




Children's Mental Health Ontario
Santé Mentale pour Enfants Ontario



EVIDENCE-BASED PRACTICE CONSULTATION PAPER

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with CMHO's Evidence-based Practice Committee

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Executive Summary

Over the past twenty years, progress in the identification of effective treatment interventions has raised service standards in the child, youth, and family mental health sector. The emerging benchmark is the delivery of evidence-based, empirically supported (see glossary) service delivery models that result in positive clinical outcomes for participants. As a leader in the field, Children’s Mental Health Ontario (CMHO) plans to take a proactive role in this transformation through its Accreditation Program and the development of the CMHO Evidence-Based Practice Technical Assistance Centre. This consultation paper is intended to frame this vision and to engage our stakeholders in the process of moving forward together toward its realization.

Introduction

Children’s Mental Health Ontario (CMHO) is committed to promoting, supporting, and strengthening a sustainable system of mental health services for children, youth, and their families. A core feature of this system is the delivery of evidence-based services that produce the positive outcomes they were designed to achieve. Our objective is that children, youth, and families receiving services from CMHO-affiliated organizations achieve an improved quality of life. And, for that reason, **our ultimate goal is that all services delivered by children’s mental health providers become evidence-based, empirically supported, and result in positive clinical outcomes for participants.**

While this sector has always focussed on service excellence, CMHO recognizes that formal supports and resources are needed to ensure continuous learning and reflective practice. We recognise that delivering effective front-line clinical services is itself an outcome of a productive service system. Therefore, CMHO is proactively supporting policy makers, funders, boards of directors, managers, and front-line mental health practitioners to bridge the gap from “science to service” in the implementation of evidence-based practice.

CMHO is embarking on this change process because advances in clinical research over the past twenty years have demonstrated that some types of treatment work, while others can be harmful or ineffective. To date, a number of evidence-based practices (EBP) have been shown to be both effective and replicable.

While there are up-front costs to implementation, EBPs are cost effective. They provide a good return on investment by maximizing the delivery of positive clinical outcomes. Cost/benefit analyses and identifying the

“In a climate of ill-funded mental health programs for children and youth, it is difficult for many agencies to buy into a program like MST (Multi-systemic Therapy) at the outset. However, MST has resulted in true long-term cost-savings as a result of positive outcomes for youth and families.”

Susan Meyers, Child and Youth Wellness Centre of Leeds & Grenville and Anne Edmondson, East Metro Youth Services

"Many people using our services have serious health, literacy, and other intergenerational problems directly related to poverty....The basic needs of this population must be addressed long before CBT (cognitive-behavioural therapy) can even be considered."

Mark Totten, Youth Services Bureau of Ottawa

cost of lost opportunity (e.g., economic productivity, social well-being) are regularly used to gauge the efficiency of EBPs relative to the status quo (treatment-as-usual) (Aos, Lieb, Mayfield, Miller, & Pennucci, 2004; Browne, Byrne, Roberts, Gafni, & Whittaker, 2001; Browne, Roberts, et al., 2001; Browne, Roulston, et al., 2000; Schweinhart et al., 2005).

Over the past ten years, a number of accredited CMHO agencies have successfully replicated EBPs in their organizations. However, the move toward EBP implementation has not been consistent across the service system. CMHO appreciates the importance of building on successes in the field. In addition, it is important to build capacity to evaluate promising practices and build knowledge regarding what works.

CMHO recognizes that the identification and delivery of EBP is an emerging science, and that EBPs must be considered within the ecological context in which services are delivered.

As Figure 1 illustrates, socio-historic, economic, and political contexts influence client circumstances. In addition, it should be noted that culture, gender, race, and class cut across all aspects of evidence-based policy and practice—and thus the diagram. For instance, an EBP developed to address youth gang violence in Philadelphia may need to be adapted to address the needs and gang issues facing refugee youth and their families in Toronto. Or, parenting education strategies may require modification to respect the cultural needs of Aboriginal communities and the residual intergenerational trauma from the residential schools experience.

