to gather data on community-based mental health intake and follow-up assessments, giving a partial picture of the needs based on those seeking services in BC.

Both Manitoba and BC also pioneered the use of the Early Development Instrument (EDI) to screen children for social and emotional vulnerability on kindergarten entry. This instrument is now being used Canada-wide and has seen considerable uptake internationally (Janus, 2011; Junek, 2012a; Ip, Li, Rao, Ng, Lau, & Chow, 2013; Waddell et al., 2013; Hagquist & Hellström, 2014). While the EDI's broad focus on early child development limits its use in monitoring and measuring child mental health, its success nevertheless shows that monitoring and reporting can not only occur at the provincial level, but also occur nationally, when all jurisdictions agree to implement a measure.

Yet perhaps the best example to date of province-wide, standardized children's mental health measurement occurred in Ontario. In 1999, the Ministry of Children and Youth Services (MCYS) implemented Canada's first systematic screening and outcome measurement plan, training over 100 children's mental health agencies across the province to use two standardized measurement tools: the BCFPI (Cunningham et al., 2009); and the Child and Adolescent Functional Assessment Scale (CAFAS) (Hodges, Doucette-Gates, Liao, 1999). By the plan's fifth year in 2004, 98% of the agencies trained in using these tools had implemented them (Barwick, Boydell, Cunningham, & Ferguson, 2004) and after six years of implementation, 114 agencies were using the BCFPI and 107 were using the CAFAS (Barwick, 2006). MCYS covered the cost of administering these tools which led to additional uptake while also, crucially, enabling data to be aggregated and reported provincially.

But in 2015, as part of the *Draft Child and Youth Mental Health Service Framework* (Government of Ontario, 2013), BCFPI and CAFAS funding was discontinued and use of standardized intake, assessment and outcome tools was no longer required (O'Hara, 2014). The reasons for these decisions were not clear in public policy documents such as the *Draft Child and Youth Mental Health Service Framework* (Government of Ontario, 2013) or the *Community-based*

child and youth mental health – Program guidelines and requirements #01: Core services and key processes (Government of Ontario, 2015b). But possible reasons may include: ongoing practitioner resistance to using the BCFPI and CAFAS; challenges stemming from organizational readiness for change, technological literacy and infrastructure; and lack of understanding and articulation of the potential clinical benefits for children (Barwick et al., 2004).

There appears to be some recent MCYS support for using a new assessment tool, evidenced through the Ministry funding their Child and Parent Resource Institute (CPRI) to further develop the InterRAI, a new potential tool for assessing child mental health (Hirdes et al., 2011). But no tool is currently formally endorsed or mandated by MCYS, based on available public documents.

Ontario's Current Situation

In Ontario, as in many provinces, the provision of children's mental health services is complex (Boydell, Bullock, & Goering, 2009). Service provision in communities is primarily the responsibility of MCYS which develops and implements pertinent policies, programs and services – including funding and overseeing community-based children's mental health agencies around the province, administering youth justice and child welfare services, and supporting Indigenous children and youth. Additional children's mental health services are also provided by the MOHLTC and by the Ministry of Education (MOE) – in primary care and hospital settings and in schools, respectively. Adding to this complexity, private practitioners as well as advocacy, charity and self-help groups also provide services. The federal government, furthermore, funds services for Indigenous children across Ontario, in partnership with the Province and with First Nations and Inuit and Metis groups (Government of Canada, 2017). Beyond these public and other providers, CMHO is an umbrella group that represents and supports nearly 90 accredited community-based children's mental health agencies that are funded by MCYS. While CMHO is not a service provider and its member agencies comprise only a subset of the approximately 400 groups that MCYS funds, the organisation is nevertheless an important advocate for children's mental health in the province. Given this array of organizations and mandates, it is not surprising that children's mental health services in Ontario have also been described as fragmented (Boydell, Bullock, & Goering, 2009). Figure 1 illustrates Ontario's current children's mental health system.

