



Beyond Silos: Optimizing the Promise of School-Based Mental Health Promotion Within Integrated Systems of Care

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Abstract

Schools have a critical role to play within the broader system of care supporting children, youth, and families. For 6 h each day, 10 months of the year, schools have the opportunity to support social emotional skill development, enhance mental health literacy, encourage help-seeking, and provide daily classroom support to students who are struggling with mental health problems. Many school districts also have the capacity to provide evidence-based preventive services, crisis response, assessment, and brief intervention services. However, when school-based mental health promotion and prevention services are not offered within the context of a comprehensive local/regional system of care, students

requiring more intensive supports may not receive needed intervention. Further, best and emerging practices across contexts may not get evaluated or shared, and responses to acute needs that transcend geography may be disjointed and confusing. Using a broader system lens, there are policy and practice opportunities for cross-sectoral integration that, when leveraged using system science principles, can lead to more efficient and high-yield service delivery for children, youth, and families as well as system-wide responses to emerging issues or acute circumstances (e.g., suicide cluster, influx of child refugees, high profile media events). Drawing on the modified interactive systems framework and highlighting examples from the provincial rollout of Ontario's Comprehensive Mental Health and Addictions Strategy, a number of system-scale implementation science principles are shared with a view to optimizing the promise of school mental health, beyond silos.

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An integrated system of care is a comprehensive and effective spectrum of mental health services and supports that are organized into a coordinated network, within and across sectors, to meet the complex and dynamic emotional and behavioral health needs of children, youth, and their families (Barrett, Eber, & Weist, 2013; Stroul, Blau, & Friedman, 2010; Weist, 1997). It has

been increasingly recognized that schools have a critical role to play within an optimally interconnected system of care (Leaf, Schultz, Riser, & Pruitt, 2003; Weist, Lever, Bradshaw, & Sarno Owens, 2014). Specifically, as part of the daily life of children and youth, schools have the opportunity to support social emotional skill development, enhance mental health literacy, encourage help-seeking, and provide regular classroom support to students who are struggling with mental health problems (Barry & Jenkins, 2007; Doll, Cummings, & Chapla, 2014; Short, 2016; Sulkowski & Lazarus, 2016). Many school districts also have capacity to provide evidence-based preventive services, crisis response, assessment, and brief structured psychotherapy services (Lever, Chambers, Stephan, Page, & Ghunney, 2010; Raffaele Mendez, 2017; SBMHS Consortium, 2013; Short, Ferguson, & Santor, 2009). This is important because school-based mental health professionals have routine access to students within the setting where children and youth spend most of their daily life, can facilitate natural supports and strategies that are easily embedded into the fabric of classrooms and schools, and can help to reduce stigma about mental illness through student-friendly service offerings (Bringewatt & Gershoff, 2010; Hoover & Mayworm, 2017). In addition, schools are an excellent venue for early detection and early intervention, frequently mitigating the need for more intensive and costly services in community settings (Flett & Hewitt, 2013; Weist, Myers, Hastings, Ghuman, & Han, 1999).

While schools clearly have an important role within an integrated system of care and are well-positioned to provide promotion and prevention services as part of the multi-tiered system of support, when these school-based services are not offered within the context of a comprehensive local/regional system of care, students requiring more intensive supports may not receive needed intervention (Freeman, Grabill, Rider, & Wells, 2013). Further, in the absence of a system lens, best and emerging practices across contexts may not get evaluated or shared, and responses to acute needs that transcend geography may be disjointed and confusing. As a result, opportunities

for cost-efficient cross-setting approaches are not optimized, and system gaps and redundancies may emerge (Boydell, Bullock, & Goering, 2009; Leaf et al., 2003). Applying a system perspective to implementation and scale-up can lead to policy and practice opportunities for cross-sectoral integration that result in more efficient and high-yield service delivery for children, youth, and families and can facilitate coherent responses to emerging issues or acute circumstances (Boydell et al., 2009). In this chapter, drawing on the modified interactive systems framework and highlighting examples from the provincial rollout of Ontario's Comprehensive Mental Health and Addictions Strategy (Ontario Ministry of Health and Long-Term Care, 2011), a number of system-scale implementation science principles are shared with a view to optimizing the promise of school mental health, beyond silos.

Understanding and Leveraging Context

Students are flourishing, with a strong sense of identity and belonging at school, prepared with skills for managing academic and social/emotional challenges, surrounded by caring adults and communities equipped to identify, intervene early, and support recovery when students struggle with mental health and/or substance use problems.

This is the aspirational vision for student mental health in Ontario, Canada (School Mental Health ASSIST, 2017), a province that is comprised of 72 school districts and approximately 5000 schools, 7400 school administrators, 117,000 teachers, and 2 million students. While all three impact factors identified by Fixsen, Blase, Metz, and Van Dyke (2015); effective interventions, effective implementation, and enabling contexts, are critical for achieving socially significant success toward this aspirational vision, building an effective and sustainable comprehensive system of care for children, youth, and families across a large province, state, or region requires special attention to ensuring an enabling context. For practices in school mental health to optimally impact

population-level wellness among children and youth, a multilayered view of the system context is required (Freeman et al., 2013). Individual and collective student mental health occurs within a complex ecology, with proximal influences at the classroom and school level but equally important conditions and impacts resting with decisions, processes, and structures at the school district, community, and wider provincial system. Understanding the constraints and possibilities within and across the concentric circles of influence around the student and their family is important for leveraging system-level change opportunities and for achieving our shared aspirational vision.