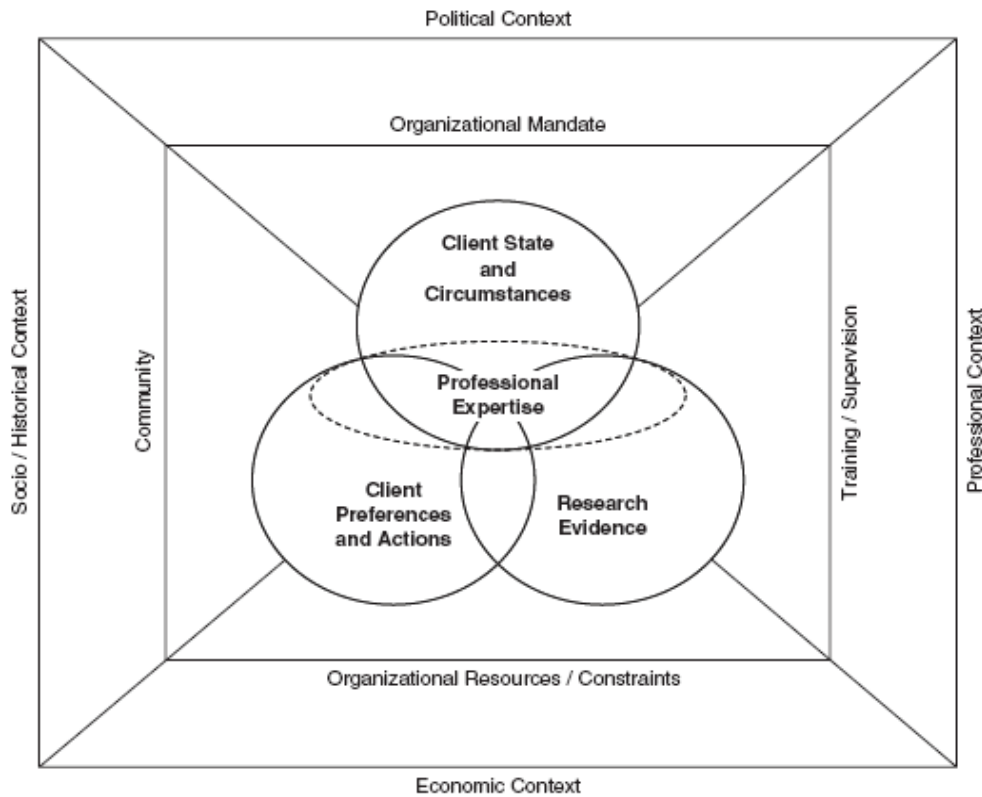


Figure 1
Elements of Evidence-Based Policy and Practice
Source: Regehr, Stern, & Shlonsky, 2007

“We must be wary of a ‘one size fits all’ model with the children, youth, and families engaged in our services. Three key social factors inform the selection and implementation of quality biopsychosocial approaches: gender, ethno-racial factors, and social class.”

Mark Totten, Youth Services Bureau of Ottawa

"Service providers must consider the interests of community partners like boards of education and child welfare services... Fostering a clear understanding of the treatment protocol is vital to moving forward. Without attention to those necessary conversations, ITTM (Intergenerational Trauma Treatment Model), with its requirement for committed caregiver involvement and its ambitious outcome aspirations, would not likely have taken root in our community."

Amber McCart and Lorena Crosbie, Child and Youth Wellness Centre of Leeds & Grenville

Another challenge to implementation involves differences in staffing capacity between the research settings and the staffing realities of most Ontario service providers. Research settings often employ child psychiatrists/psychologists and graduate level therapists who carry small caseloads and receive intensive supervision. Whereas, community-based clinical settings house a variety of professionals with differing levels of academic training ranging from college to graduate level. These professionals manage heavy and complex caseloads and are often too time-constrained to receive supervision. Due to these factors, clinical settings may not have sufficient resources or the capacity to effectively implement evidence-based treatments that are training and supervision intensive.

Time and careful evaluation will be required to establish which EBPs work, with whom, and in what settings. **Hands-on technical assistance, which bridges the gap between academics and service providers, is required to facilitate the iterative cycle of program design, service delivery, evaluation/research, knowledge development, and implementation.**

As well, a relatively small number of interventions have undergone rigorous effectiveness trials. Such research is complex and expensive to undertake—and outside the scope of practice for most community-based agencies. Therefore, program evaluation will continue to play an important role in monitoring program outcomes and efficacy. This is the case for both home-grown service innovations, and for overseeing EBP programming implementation in the local setting.

CMHO recognizes that experience thus far, as well as research regarding the implementation of EBPs, have identified common objections that must be addressed as part

of a system/service transformation (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Gambrill, 2006; Geddes & Carney, 2001; Gibbs & Gambrill, 2002). These can be summarized as follows:

Common Perceptions	Transformation
1. Evidence-based practice research is not convincing.	The research methodology exists to develop new clinical knowledge. A cultural shift is required in which mental health practitioners recognize the role of standardized measures, program evaluation, research, and quality improvement as essential components of their clinical practice.
2. Evidence-based practices constrict the work of skilled mental health practitioners.	Clinical expertise is required in the delivery of EBPs. This includes clinical supervision that supports adaptation of services to address each client’s individual context and needs, while maintaining fidelity to essential elements of the EBP.
3. Evidence-based practices are too expensive to deliver.	The delivery of EBPs often requires shifting resources. However, more effective clinical practice results in better clinical outcomes for clients, and thus provides a good return on investment.
4. Evidence-based practices are too difficult to implement.	The implementation of EBPs requires organizational and systems change. By taking a systemic view of implementation, supports can be put in place that address barriers, facilitate implementation, and support ongoing program integrity.
5. Evidence-based practices are introduced in communities that are not ready.	Educating community partners and maintaining a focus on demonstrated positive clinical outcomes for clients can garner community support for the shift to EBPs.