In response to repeated concerns about system complexity, lack of central ministerial coordination and lack of evidence-based services (Kirby & Keon, 2006; Auditor

General of Ontario, 2008, Office of the Provincial Advocate for Children and Youth, 2012), two action plans were released – *Moving on Mental Health: A System That Makes Sense for Children and Youth* (Government of Ontario, 2012) and the related *Draft Child and Youth Mental Health Service Framework* (Government of Ontario, 2013). In the *Draft Child and Youth Mental Health Service Framework* two system changes were described, in addition to noting the decision to stop using the BCFPI and CAFAS measurement tools (Government of Ontario, 2013). These system changes have since been implemented and include the creation of Lead Agencies as well as the introduction and reporting of service performance indicators. Related to the reporting of performance indicators, MCYS has also proposed a “Business Intelligence Solution” for child and youth mental health as part of an integrated data and performance measurement system (MHASEF Research Team, 2017).

Lead agencies

MCYS has established overarching agencies responsible for planning and delivering children's mental health services in 33 geographically-defined service areas (Government of Ontario, 2015b). In these areas, individual agencies are accountable to these Lead Agencies who are in turn accountable to MCYS – facilitating the coordination of services across individual agencies.

Performance indicators

MCYS is requiring funded agencies to report aggregate indicator data to them. The indicators currently include profiles of children served and whether children have had “positive outcomes”. However, based on the materials that are publically available, it is unclear whether the profiles include mental health assessments, how positive outcomes are being defined, and whether the selection and definition of indicators may change over time (MHASEF Research Team, 2017). It is also unclear whether reporting on these indicators is a condition of MCYS funding. Table 1 outlines these performance indicators.

“Business Intelligence Solution”

To facilitate the flow of performance indicator information from individual agencies to MCYS, the Ministry has proposed a system that can extract raw individual-level information directly from agency information systems (Marhasin, 2015; MHASEF Research Team, 2017). Such business intelligence systems comprise technologies designed to handle large amounts of complex raw data from different sources. However, MCYS has not specified any standardized process or measurement tools to collect indicator

information, leaving it to individual Lead Agencies to decide on the method and processes of collection (Government of Ontario, 2013).

Issues Constraining the System

Given the recent Ontario changes – including the decision to stop using the BCFPI and CAFAS as measurement tools – we now explore some of the issues that constrain the system and that need to be overcome.

Cross-sectoral nature of children's mental health services

Children's mental health has been a policy priority for MCYS, MOHLTC and MOE since the early 2010s, yet Ontario has yet to develop an integrated care model (Clinton et al., 2014). The lack of coordination across the three Ministries has been seen to result in inefficiencies, difficulties in monitoring success, and complications in tracking disorder incidence and duration (Canadian Institute for Health Information, 2015). The problem is further compounded by the fact that MCYS does not offer children's mental health services directly, as some other provinces do (Government of BC, 2003), but rather, contracts with individual agencies to deliver services across the province. The fragmented system is also difficult for users to navigate (Boydell et al., 2009) and makes it difficult to assess the quality and appropriateness of services. But beyond MCYS, a children's mental health measurement system would need commitments from the health and education sectors for Ontario to comprehensively measure children's mental health needs and outcomes. In turn, a measurement system could be used to track service users across sectors and to help address fragmentation.

Legislative constraints

For MOHLTC and MOE, the provision of healthcare and education services, respectively, are required under the *Acts* that determine these Ministries' mandates. However, for MCYS the provision of children's mental health services is not required under the *Child and Family Services Act (CFSA)* that determines its mandate (Government of Ontario, 2015a). Instead, MCYS funds individual agencies to provide services on a contracted basis. This leads to two issues. First, there are accountability problems that limit MCYS's ability to reform policy and change agency behaviour – highly problematic when trying to introduce standardized and universal policy solutions such as systematic collection and reporting of service and outcomes data. Despite requiring reporting on the BCFPI and CAFAS as

part of service contracts in the past, MCYS has seemed reluctant to strengthen accountability mechanisms by requiring such reporting as a condition of funding more recently (Government of Ontario, 2015b). While the creation of Lead Agencies across the province may make sense from a system delivery perspective, it may also decentralize decision-making and accountability. Standardized information collection across the Lead Agencies seems improbable – without oversight from a central body such as MCYS.

The second problem is that the *CFSA* does not require the Ministry to collect identifying information from the agencies they fund regarding the children and families they serve (Government of Ontario, 2015a). In fact, the collection and use of personal information is not included in the *CFSA*, which means any information collection is not mandatory (Office of Provincial Advocate for Children and Youth, 2012). As well, because MCYS does not collect this identifying information (Government of Ontario, 2013), they cannot assign unique identifiers to track utilization. (Administrative information systems typically rely on the unique identification of individuals to track their pathways within the system, e.g., the Ontario Health Insurance Plan number in the health system and the Ontario Education Number in the education system). A children's mental health measurement system would benefit greatly from a unique identifier being assigned to all children who are being assessed – or from making use of existing identifiers from the health or education sectors.