The Cascading Context Within School Districts

Within the education sector, the host context at the classroom level provides the most direct point of influence for student mental health. However, because this setting is influenced by the school environment and by conditions at the district and policy levels, it is important to look at context in a cascading manner.

Enabling Policy Context The overall parcel of funds for the education sector, funding formulas for school districts, and other important decisions such as the curriculum that districts must adhere to are most commonly set by policy-makers at the provincial/state or national level (depending on the jurisdiction). Policy often acts a signal to the system about the areas in which it should focus. This signal then cascades through the other contextual levels and eventually makes its way the classroom, with opportunities for interpretation and adaptation along the way. In Ontario, for example, the provincial Ministry of Education (EDU) recently released a strategy promoting and supporting student well-being, with mental health being one of four key areas identified (Ontario Ministry of Education, 2016). By releasing this strategy, the provincial government is signalling to the system that student well-being is important and worthy of attention and that mental

health is a core component of their concept of well-being. Sometimes such policy signals are accompanied by additional targeted financial investments for schools and school districts increasing the incentive for participation and alignment with the desired policy direction. Policy can also be important for scaling-up effective local- or district-level innovations, so they may have socially significant impacts across a population – a cascade that flows in the opposite direction. From a system perspective, it is important to recognize that policy itself can be at multiple levels within a sector (e.g., school, district/board, ministry) but can also encompass efforts across sectors (e.g., whole-government policies or platforms relating to specific topics like mental health). Through both its general policy actions and targeted actions for specific areas, this broader policy context is a critical foundation for student mental health.

Enabling District Context A focus on organizational conditions at the school district level is particularly important for achieving coherence and consistency across a large province, state, or region. Rarely will school by school, or classroom by classroom, efforts alone lead to a meaningful, far-reaching, and sustained positive change in student mental health. Survey and scan data collected across Canadian provinces suggests that in the absence of district infrastructure, processes, and strategies, a patchwork of fragmented, untested, and short-lived mental health programming has emerged (SBMHSA Consortium, 2013). While innovations can and should be tested at a local level, scalable and sustainable work in school mental health must consider and engage the wider district context.

Creating a hospitable district environment for effective practices in school mental health requires consideration of many features. For example, implementation scientists have identified the important role of leadership, dedicated implementation teams, data-drive decision systems and feedback loops, and readiness for change (Chinman et al., 2008; Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Gustafson et al., 2003; Metz, Halle, Bartley, &

Blasberg, 2013). Drawing on this literature and in consultation with Ontario-based district leaders, School Mental Health ASSIST has developed a list of ten conditions that are foundational in facilitating uptake and sustainability of evidence-based practices in school mental health (Short, Finn, & Ferguson, 2017). A district context that includes, for example, visible senior administrator commitment, a mental health leadership and implementation team that has responsibility for developing and executing a board-wide strategy and action plan, and systems for continuous learning and improvement is well-positioned to optimize high-quality programming that lasts. Naturally, as these structures and processes are introduced, this can lead to tensions and discomfort as existing systems and roles are challenged. Strong communication, a shared vision, and authentic engagement of stakeholders help to ensure that the change process is not compromised when the status quo is interrupted. This includes a strong need for communication and collaboration with partners across sectors, as programs and services that were once offered, or introduced in an ad hoc manner, may no longer be supported within the district strategy and action plan. Clear messaging about the need for standardization of protocols and priorities across a district, to avoid fragmentation and inequity, are often needed. It is also important to convey that opportunities for local tailoring and innovation continue to be encouraged but that evaluation and alignment are critical filters for decision-making.

Enabling School Context Just as a coherent district context supports best practices, a school environment that facilitates quality and consistency in mental health practice and programming is critical for enhancing outcomes. Schools that maintain a welcoming and safe climate, embed wellness promotion and social emotional learning in a whole school manner, and support strong staff and student relationships have been associated with good student mental health outcomes (Weare, 2015; Wells, Barlow, & Stewart-Brown, 2003). School administrators set the tone for this positive school climate, and create the conditions for uptake and

maintenance of high-yield mental health practices. A key part of leading mentally healthy schools is to apply the ten organizational conditions to this setting (e.g., establishing a school level mental health leadership and implementation team, implementing a systematic staff capacity building plan, ensuring and communicating standard protocols for suicide prevention, intervention and postvention). With organizational conditions in place, it is easier for school teams to select from the array of potential mental health programming options those that are most aligned with their school needs and overall strategy.

Enabling Classroom Context Effective school mental health practices are most likely to be adopted and sustained at the classroom level when teachers feel supported, knowledgeable, and confident about the programming that is presented. Time to learn about mental health, and social emotional learning practices that they can add to their daily practice, is a key part of facilitating staff commitment and comfort with this area of work. With support from school administrators and ongoing coaching from school mental health professionals, educators can grow in confidence in enacting their role in creating a welcoming, safe, and inclusive classroom environment, delivering instruction in mental health literacy and social emotional learning, identifying students who may be struggling with mental health problems, and connecting with parents/caregivers and community professionals as required. Clarity in their role can focus training activities and decrease the burden of teachers feeling they carry all of the responsibility. The context cascade, from policy level to district, to school, to classroom, helps to remove barriers to uptake of effective practices by those who are best positioned to support student mental health at school.