"A core value for children's mental health practitioners is their capacity to reflect and respond to unique needs—and in many ways it is their greatest asset. This capacity continues to inform everything that happens both within and outside of our implementation of ITTM, and ensures that any evidence-based model that integrates itself into our practice does not diminish, but rather enriches this capacity."

Amber McCart and Lorena Crosbie, Child and Youth Wellness Centre of Leeds & Grenville

Experience has demonstrated that addressing objections through education, the sharing of "on the ground" experience (e.g., communities of practice), along with knowledgeable technical assistance, can expedite the transition to EBPs across the sector.

The delivery of EBPs involves not only the interaction between the mental health practitioner and client, but also the processes of training and supervision, agency administration and management, community readiness, the policy and funding environment, and all other aspects of the service system. For this reason, **CMHO recognizes that the implementation of EBPs requires education and expert consultation for policy makers, funders, boards of directors, and managers to put knowledge into practice.** Without this attention to implementation, research and experience has shown that EBPs will not transfer to the field, and outcomes for service participants will not improve (Fixsen, et al., 2005).

Evidence-based practice is an evolving body of knowledge. The delivery of EBPs requires that mental health practitioners, agencies, and the service system operate from a paradigm of continuous learning and improvement (e.g., Deming, 1986; Senge, 1994; Drucker, 1999). An EBP is not considered to be implemented until it can be demonstrated, on an ongoing basis, that practitioners are delivering the clinical practice with fidelity,

"Without buy-in from our organizations' leadership, MST would not have survived in Ontario due to the real challenges of implementing an EBP. Leaders must champion MST both within and outside their organizations to maintain buy-in from stakeholders and staff, commit resources, and ensure ongoing fidelity to the model."

Susan Meyers, Child and Youth Wellness Centre of Leeds & Grenville and Anne Edmondson, East Metro Youth Services

and that consumers are achieving and sustaining positive outcomes. Considerations regarding when and how adaptations are made to particular EBPs require careful reflection. Sometimes modifications are necessary and possible, and in other instances they may be problematic and counter-indicated. Thus, clinical supervision and program evaluation are key aspects of EBP implementation and management.

"Research has shown that fidelity to a given evidenced-based intervention will translate into positive outcomes for families. Continuous quality improvement is integral to the delivery of all evidenced-based practices."

Susan Meyers, Child and Youth Wellness Centre of Leeds & Grenville and Anne Edmondson, East Metro Youth Services



Background

Ontario is poised to boldly move forward with the implementation of EBPs across the child, youth, and family mental health service system. A number of significant catalysts and supports are already in place. Organizations that support leading-edge research in child, youth, and family mental health, such as the Provincial Centre of Excellence for Child and Youth Mental Health, are now accessible to the field. In addition, a new collaboration, the Network for Mental Health Information, has been initiated between the Centre of Excellence, Offord Centre, eMentalHealth, and CMHO. This network has been created to ensure that high-quality information about mental health problems is available to children, youth, and families, in a format that they can understand and use.

Even when the right information about EBPs is accessible, we know from the US experience that the intended end result—better outcomes for children, youth, and families—does not always occur. According to Fixsen et al., (2005) **the missing link between science and service is effective implementation:** the art and science of incorporating innovations into typical human service settings to benefit children, families, adults, and communities.

CMHO, building on its experience and expertise, plans to take a leadership role by providing hands-on technical assistance to policy makers, funders, managers, and front-line service providers to implement evidence-based practices. CMHO's work will complement that of the Centre of Excellence for Child and Youth Mental Health, much as a general contractor, working with an architect and client, facilitates the transformation of blueprints into reality.

Technical assistance (TA) to support the implementation of EBP is cost effective. Early investment in TA for

service providers and policy makers results in later cost savings. Fixsen & Blase (2006) depict the investment/savings process as follows:

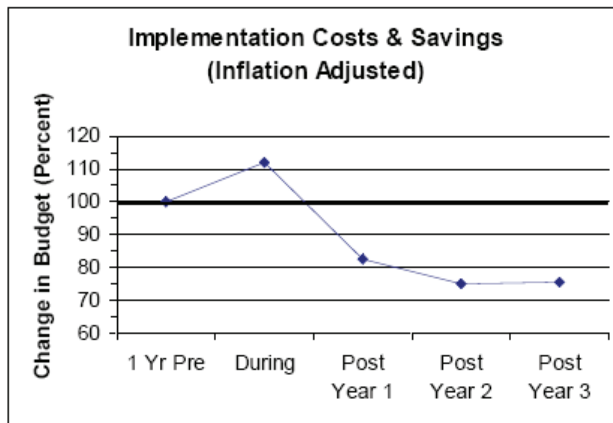


Figure 2
Source: Fixsen & Blase, 2006

In the US, billions of dollars have been spent funding organizations to provide EBPs. Most funding has been granted without attention to implementation. Without sufficient attention to fidelity, the outcomes for service participants did not improve (Fixsen, et al., 2005). However, it has also been demonstrated that, with comprehensive support, effective implementation reaches 95% (Fixsen, et al., 2005).