Beyond this, simply counting visits for services does not account for children who receive repeated services, receive services from multiple locations or move between different service regions. Counting visits also does not capture what services were provided and how effective these were. Even more importantly, such counting does not address those who needed services but could not access them.

Multiple competing interests

As with many important public policy problems, multiple competing interests are at play in children's mental health, potentially bringing differing agendas and levels of engagement to the question of a measurement system. For all involved, children's interests should be the primary concern. Yet this concern may be expressed in varying ways with the result that children's interests are not always optimally served.

MCYS. The current suggested Ministry performance indicators capture information on how the *system* is doing (e.g., service utilization, duration, wait times, client perceptions of service) (Government of Ontario, 2013). This may well serve the Ministry's interest in being accountable

regarding basic service reach. But only two indicators address how well *children* are doing and whether their lives are improved as a result of the services they receive (e.g., profile of clients with complex mental health needs, clients with positive outcomes) (Government of Ontario, 2013). Furthermore, while “positive outcomes” are included in one of the indicators, definitions and recommended tools for collecting outcome information are not provided (Government of Ontario, 2015b). Agencies are also not required to provide standardized reporting as a condition of funding (Government of Ontario, 2013, 2015b). In the absence of common tools or definitions, and in the absence of required reporting, the current performance indicators are unlikely to provide adequate measurement of children’s mental health outcomes.

Child mental health agencies and practitioners. Service agencies represent two contrasting yet inter-related sets of interests: (a) those of the agencies collectively, as represented by CMHO; and (b) those of individual agencies and the practitioners within them. CMHO has repeatedly called for the establishment of common measurement tools and for province-wide data on child outcomes (CMHO, 2013a; 2014; 2015). Therefore, this particular issue seems to be high on CMHO’s agenda. The potential lobbying power of CMHO is strong, given the number of organizations they represent. The organisation also works closely with MCYS. But even so, CMHO needs buy-in from more individual agencies and practitioners; its membership currently represents only a quarter of all Ontario agencies (CMHO, personal communication, August 9th, 2017).

CMHO recognizes the benefits of a children’s mental health measurement system, but this recognition does not necessarily extend to the agency and practitioner levels (Barwick et al., 2004). Although agencies use many different standardized measurement tools to assess needs and to triage and plan services, there is resistance to universal standardized measurement for monitoring and assessing child outcomes more systematically (Barwick et al., 2004). It has been noted that even after 10 years the BCFPI and CAFAS were not “universally accepted or used for the practice of comparing outcomes” (CMHO, 2014, p.5). The benefits – particularly for children – of gathering monitoring information have therefore clearly yet to be endorsed by all involved. Interests may play a role here, for example, in agencies and practitioners not wishing to have “one-size-fits-all” measurement systems that could result in comparative assessments of agency and practitioner efficacy, or that could result in new practice directions being given by MCYS. The lack of agency and practitioner engagement is

therefore an important obstacle to further understand and address.

Researchers. The research community has its own interests. This community includes researchers based: at universities; at government-funded research agencies such as ICES, the Ontario Centre for Excellence for Child and Youth Mental Health, and CPRI; and at selected children’s mental health agencies (e.g., Hincks-Dellcrest Centre in Toronto and Kinark Child and Family Services in Markham). Researchers recognize the need for a comprehensive children’s mental health data system and see opportunities to capitalize on existing information systems (Waddell et al., 2005; Waddell et al., 2013). However, to date researchers have not formally organized to support or advocate for a children’s mental health measurement system. In addition, researchers may be more motivated by their own independent research programs and by funding opportunities that do not provide time or resources for supporting non-research initiatives (Waddell, Shepherd, Lavis, Lomas, Abelson & Bird-Grayson, 2007). Suggestions that children’s mental health policy in Canada have not always been optimally informed by research evidence have led to calls for researchers to increase their awareness of competing priorities in the policy process, to create research-policy partnerships and to increase levels of public engagement (Waddell et al., 2005). Engaging researchers will likely be essential to improving the children’s mental health measurement system.

Prospects for Change

Having outlined the historical issues and the current situation, we turn now to discussing the prospects for change.