Reaching Beyond Silos for Enabling Context

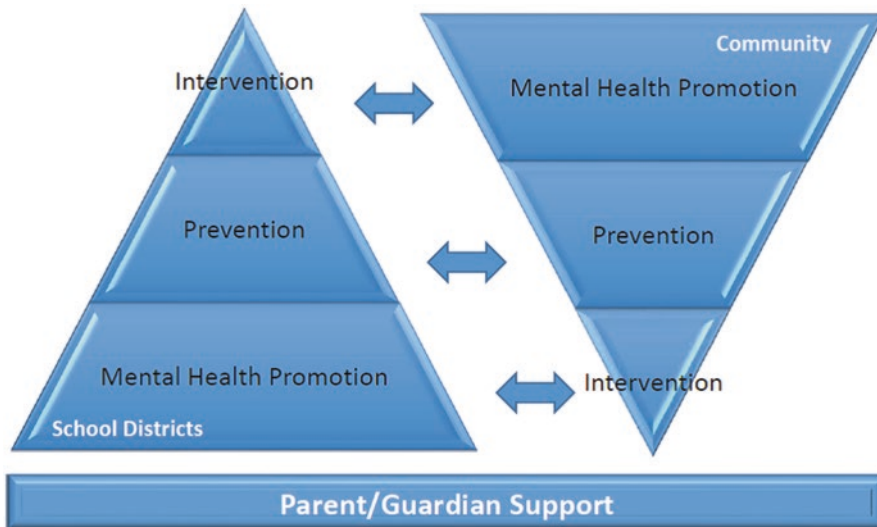
The multi-tiered system of support (MTSS) framework, akin to the public health model of intervention, is a widely accepted model for

understanding the range of services provided within the school setting and how this can fit into a larger community context (Walker et al., 1996). This model highlights the ways in which schools can promote positive mental health at *Tier 1* (e.g., through creating welcoming and supportive school and classroom environments, engaging student voice and leadership, building understanding about mental health, and reducing related stigma), prevent problems from escalating at *Tier 2* (e.g., by working to enhance protective factors and reduce risk factors in classrooms every day and through targeted preventive services led by school mental health professionals), and provide specialized brief assessment and intervention services at *Tier 3* (e.g., psychological and social work services, specialized support programs). This model echoes a comprehensive school health approach at Tier 1 (Joint Consortium for School Health, 2013) but extends this to

include evidence-based prevention and intervention services for students at greater risk. Multi-tiered systems of support are essential for defining and supporting practice within schools and districts (Kutash, Duchnowski, & Lynn, 2006; Stoiber & Gettinger, 2016).

However, to truly effect sustainable uptake of evidence-based school mental health to scale, multi-tiered systems need to engage and be built within and across sectors, collaboratively. Role clarity and partnership protocols, for promotion, prevention, and intervention must be clarified through authentic dialogue and collaborative processes. An aspirational vision for an integrated system of care that rests upon a MTSS model is depicted here.

Multi-tiered Systems of Support Across Sectors



While an appreciation for the cascading nature of the enabling context within the education sector is important, so too is the need to consider settings across the wider system of care. This context, in addition to being enacted locally within each community, is optimized when it aligns with the broader vision at the regional, provincial/state, and even

national level when possible. Like ensuring evidence informs practice, having a clear and focused vision is necessary but insufficient for sustainable and replicable system change. The process of enacting a vision guided by evidence requires a clear strategy for operationalization and implementation that needs to be strategic and deliberate.

Conceptual Framework

Implementation science offers a wide range of conceptual models, theories, and frameworks from which to draw (for reviews, see Mitchell, Fisher, Hastings, Silverman, & Wallen, 2010; Moullin, Sabater-Hernández, Fernandez-Llimos, & Benrimoj, 2015; Nilsen, 2015; Tabak, Khoong, Chambers, & Brownson, 2012). Some models are useful for describing and/or guiding the process of translating research into practice, others are useful for understanding and explaining what influences implementation outcomes, and still others focus on evaluating implementation efforts (Nilsen, 2015). For the purpose here, which is to understand and describe the supports necessary for system-level implementation and scale-up, we drew upon the interactive systems framework for dissemination and implementation (ISF, Wandersman et al., 2008; Wandersman, Chien, & Katz, 2012). Initially developed as a heuristic to help clarify how new knowledge in the field of violence prevention moves from research development to widespread use and the systems and processes supporting this movement, the ISF has been widely cited and applied across a number of fields including school mental health (e.g., Bradshaw & Pas, 2011; Flaspohler, Anderson-Butcher, & Wandersman, 2008; Taylor, Weist, & DeLoach, 2012) and has been particularly helpful in clarifying the capacities required to support the implementation process at a systems level.