Assumptions

The achievement of positive clinical outcomes requires a systems approach to service quality (Fixsen, et al., 2005). A significant body of research indicates commonalities between effective implementation processes that cut across business, industry, health, and social services. This evolving knowledge can inform and support successful EBP implementation. Key factors include:

- Establishing standards and benchmark outcomes
- Providing ongoing auditing, evaluation, and research
- Developing and disseminating knowledge
- Incorporating organizational and systems learning
- Providing workforce development
- Ensuring multi-system transformation (i.e., changes in practice at all levels: clinical, supervisory, management, community, policy, political)
- Securing adequate funds to ensure sufficient and ongoing implementation

Partners


CMHO takes a multi-systemic view of EBP. **Successful incorporation of EBPs throughout the child, youth, and family mental health service system, and the demonstration of positive clinical outcomes, will require input from and collaboration with stakeholders at every level.** These stakeholders include: consumers; frontline mental health practitioners; clinical supervisors; program and agency management; boards

of directors; collateral service providers (e.g., health, education); researchers and evaluators; collateral organizations (e.g., the Provincial Centre of Excellence for Child and Youth Mental Health, universities, Hospital for Sick Children, the Sparrow Lake Alliance, the Oxford Centre, National Implementation Network, Louis de la Parte Florida Mental Health Institute, University of South Florida); the Ministry of Children and Youth Services; city, provincial and federal governments; and other funding sources (e.g., foundations, corporations, United Way).

CMHO Activities

The goal for all services delivered by children's mental health (CMH) providers is that they be evidence-based and empirically supported. Successfully demonstrating positive clinical outcomes for participants will take a number of years to achieve. Service providers in Ontario are at different starting points with respect to EBPs. Progress toward realization of this vision will take place along a continuum. **The objective is for all agencies to move ahead on the continuum; it is not an expectation that all will end up at the same place.** Agencies have differing capacities to select, learn, implement, and evaluate EBPs. In addition, the needs of local communities and populations vary across the province.

CMHO plans to develop a technical assistance centre to meet the needs of the field. **The CMHO EBP Technical Assistance Centre will provide hands-on technical assistance to managers and front-line service providers in terms of the multifaceted aspects of successful EBP implementation, and consultation/education for policy makers and funders.**



Research regarding effective implementation strategies, and the associated methods needed to make better use of science in human service settings, has progressed significantly over the past five years. The CMHO EBP Technical Assistance Centre will provide technical assistance to support the service system's capacity to act on identified key implementation "drivers" (Fixsen, et al., 2005):

- recruitment and selection of clinical staff
- pre-service training of clinical staff
- consultation and coaching of clinical staff
- ongoing education
- performance evaluation
- development of a learning organization culture through the use of data supported decision-making/applied research/evaluation
- alignment of administrative process to support service delivery
- program evaluation
- systems interventions (e.g., policy changes, funding shifts (Broner, Franczak, Dye, & McAllister, 2001; Lomas, 2000))
- systems management (i.e., infrastructure, data collection and analysis, leadership, incentives, etc. that move the system forward as a whole)
- research and knowledge exchange (e.g., consultation and joint planning with the Centre of Excellence regarding priorities in the field)

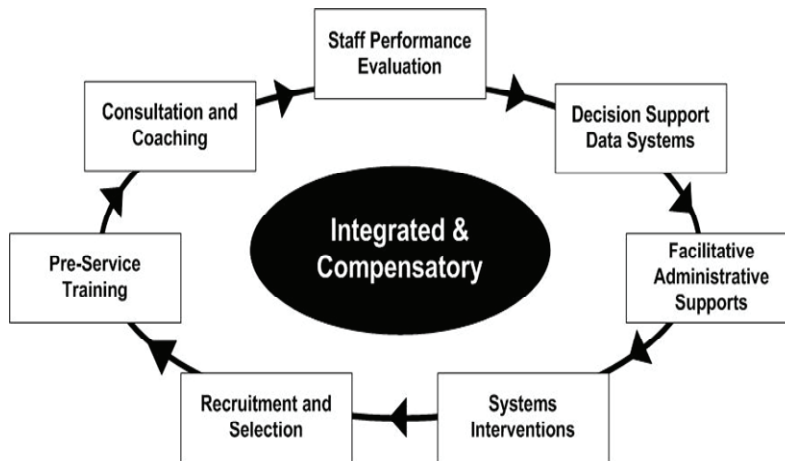


Figure 3
Implementation Drivers
 Source: Fixsen, Naoom, Blase, Friedman, & Wallace, 2005