Seeking opportunities through system change

In Ontario, the recent introduction of Lead Agencies, performance indicators and the proposed “Business Intelligence Solution” may encourage the development of a children’s mental health measurement system in future. In time, Lead Agencies could occupy a new role mediating between individual agencies and practitioners, CMHO and MCYS – to advocate for and support the successful implementation of a measurement system. Lead Agencies could also collaborate to introduce programs and policies that address the issues raised by MCYS’s lack of legislative authority. For example, regarding the lack of unique identifiers, individual agencies could agree to assign such identifiers based on a common algorithm, which if applied across all agencies, could allow both MCYS and agencies to track individuals. However, Lead Agencies may still be discerning their new roles and more time may be needed for them to take on such

leadership (CMHO, 2013b). Although current performance indicators are problematic and the “Business Intelligence Solution” has yet to be implemented, the new Lead Agency infrastructure could help to move forward the systematic collection of agency information.

Learning from other provinces

The cross-sectoral collaboration needed to implement successful systemic change in children's mental health presents a significant challenge. MCYS is a much smaller ministry than MOHLTC and MOE, with less influence, given not only legislative constraints but also fewer resources (Government of Ontario, 2017). While there was inter-ministerial collaboration on Ontario's *Comprehensive Mental Health and Addictions Strategy* (Government of Ontario, 2011), these successes have yet to translate into a cross-sectoral children's mental health measurement system. However, children's mental health successes in other provinces may provide models for Ontario. A review of children's mental health services in BC following implementation of MCFD's 2003 *Child and Youth Mental Health Plan* reported successful partnerships between the children's Ministry and the Ministries of Health and Education (Government of BC, 2003; Berland, 2008). BC's 2010 *Healthy Minds, Health People: A Ten Year Plan to Address Mental Health and Substance Use in British Columbia* (Government of BC, 2010) further built a successful collaboration between MCFD and the Ministry of Health to meet mental health goals, including for children – and including support for performance monitoring. Manitoba provides another example in that multiple Ministries have contributed to Healthy Child Manitoba, as well as to the monitoring efforts of the Manitoba Centre for Health Policy (Santos, 2006; Brownell et al., 2012). These examples show that cross-sectoral collaboration is not only possible, but also sustainable.

Capitalizing on advances in data and technology

The recent proliferation of data collection, storage, linkage and sharing and the related advances in computing and technology are all promising developments. Computing capabilities and familiarity with data processes have increased exponentially since the implementation of BCFPI and CAFAS, as evidenced by Ontario's exploration of a technologically-sophisticated integrated data and performance measurement system. In addition, the opening of more ICES research hubs and the creation of Ontario's *Open Data Catalogue* point to increasing support for administrative data being used for other purposes, such as monitoring. For example, MCYS recently released 2010-2012 Ontario

EDI data through the *Open Data Catalogue*. As data processes become more sophisticated, it may become easier for policymakers and others (such as researchers) to commit to collecting and using high-quality data to inform policy and ongoing service evaluation.

Enhancing accountability

The impact of any system changes may be limited if individual service agencies are also not made more accountable. Historically, child welfare and children's mental health agencies were established as charitable organisations with independence and autonomy. The *CFSA* was only introduced in 1985 and MCYS itself was only formed in 2003. However, in receiving public funds for the provision of mental health services, individual agencies do need to be accountable not only to MCYS but also to Ontarians for improving the lives of the children and families they serve. Constrained by *CFSA* statutes that do not allow MCYS to mandate services, a long-term solution would be to amend the *CFSA* to provide clarity on agencies' roles, including on their accountability for improving child outcomes. A short-term solution would also be for MCYS to better leverage its funding role to require standardized reporting on child outcomes – actions that should be possible within the Ministry's current frameworks, and that would likely be well supported by collaborators such as the CMHO, as well as by researchers.