The ISF specifies the three systems needed to carry out dissemination and implementation functions: (1) Synthesis and Translation System, (2) Support System, and (3) Delivery System. The Synthesis and Translation System encompasses the functions associated with distilling theory and evidence, translating it into usable formats and ensuring that people who could benefit from the evidence have access to it (e.g., those in the Delivery System). Examples of activities include the development of guidelines and manuals, creating actionable messages, and hosting knowledge exchange events between the producers of a given innovation and potential users of it. The Delivery System includes individuals,

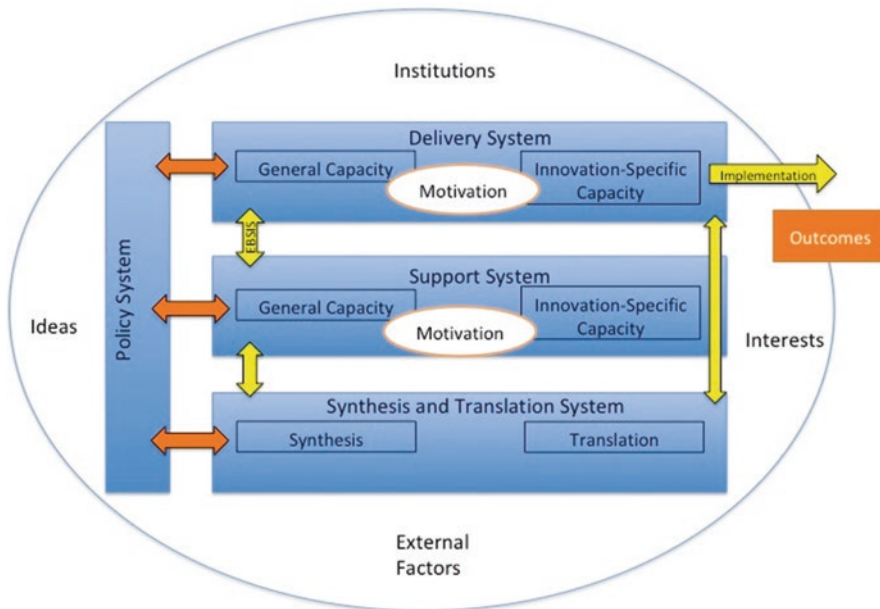
organizations, and communities who carry out the innovations developed by the Synthesis and Translation System. Within education, those in the Delivery System include educators, school mental health professionals and other support staff, school administrators, and school district leadership teams. The Delivery System is where implementation takes place and where social benefits are realized. Finally, the Support System works with the Delivery System to ensure innovations are implemented with quality and to increase the likelihood that the innovation will lead to desired outcomes. The Support System provides two primary types of support: (1) innovation-specific capacity building, including the necessary knowledge, skills, and motivation required to implement a particular innovation, and (2) general capacity building, which includes efforts to enhance the infrastructure, skills, and motivation of organizations and individuals to participate in implementation activities. Some common approaches employed by the Support System include training, technical assistance, and monitoring progress but can also include facilitating a deliberative process to select an innovation, providing expertise on implementation science and accessing and sharing resources developed by the Synthesis and Translation System. Each system is connected through bidirectional relationships, and the systems are embedded within a context that includes macro-policy, existing research and theories, climate (defined as the level of emphasis placed on accountability for practitioners), and funding.

While the ISF has broad use and applicability and has found purchase among researchers and evaluators looking to design, describe, and evaluate implementation efforts at scale, the framework has not been sensitive to the policy considerations and policy-related activities that are an important part of implementation in public systems including the education system in most countries. The model indicates “macro-policy” is part of the context in which implementation occurs, but researchers studying the infrastructure needed for effective implementation (often called intermediaries) commonly identify activities and functions that are policy-specific.

For example, Franks and Bory (2015) identified “policy and systems development” as one of the seven functions carried out by intermediaries, based on a survey of 68 unique intermediary programs or organizations. Within the field of education, Cooper (2014) describes 8 functions of research brokering organizations, and one of these functions is “policy influence” based on a cross-case analysis of 44 organizations in Canada. Furthermore, the outcomes of a national colloquium on the potential contribution of intermediary organizations to school mental health promotion in Australia in 2012 concluded that intermediaries are regularly challenged to work across service sectors and levels of government and that, among other things, they require the ability to understand complex policy relationships and translate these into local contexts

for diverse populations (Corcoran, Rowling, & Wise, 2015). Based on these findings and an additional mixed methods review of the literature, Bullock and Lavis (2018) propose to build on the ISF by adding a Policy System to better capture the role of policy in implementation and the interactions between the Policy System and each of the three previously identified systems (Image B). The Policy System includes public policy at all levels (municipal, provincial/state, and/or national levels) as well as organizational policy, with each type of policy having influence on the other systems bridging the research to practice gap.

Modified Interactive Systems Framework (Bullock & Lavis, 2018)



For the remainder of this chapter, we draw on the modified ISF to explore the efforts of three intermediary organizations in the province to support the implementation of a province-wide mental

health strategy with a focus on improving services and supports for children, youth, and families and identifying common approaches and lessons learned.