To support the move to EBPs, the CMHO EBP Technical Assistance Centre will provide leadership to the child, youth, and family mental health services field in Ontario and Canada through a variety of activities, including:

Technical Assistance: Provide assistance to organizations across the stages of EBP implementation—selection of EBPs, contracting with EBP purveyors, pre-implementation planning, staff recruitment/selection, performance/ fidelity monitoring, EBP adaptation/innovation, planning for sustainability

Training: Facilitate and broker training opportunities; assist organizations in managing training costs through collaboration; ensure that training outcomes are maximized through the inclusion of demonstration, practice, feedback, and coaching as components of all training coordinated by



the Technical Assistance Centre

Consultation: Provide organizational leaders, funders, and the government with consultation, education, and coaching in all aspects of the EBP implementation process; anticipate likely challenges; assist with problem solving

Linkages: Create linkages between stakeholders throughout the child, youth, and family mental health services sector to facilitate EBP implementation (e.g., funders with organizations capable of delivering EBPs, policy makers with subject matter experts, boards of directors with experienced consultants/evaluators, managers with EBP purveyors, front-line mental health practitioners with communities of practice, researchers with agencies willing to be involved in EBP studies)

Data Collection and Analysis: Provide technical assistance with the development of quality improvement and decision support systems; assist with software selection and the development of data architecture; undertake data management and analysis projects on behalf of the system (e.g., Brief Child and Family Phone Interview, census data, survey projects); provide technical assistance with data analysis and interpretation

System Development: Provide technical assistance to funders, policy makers, and government regarding their role in the shift to EBP; facilitate dialogue and consultation with experts in the field; provide leadership in creating a shared vision; provide educational and skill development opportunities for system leaders to support their role in the system's transformation to EBP; provide technical assistance (e.g., needs analysis, planning, logistics management)

Culture Development: Facilitate development of a reflective, iterative, learning culture at all levels of the service system, which supports service excellence and the EBP process

Advocacy: Advocate with funders, policy makers, and government to support the shift to EBP by investing not only in direct service delivery, but also in the organizational and system infrastructure required to support EBP implementation and sustained performance

CMHO will lead by example in the development of the CHMO EBP Technical Assistance Centre. The available research will be reviewed in terms of approaches to supporting successful EBP implementation and the provision of technical assistance. The National Implementation Research Network and other technical assistance centres will be consulted regarding their experiences and successes. The CMHO EBP Technical Assistance Centre's technical assistance model will be developed based on this research. In addition, CMHO will engage with and be a recipient of technical assistance and coaching during the EBP Technical Assistance Centre's development.

CMHO will also continue to develop its Accreditation Program, which defines standards for high quality services and performance and verifies that those standards have been attained. The accreditation process is seen as a key component of quality improvement and organizational learning. The move toward integrating the values and methodology of evidence-based practice into the CMHO Accreditation Standards has already begun.

"A few years ago, Vanier Children's Services in London began to change how we think about staff development. Up to that time, it was difficult to schedule staff to present to the agency on training that they had attended outside of the agency, and day-to-day practice rarely changed as a result of these presentations. Instead, we started talking about Knowledge Centres, Communities of Practice, and Working Groups."

Jeff Carter, Vanier Children's Services

While CMHO will provide leadership in this effort, transformation of the field and insurance of sustainability can only be achieved by building competency within agencies and across systems. As such, the active involvement and support of member centres and key partners throughout the service system will be critical.

Outcomes

CMHO will track and measure the following outcomes in relation to this initiative:


- All services provided by CMHO-accredited agencies will be evidence-based (ideal) or empirically-supported (minimum)
- CMHO-accredited service providers will demonstrate, or be in the process of demonstrating, success in achieving positive clinical outcomes for service participants and for agency services/programs
- Mental health practitioners, agencies, and the Ontario CMH service system will have increased capacity for continuous improvement/knowledge development and use
- A significant government and private sector investment in supporting EBP implementation across the province will be initiated; this investment will correspondingly improve clinical outcomes for children, youth, and families receiving services from the CMH system

"...clinicians were trained and certified in a labour-intensive evidence-based observational assessment, which could then be used pre- and post-program, alongside other instruments, to measure changes in parent-infant interaction. The findings were instrumental in informing specific changes in subsequent program design to better serve the centre's clients, and substantially improved outcomes."