Enhancing reporting

Although “positive outcomes” are included in one of the current MCYS indicators, no definitions or reporting tools are provided or required for measuring child mental health outcome information. Current performance indicators therefore do not enable standardized reporting on outcomes. To address this problem, performance indicators need to be expanded to include standardized measurement of child mental health outcomes – such as Ontario previously had with the BCFPI and CAFAS. Agency incentives could be created through reporting and quality requirements attached to funding agreements, although other efforts to motivate practice change may be needed as well. Improving knowledge and awareness about the benefits of a children's mental health measurement system, for example, could help guard against agencies or practitioners vetoing this type of system and could enhance compliance (Barwick et al., 2004, Barwick, Peters, & Boydell, 2009). Perceptions may also exist that a comprehensive monitoring system would create added burdens for practitioners (Patel & Riley, 2007) or could be used to redistribute already-scarce resources,

resulting in a lack of agency and practitioner buy-in (Manion, 2010). Consultation and education may be needed to better understand and overcome agency and practitioner reluctance. Such efforts would likely be best undertaken in partnership with Lead Agencies and groups such as CMHO, who already strongly support outcome monitoring, and who have close links with agencies and practitioners.

Taking leadership, building consensus

The crucial groups to potentially engage in further developing a children's mental health measurement system for Ontario include: MCYS; CMHO; service agencies and practitioners; and the research community. Yet consensus has yet to be developed across these groups about the need for a comprehensive children's mental health measurement system, and about who should be collecting and using the data, and in which ways. CMHO and researchers have suggested that crucial data should be collected by MCYS so that policymakers and children's mental health agencies can use these data to track outcomes and assess service effectiveness (CMHO, 2013a; Barwick et al., 2004). MCYS is well positioned to undertake such a role. CMHO and researchers could help by supporting MCYS to take on further leadership with service agencies and practitioners, for example, through setting and enforcing standards for comprehensive reporting. A provincial data and measurement advisory group could also be created to assist MCYS as well as the agencies. As experience with the BCFPI and CAFAS suggests, however, consensus will need to be built to ensure long-term sustainability for any measurement system. Another long-term goal must therefore be to persuade those agencies and practitioners that have been reluctant that comprehensive outcome measurement is in the best interests of children.

Reporting on all children

The CAFAS and BCFPI formed a reasonably robust initial system of data collection on children receiving specialized mental health services in Ontario. Ontario has chosen to replace this system, and new clinical service measurement approaches are still emerging. Yet with epidemiological surveys consistently showing that the majority of children with mental disorders do not receive specialized services, a much larger issue is that of data collection on the levels of unmet need in the child population in general (Waddell et al., 2014; Offord et al., 1987). Ontario has indicated a strong commitment to gathering new high-quality data on prevalence and service use through the funding of a sequel to the Ontario Child Health Survey (Statistics Canada, 2015).

With joint funding from the Canadian Institutes of Health Research and Ontario's MOHLTC, MOE and MCYS, this rigorous epidemiological survey will provide a detailed snapshot on a representative sample of all children in the province. Results, expected soon, will provide invaluable information on all children in the province, not just those seeking or obtaining services. Findings should spur new debates and new actions to improve children's mental health services – including instigating public conversations on better addressing the ongoing measurement issues. This new survey therefore constitutes a crucial opportunity to expand the ideas about measuring children's mental health – to be more inclusive of meeting the needs of all children. MCYS, other Ministries, CMHO, researchers and service agencies should all be involved in re-imagining children's mental health services and in re-imagining ongoing measurement to better meet all needs.

Conclusion

Given the high prevalence and negative impact of childhood mental disorders, comprehensive children's mental health measurement systems are crucial for the health of children and of populations. Ontario led the way in the past with its centralized requirements for the BCFPI and CAFAS, building capacity to collect child outcome and related data – thereby tracking outcomes and enabling better program and service planning. Yet those data collection mechanisms were discontinued, in part, reportedly, due to lack of agency and practitioner buy-in (Barwick, 2004; Manion, 2010). So new opportunities must be created. In Ontario and elsewhere, children's mental health measurement is constrained by: the complexities of the multiple governing, advocacy and service groups involved; the limits on accountability mechanisms to date; and competing interests despite all participants nominally holding children's interests paramount. Even so, there are promising prospects for change: recent Ontario system changes such as creating Lead Agencies and developing new child mental health service performance indicators; successful models in other provinces showing that central measurement systems can be sustained; advances in data and technology; and new opportunities for increasing accountability, reporting and collaborative leadership, including on behalf of children not currently receiving services.

Ultimately, it is in the collective interest to improve children's mental health – in Ontario and elsewhere in Canada. Measuring children's mental health is a crucial component in achieving this goal. Understanding Ontario's challenges may also help other provinces to recognize and address

similar challenges so that children's mental health can be improved across the country.

Acknowledgements / Conflicts of Interest

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