An Example from the Field: Ontario's Mental Health and Addictions Strategy – *Open Minds, Healthy Minds*

In June 2011, *Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addictions Strategy* was announced. Through this multi-ministry strategy, the province articulated their aim to “reduce the burden of mental illness and addictions by ensuring that all Ontarians have timely access to an integrated system of excellent, coordinated and efficient promotion, prevention, early intervention, community support and treatment programs” (Ontario's Comprehensive Mental Health and Addictions Strategy, 2011, p. 7). This strategy focused on children and youth in the first 3 years and was supported by 14 ministries, under the leadership of the Ministry of Child and Youth Services (MCYS). There were three key target areas: ensuring fast access to high-quality services, providing early identification and support, and helping vulnerable children and youth with unique needs.

Though the 22 initiatives within the strategy were each led by specific ministries, there was

Moving on Mental Health was the transformation effort in the community child and youth mental health sector. This included the identification of lead agencies supporting the development of community mental health plans and the provision of a core basket of services across service provincially. *The Centre* supported this transformation with a team of knowledge brokers (KBs) assigned to each service area. KBs had expertise in evaluation, implementation science, knowledge mobilization as well as family/youth engagement. The goal was supporting agencies in their change management while aligning thinking and efforts in the sector across communities. The Centre also linked evidence to policy by producing strategic policy-ready papers for government on key elements of the transformation.

Systems Improvement Through Service Collaboratives (SISC) aimed to improve the transitions in care for children and youth (e.g., transition from community to hospital services, from child to adult services). To tackle these significant challenges, 18 Service Collaboratives were established across the province. Each brought together stakeholders who worked collaboratively to identify a key system-level challenge in their community that could be mitigated through multi-sectoral partnerships and collaborative implementation efforts. *PSSP* functioned as the intermediary or “backbone” to this initiative. With expertise in implementation, knowledge exchange, evaluation, information management, equity and engagement, and aboriginal engagement and offices across the province, tailored local community support that is consistent with provincial objectives is possible.

considerable cross-sectoral collaboration involved in bringing the work to fruition. Three intermediary organizations emerged to take on significant roles to support various initiatives led by their respective funding ministries. These intermediary organizations became the Support System infrastructure for the strategy and also often acted as part of the Synthesis and Translation System (Bullock & Lavis, 2018; Wandersman et al., 2008). The Provincial System Support Program (**PSSP**) at the Centre for Addiction and Mental Health is funded for this work by the Ministry of Health and Long-Term Care. The Ontario Centre of Excellence for Child and Youth Mental Health (*the Centre*) is funded by the Ministry of Children and Youth Services (MCYS) and provides supports to Ontario's child and youth mental health sector with a primary focus on community-based service agencies. School Mental Health ASSIST (*SMH ASSIST*) is funded by EDU and offers leadership, resources, and implementation coaching to Ontario's 72 school boards in support of student mental health and well-being. Each of these organizations provided

leadership and coordination for individual initiatives and took responsibility for promoting alignment across efforts. Through this collaborative approach, project teams learned and grew together and identified key implementation and leadership learnings associated with the first 3 years of the strategy and key recommendations for continued efforts in building the system of care for children and youth in Ontario.

Working alongside EDU, *SMH ASSIST* provides leadership, resources, and implementation support to Ontario's 72 school boards as they work to create and implement a board-level mental health strategy in support of student mental health and well-being. The *SMH ASSIST* team is comprised of regionally based implementation coaches who support school districts with establishing organizational conditions, building the capacity of education professionals, introducing evidence-based implementation-sensitive programming, supporting equity by recognizing the needs of specific populations, inspiring youth leadership and voice, and contributing to the ongoing development of the system of care.

There are certain commonalities in the work of these intermediary organizations. In each case they support change within their given sectors. Key features of this support include (1) linking evidence to practice, (2) building capacity in evaluation, (3) providing supports for implementation and change management, and (4) creating opportunities for knowledge exchange throughout the process of transformation in each sector including a specific role in informing policy. The push toward *the adoption of evidence-informed processes and practices* has been significant over the last decade. Making evidence available to stakeholders (e.g., service providers, administrators, educators, policy-makers) within context and at the point of decision-making becomes critical in support of systemic change and a role that the Synthesis and Translation System undertakes

(Bullock & Lavis, 2018; Wandersman et al., 2008). The intermediaries play a significant role in synthesizing and mobilizing existing evidence using a variety of tools and vehicles (toolkits, policy papers, web portals and websites, pathway documents, evidence briefs, learning modules, training video, learning forums).

The adoption of evidence or the change of any practice within the context of system transformation should be subject to *rigorous evaluation to demonstrate impact*. Evaluation capacity and expertise are often lacking at the level of the individual organization and such efforts are rarely integrated across an entire sector. Intermediary organizations have played a significant role in building this capacity in each of their sectors, and this aligns with one of the functions of the Support System (Bullock & Lavis, 2018; Wandersman et al., 2008). This has included providing frameworks to build evaluation plans for individual programs or processes (i.e., program logic models), identifying tools/measures that can be used to track processes and outcomes, making financial supports available for specific evaluation projects, as well as providing evaluation coaching supports.