Yvonne Bohr, Aisling Discoveries Child and Family Centre

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Bibliography

With selected annotations

For a more comprehensive list of resources, please refer to the annotated bibliography by Barwick and colleagues at:


[http://www.kidsmentalhealth.ca/documents/
KT_annotated_bibliography.pdf](http://www.kidsmentalhealth.ca/documents/KT_annotated_bibliography.pdf)

Barwick, M. A., Boydell, K. M., Stasiulis, E., Ferguson, H. B., Blase, K., & Fixsen, D. (2005). *Knowledge transfer and evidence-based practice in children's mental health*. Toronto, ON: Children's Mental Health Ontario.

The authors of this report identify the barriers and facilitators that come into play when implementing evidence-based practices in children's mental health centres in Ontario. The authors suggest that successful knowledge transfer and implementation of evidence-based practices requires a coordinated effort by all players involved, including government, children's mental health centres, and children's mental health professionals. In addition, it requires dedicated resources to assist with the dissemination and uptake of current evidence-based practices.

Feldman, S. (1999) Strangers in the night: Research and managed mental health care. *Health Affairs*, 18(5), 48-51.

The author states that research findings have negligible effects on managed mental health care and explores the reasons behind it. A main reason for this finding is that managed mental health organizations are not convinced that research has much to offer them, nor do they believe that it will enhance the quality of the services they provide. Similarly, most researchers, having limited interactions with managed mental health organizations, do not have a clear understanding of the realm in which they operate. As a result, they tend to study topics that attract funders rather



than those considered important to the managed mental health organizations. Thus, a 'relevance gap' between research and the reality in which many mental health organizations operate is created. To address this gap, the author suggests that managed mental health organizations, researchers, and funders need to work together.

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

This monograph provides a comprehensive review of the research literature on the science of implementation. It identifies effective implementation strategies which bridge the gap between science and practice. According to the authors, implementation appears most successful when: a) practitioners are carefully screened and receive appropriate training, coaching, and performance assessments; b) organizations support training, supervision coaching, and regular process and outcome evaluations; c) communities and consumers are involved in the selection and evaluation of programs and practices; and d) state and federal funding avenues, policies, and regulations are open to implementation and program operations.

Garland, A. F., Plemmons, D., & Koontz, L. (2006). Research-practice partnership in mental health: Lessons from participants. *Administration and Policy in Mental Health and Mental Health Services Research*, 33(5), 517–528.

Researchers have identified the need for increased collaboration between researchers and practitioners with the goal of improving patient care and improving the ecological validity and clinical utility of research. However, to date there has been minimal research investigating the factors that may facilitate or inhibit these collaborative processes. This qualitative study examines the perceptions held by participants (practitioners and researchers) throughout a research-practice

collaboration. The findings suggest that effective communication and shared trust facilitate successful collaborations.

Jensen, P. S., Hoagwood, K., Trickett E. J. (1999). Ivory Towers or earthen trenches? Community collaborations to foster real word research. *Applied Developmental Science*, 3(4), 206–212.


The authors stress the need for moving research from laboratory settings into community-based mental health care centres. Principles for effective and meaningful collaborations between university investigators and community partners are discussed. Key elements of collaboration include: (a) a focus on external validity; (b) incorporating the values and needs of community collaborators within research activities; (c) a broader assessment of outcomes; (d) the flexibility to fit local needs and circumstances; (e) modifications of research methods; and (g) embracing long-term perspectives.

Kazdin, A. E. (2006). Arbitrary metrics: Implications for identifying evidence-based treatments. *American Psychologist*, 61, 42–49.

Kazdin argues that relying on arbitrary metrics (effect size, statistical significance) alone to determine treatment effectiveness is not enough and doesn't account for factors such as improved quality of life. Evidence-based treatment outcomes must be relevant and evident to patients and others in their everyday life. Kazdin concludes that one solution may be to incorporate the use of qualitative outcome measures in research studies to assess improvement.

Magnabosco, J. L. (2006). Innovations in mental health services implementation: A report on state-level data from the U.S. Evidence-Based Practices Project. *Implementation Science*, 1, 1–13 .

Ministry of Children and Youth Services. (2006). A shared responsibility – Ontario's policy framework for child and



youth mental health. Toronto, ON: Author.

This policy framework provides the strategic direction for children's mental health in Ontario. It sets a common understanding for ongoing improvements and establishes the need for a broad continuum of services for young people, ranging from health promotion, early identification, and intervention, to specialized treatment.

Myhr, G., & Payne, K. (2006). Cost-effectiveness of cognitive-behavioural therapy for mental disorders: Implications for public health care funding policy in Canada. *Canadian Journal of Psychiatry, 51*(10), 662–670.

The authors examine the economic impact of using cognitive-behavioural therapy (CBT) in the treatment of mental health disorders. Specifically, they review 22 health economic studies involving CBT in the treatment of mood, anxiety, psychotic, and somatoform disorders. The findings demonstrate that an investment in CBT represents value for dollars spent. Furthermore, as a sole intervention for depression or anxiety, CBT is cheaper than medication. This review suggests that CBT is cost-effective, and states that its current under-use represents a serious gap in Canadian mental health care.

Nelson, T. D., Steele, R. G., & Mize, J. A. (2006). Practitioner Attitudes Toward Evidence-based Practice: Themes and Challenges. *Administration and Policy in Mental Health and Mental Health Services Research, 33*(3), 398–409.

In light of the fact that evidence-based treatments are adopted slowly in community mental health settings, the authors examined practitioners' attitudes toward these approaches. Child and adolescent mental health practitioners from two community mental health centres participated in focus groups. Among the practitioners' concerns were issues related to the applicability and transportability of evidence-based research to clinical settings, a desire for a greater emphasis on therapeutic relationships, and the need for flexibility within treatment design and evaluation.

Standing Senate Committee on Social Affairs, Science and Technology. (2006). *Out of the shadows at last—Transforming mental health, mental illness and addiction services in Canada*. Ottawa, ON: Author .


Southam-Gerow, M. A., Ringeisen, H. L., & Sherrill, J. T. (2006). Integrating interventions and services research: Progress and prospects. *Clinical Psychology: Science and Practice, 13*(1), 1–13 .

Southam-Gerow, M. A., Weisz, J. R., & Kendall, P. C. (2003). Youth with anxiety disorders in research and service clinics: Examining client differences and similarities. *Journal of Clinical Child and Adolescent Psychology, 32*(3), 375–385.

The authors compare two groups of children with anxiety disorders, those treated in a university-based research clinic and those treated in a community-based service clinic. They found that children receiving treatment in community settings demonstrated more co-morbid externalizing diagnoses and externalizing problems, and were more likely to come from low-income and single-parent families. The children did not differ on measures of internalizing symptomatology and diagnosis. The findings suggest that research carried out in university-based clinics may lack external validity and raises questions about the transportability of evidence-based treatments in community settings. Methods for improving applicability of treatments in community settings is described, including a model for testing treatments in real-world settings.

Sullivan, G., Duan, N., Mukherjee, S., Kirchner, J., Perry, D., & Henderson, K. (2005). The role of services researchers in facilitating intervention research. *Psychiatric Services, 56*(5), 537–542.

The authors explore why clinically- and cost-effective interventions are rarely adopted widely in clinical settings. One reason may be the use of top-down approaches when exam-



ining interventions, whereby knowledge is developed and generated by researchers with little input from front-line clinicians. This article describes a bottom-up approach in which clinicians participate in the design and testing of interventions. The authors recommend the use of a combination of both of these approaches.

Ollendick, T. H., & King, N. J. (2004). Empirically supported treatments for children: Advances toward evidence-based practice. In P. Barrett & T. H. Ollendick (Eds.) *Handbook of interventions that work with children and adolescents: From prevention to treatment*. London: John Wiley & Sons, Inc.

The authors review a number of empirically supported treatments for children. They suggest that the existing research evidence in children's mental health does not address: a) the clinical experience of practitioners in real world settings; b) the efficacy of treatments across the developmental continuum or with children with concurrent disorders; and c) barriers to implementation of EBP, such as the fragmentation of services across disciplines and sectors.

Waddell, C., McEwan, K., Shepard, C. A., Offord, D., & Hua, J. M. (2005). A public health strategy to improve the mental health of Canadian children. *Canadian Journal of Psychiatry*, 50(4), 226–233.

To improve the mental health of Canadian children, the authors recommend the creation of a public health strategy that includes promotion, prevention, treatment and evaluation. This public health strategy would recognize that: evidence-based practices are the standard of care; practitioners should be supported to meet the standard; treatment services should be coordinated across jurisdictions, sectors and disciplines; and a national information system to monitor outcomes should be created.

Weisz, J. R., Donenberg, G. R., Han, S. S., & Weiss, B. (1995). Bridging the gap between laboratory and clinic in child and

adolescent psychotherapy. *Journal of Consulting and Clinical Psychology*, 63(5), 688–701.

Weisz, J. R., Sandler, I. N., Durlak, J. A., & Anton, B. S. (2005). Promoting and protecting youth mental health through evidence-based prevention and treatment. *American Psychologist*, 60(6), 628–648.

The authors stress the importance of linking prevention and treatment programs to improve youth mental health. A number of such programs are reviewed to illustrate effective intervention outcomes. The strengths, gaps, and future directions of this model are identified.

Welsh, B. (2001). Economic costs and benefits of early developmental prevention. In R. Loeber and D. Farrington (Eds.), *Child Delinquents: Development, Intervention, and Service Needs* (pp. 339–355). Thousand Oaks, CA: Sage.