Having a strong understanding of the implementation process guided by implementation science has been identified as important for the Support System to function effectively (Bullock & Lavis, 2018; Wandersman et al., 2008). All three intermediary organizations have a strong appreciation of *implementation science* and understand that evidence in and of itself is insufficient to foster sustainable change and impact. Each has adopted the Active Implementation Frameworks developed by the National Implementation Research Network (NIRN) (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005) as a best practice in the science of implementation to support organizational change and system transformation to improve outcomes across the spectrum of human services. Implementation is a staged process that needs to be strategic, deliberate, and systematic. It requires special attention to change readiness and pre-existing organizational/systemic conditions that, if in place, can support not only the adoption of

different practices/processes but also their sustainability. In many ways, implementation includes all of the other key activities of the intermediary organizations as the process is sensitive to the selection of evidence to fit context as well as the need for a foundation in evaluation prior to implementation. The Active Implementation Framework model recognizes the important role of drivers in this entire process (i.e., training and coaching, facilitative leadership, information supports, technical supports, and resources).

Much of the implementation literature has focused on change at the organizational level, with a given evidence-informed practice. Sometimes this extends to scale-up of a specific practice to a jurisdictional or systemic level. In the Ontario context, the intermediary organizations have extended this thinking further to draw on principles from implementation science to inform a complex transformation effort occurring at the system level. This application required adaptations to enhance relevance and effectiveness at the system level. For example, although coaching at the program/intervention level is most relevant when implementing an evidence-based practice (EBP) within in agency, when applying the frameworks to a system-level initiative, “coaching” can be thought of as relevant to organizational and system level as well (Duda, Blasé, Fixsen, & Sims, 2013). Through this coaching process, support and capacity building is provided as it relates to the particular practice but also to the implementation process overall. Most importantly, since organizations across sectors are experiencing this coaching, the capacity for good implementation is increasing in the system overall. For example, in Service Collaboratives members in mental health, education, justice, health, and social services came together to improve a transition between their services. These individuals worked collaboratively to identify a key system-level challenge in their community that could be mitigated through multi-sectoral partnerships and collaborative implementation efforts. Although the specific effort was to implement a new practice or process, the experience of being led and supported through a systematic and deliberate implementation process provided communities with a new

way of working across silos to effect change. Another example that illustrates transformation within and across sectors involved the Centre and SMH ASSIST working together, with MCYS and EDU, and practice leaders in each sector, to create a Pathways Support Toolkit. This co-created resource served as a first step toward clearly articulating current roles and functions across the system of care and helped local agencies and school boards to imagine the preferred future together, clearly articulating complementary roles and services.

Capturing the story of change and continuously *sharing knowledge* within and between sectors has been core to the work of the three intermediary organizations involved in *Open Minds, Healthy Minds*. With so much change going on at multiple levels through various initiatives, it was very easy for stakeholders and communities to become confused and overwhelmed. Communication was important and cohesive aligned messaging was essential. Sharing within and across sectors was continuous through a variety of vehicles (publications, presentations, learning forums). Audiences needed to understand what was being done, why it was being done, how it all fit together, and what difference was it making. Consistent communication across the intermediaries facilitated a growing appreciation of a whole-system effort to improve the lives of children, youth, and their families.

An extension of the knowledge exchange role of intermediaries is the ability to bring evidence to policy-making. As suggested by Bullock and Lavis (2018), policy plays a critical role in implementation and scale-up of practices both within and across sectors. It sets the direction for investments in support of system change but also sets the accountability expectation mechanisms to determine the impact of implementation. Intermediaries can be critical in operationalizing policy within context but also in capturing and communicating the process and impact of implementation.

In addition to their roles in their respective sectors, the intermediaries involved in the first phase of the strategy stepped across sectors to collaborate, meaningfully and often! At this meta-systemic level, the three organizations worked together to (1) inform each other on

progress of individual initiatives that could be enhanced and better aligned by knowledge from each other, (2) begin to develop a common language for key constructs that were relevant across sectors, (3) co-create new tools/processes where gaps were found in existing evidence, (4) advocate for each other's role across sectors bringing more credibility to each partner's work, and (5) role model cross-sectoral collaboration and the value of a collective whole-government perspective on child and youth mental health. Although relevant for all stakeholders, such role modeling was particularly relevant for policy-makers who also sought to display similar collaboration across ministries. Multiple examples were seen when leads from each organization presented similar material with similar messages to various audiences be they in health, education, or child and youth mental health.

System-Scale Implementation Science Learning

There is important work in school-based mental health occurring across jurisdictions that is informing how best to affect system change to best meet the holistic mental health needs of students (Weist et al., 2017; Weist, Short, McDaniel, & Bode, 2016). In Ontario, Canada, we are seeing change of this magnitude occurring at multiple levels/contexts (individuals, schools, school boards, as well as ministry-wide). This within-sector change is being informed by evidence and evaluated for impact. It is being facilitated by a strong commitment to the principles of implementation and supported by an intermediary organization with the vision, expertise, and capacity to make this change feasible and sustainable.

In and of itself, this process within education will be transformative. However, if done in isolation from other change efforts outside of education, the opportunity for larger system change and impact will be missed. With similar transformation and major change initiatives occurring simultaneously across sectors, there is a real danger of confusing and burdening stakeholders, duplicating efforts, and wasting resources where better

alignment could reduce expenses. Our experience in the first 3 years of *Open Minds, Healthy Minds* implementation demonstrates that when harmonized across sectors, more cohesive non-siloed action produces holistic benefits for communities, organizations, schools, families in support of the wellness of children, and youth. Specific learnings from this cross-sectoral work are shared below to offer some potential considerations for optimizing collective efforts across sectors.

Open Minds, Healthy Minds: Phase One Implementation Learnings

10	Things we wish we had known when implementing Provincial Mental Health & Addictions Initiatives
1	Appetite for Alignment The field needs to see how different pieces fit together, locally and provincially. Think systematically!
2	Mind the Gap Communities need implementation guidance & support for local variation.
3	Build the Ramp A strong foundation & assistance is required to move from present practice to the desired future.
4	Set the Pace This complex work needs to be chunked into implementation stages, with realistic timelines.
5	Walk Alongside Effective implementation needs tailored coaching support.
6	Build Leaders At All Levels Every level of the system needs leaders to move policy to practice.
7	Coordinated Communication Consistent, frequent & integrated messaging through the system & across sectors is key.
8	Diverse Needs, Diverse Responses Working with population representatives to co-create resources & supports that meets needs & preferences is required.
9	Continuous Input and Feedback Loops This is an iterative, non-linear process. Be prepared!
10	Data is Not a Four-Letter Word Promoting & supporting consistent monitoring & evaluation practices across sectors is needed.

The three intermediary organizations worked alongside additional partners that supported phase one work, Canadian Mental Health Association, Ontario Division and Hospital for Sick Children, and Community Health Systems Resource Group, to identify and share a listing of

system-scale implementation learnings from *Open Minds, Healthy Minds*. Each of these considerations is described briefly below.

1. *Systems' Thinking Is Not Easy!* It is natural to become absorbed in granular aspects of work in our own programs, settings, or sectors. We had to make strong and explicit efforts to sustain a system perspective, individually and collectively. Practitioners need help to think systemically and to see how their local efforts fit with the wider direction. When there is perceived or actual duplication of projects or services at a provincial level, the field gets frustrated and discouraged. When alignment is modeled provincially, the field is inspired to persist with challenging local coordination work. Regular reminders of our overarching goal – *contributing to an enhanced system of care for children, youth and families* – kept us focused and hopeful.
2. *Set the Pace* – Systematic implementation of sustainable plans in large organizations and complex systems takes considerable time and effort. The research is clear that large-scale transformation takes many years to bring to fruition. Knowledge, planning, resources, monitoring, and support are all required. Implementation science frameworks help a lot!. Realistic time expectations and a steady pace of work help to maintain momentum for the long term. Chunking the work into implementation stages and cycles and making even small practice change visible can help to carry momentum forward during longer-term change efforts. Across initiatives, we have deepened our understanding of implementation principles, like the importance of maintaining scope, promoting strategy and sequence, and offering ongoing responsive coaching support. In building a system of care for children and youth, all of us have to work well together in new ways, while we are changing how we work internally at the same time
3. *Continuous Communication* within and across government, organizations, sectors, and communities is challenging but necessary to address complex system change. It has been important to create platforms for sharing knowledge across initiatives of the strategy. The field needs regular communication to understand the plan and their part in its execution. Communication that crossed sectors and spoke to integrated messages was particularly welcome in the foundational years of the strategy. Common platforms for sharing information were well-received, like joint cross-sector panel presentations and online forums such as [EENet](#). In addition, a provincial advisory group, with representation across sectors and government presence, supported the ongoing exchange of project-based learning and their connections to the overall strategy. Although this group was initially developed to provide guidance to the Service Collaborative initiative, we quickly realized this collective was important to discussions about the overall strategy.
4. *Diverse Needs, Diverse Responses* – Many approaches are designed for general populations of children and youth. Given the regional and cultural diversity of the province, localized approaches are needed. Rural and urban settings have different resources, needs, and system considerations that require adaptations in the implementation process. In addition, some specific cultural populations in Ontario have more or different needs, requiring a response of a different intensity or nature. In the foundational years, several initiatives worked alongside representatives from specific populations to learn more about needs and preferences (e.g., indigenous mental health). Finding respectful ways to include and co-create resources and supports that meet the needs and preferences of specific populations is a critical implementation learning.
5. *Data Is Not a Four-Letter Word!* Modeling the use of data and evidence, and sharing developmental progress, has helped with uptake of core strategies. The field needs to see progress for their change efforts. This requires measurement for continuous quality monitoring, program evaluation, and pro-

cess/outcome tracking. In the foundational years, several implementation and outcome monitoring measurement tools were developed and shared across initiatives. There were difficulties related to the perception of competing or duplicative measures of child and youth mental health functioning. There are varying levels of capacity and resources across the province to include performance measurement and evaluation into the work.

6. *Mind the Gap* – It is a difficult work to translate policy and research into daily practice locally. Communities need implementation guidance to help to bridge the gap between evidence and practice. This includes considering sustainability from the outset and decision-making throughout the implementation process. Supporting communities with information related to implementation principles (e.g., tips for maintaining scope, sequencing for sustainability, risk management) and offering decision support to promote research-based practice can be helpful ways to “mind the gap.” At the same time, it is important to moderate high-level guidance with the appreciation that there will be local variations in how guidelines can be implemented.
7. *Build the Ramp* – In times of transition and transformation, individuals, groups, and communities need help moving from present practice to the desired future. There needs to be explicit attention to preparing people and organizations for sustainable change and meaningful collaboration. It is important to forecast where the field is moving in specific terms and to help stakeholders to understand how we will get there, together. Part of ramp-building involves supporting organizations to tend to foundational conditions so that high-yield programming and services introduced in transformation will flourish within a fertile environment. When the change process and associated expectations and facilitating conditions are made explicit, this can set the stage for future change projects that invariably occur within a transformational culture.
8. *Walk Alongside* – There is good evidence that effective implementation is enhanced via coaching support. Several of the initiatives in the foundational years relied upon implementation coaching as a key enabler of the change process (e.g., Service Collaboratives, SMH ASSIST, youth suicide prevention support through the Centre). It has been well-documented that support models that include implementation coaching are a high-yield way of supporting change within sectors (Fixsen et al., 2005), and our experience in Ontario suggests that the language and experience of coaching can also be used across sectors to reinforce efforts and a sense of collective transformation.
9. *Build Leaders at All Levels*. In order to move from theory and policy into practice, we need leaders at every level of the system. Leadership in times of change needs to be continually nurtured. Distributed leadership is needed to encourage vision setting, strategy development and execution, organizational conditions, systematic communication, capacity building for staff, and ongoing quality monitoring within levels, as well as across sectors. Authentic leadership and voice from families and youth is a critical part of the needed leadership structure.
10. *Meaningful Collaboration* is a critical element in the evolving system of care. Engaging stakeholders including children, youth, families, and those with lived experience to help to plan, develop, and implement new practices every step of the way leads to better solutions and ultimately a better system of care. Collectively, we developed many strategies for honoring historical contributions, sharing leadership, learning together, and co-creating resources across sectors, disciplines, and regions.

Summary

Undertaking implementation efforts that go beyond a single intervention and instead focus on complex, system-level transformational change

for children, youth, and families in a province with over 13 million inhabitants and a vast geography required heavy lifting and the mobilization of many resources. The modified ISF (Bullock & Lavis, 2018) provides a coherent framework for understanding these resources and how each system contributed to the overall change effort. In this final section, we revisit the components of the modified ISF and reflect on how the efforts described here fit within it.

Delivery System

For this particular change effort, the Delivery System is better described as *Delivery Systems*. The focus of the implementation efforts we described took place in the education system, the child and youth mental health system, the adult mental health system, and the criminal justice system. Each of these service delivery systems functions according to its own set of rules, with its own particular service language and culture. In order to achieve change, the Support System, including these three intermediary organizations, needed to have a fulsome understanding of each system, how it operated, and what levers for change were available and needed to have or earn credibility with each service delivery system it was engaging with. Being nimble and adaptive to each particular delivery system context and working to support innovation-specific capacity that was specific to a service delivery system while simultaneously creating general capacity that was not specific to one delivery system but became common to all was a particularly unique feature of this effort.

Support System and Synthesis and Translation System

The three intermediary organizations described here comprised a large portion of the Support System for this change effort. However, the same three intermediary organizations also comprised a large portion of the Synthesis and Translation System. In this system change effort, these two

systems were integrated, which is relatively unique when compared to other descriptions of ISF. Although they were integrated from an organizational perspective, they still remained discrete functions within the intermediary organizations. Integrating these systems within an intermediary provides an opportunity for the intermediary to operate along the full continuum of dissemination to implementation; however, it requires an even more diverse skill set of the people working within them and creates a very large scope of work. The intermediaries must be able to do both innovation-specific and general capacity building for implementation, understand and employ tools and tactics to support synthesis and translation of evidence, and have knowledge and understanding of the theory underpinning each system.

Policy System

Each of the intermediary organizations received funding from a separate provincial government ministry: education, child and youth services, and health and long-term care. These Policy System partners recognized the need for Synthesis and Translation System and Support System capacity in order to achieve the goals set out in the strategy. They enabled this capacity directly through funding the intermediary organization, but they remained actively engaged in the work of their respective intermediary organization and encouraged the collaboration among them. These three ministries also met regularly together to foster coordination of their policy implementation efforts. An important role for the intermediary organizations in their Support System capacity is to feedback to the Policy System any structural barriers the Delivery System is encountering during implementation. The intermediaries also found they employed both their Support System and Synthesis and Translation System functions by increasing the capacity, ability, and appetite of the Policy System to access and use research evidence and increased their knowledge and understanding about implementation science and the process of implementation.

Often cross-sectoral work is approached with considerable hesitation and perceived as too complex to tackle, and despite the best of intentions, groups tend to fall back into familiar silos, especially during times of change and limited resources. But it is especially during these times that cross-sectoral work becomes most critical to ensure efficient use of available resources in the interest of promoting child and youth mental health. The *Open Minds, Healthy Minds* example is provided as an illustration to highlight the power of implementation science within the complex work of transformation to scale across sectors. This example is presented as a reflection of a learning journey, rather than as a definitive guide, but perhaps some of the principles and experiences noted will spark ideas in other jurisdictions and system initiatives.

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