Appendices

Appendix A

Logic Model
Activities Detail

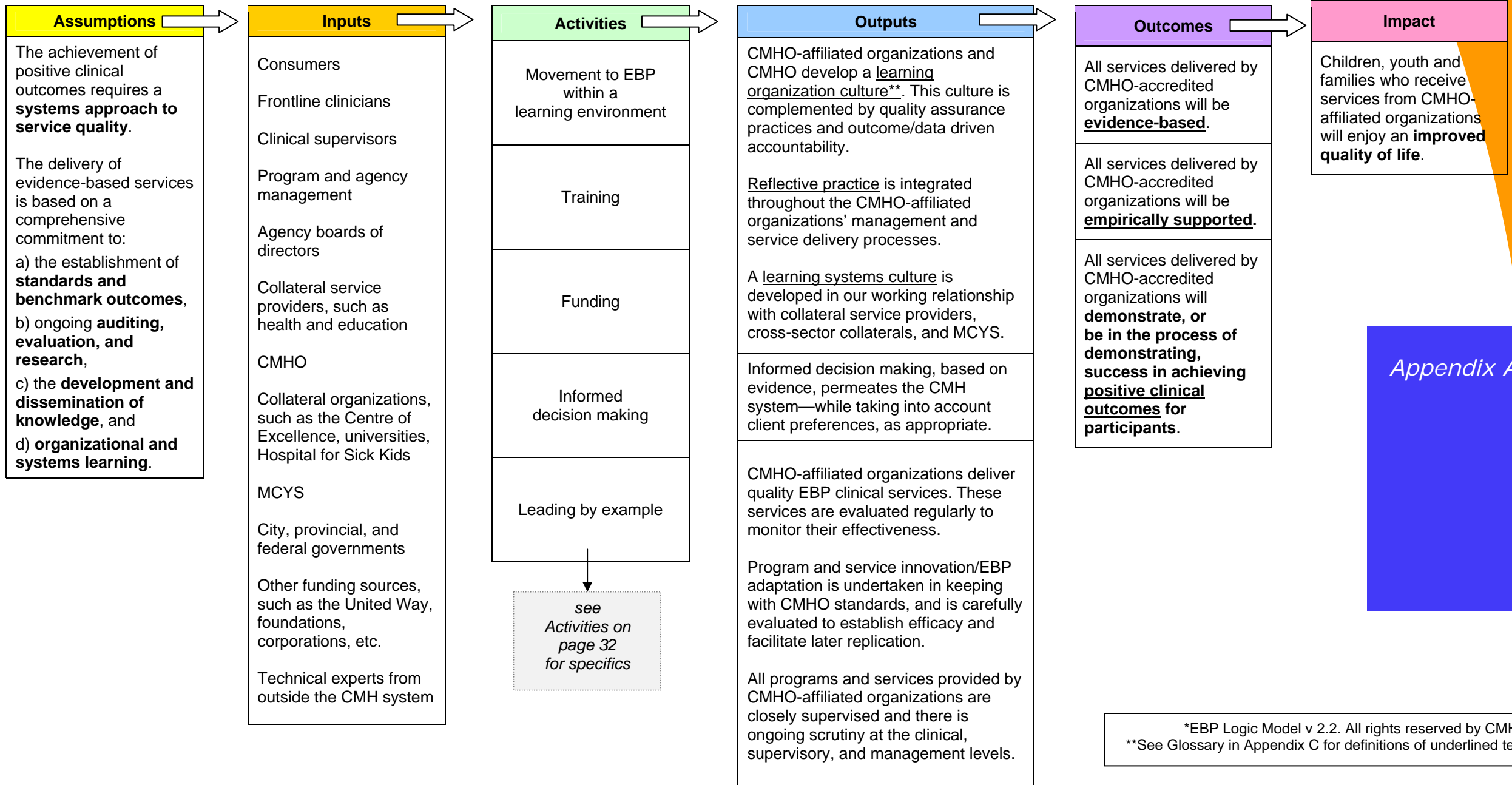
Appendix B

Case Studies

Appendix C

Glossary
Glossary References

EBP Logic Model*



Appendix A

*EBP Logic Model v 2.2. All rights reserved by CMHO
 **See Glossary in Appendix C for definitions of underlined text.

	Activities
Movement to EBP within a Learning Environment	<p>The new CMHO Knowledge and Learning Accreditation Standards serve as templates to help move the field forward by guiding and supporting CMHO-affiliated organizations in all stages of EBP implementation. This process includes adopting broader systems changes in the areas of reflective practice, learning organization development, and quality assurance practices.</p> <p>CMHO markets and packages the movement to EBP to engage participation at all levels of the system, promote the necessary shift in organizational culture, support implementation, and address issues of resistance.</p> <p>CMHO facilitates and/or provides access to instrumental supports, such as:</p> <ul style="list-style-type: none"> • grant/proposal writers • transition funds • a consortium of evaluators/researchers • sharing of expertise across organizations • a common language and data dictionary that provides a framework for comparative program evaluation <p>CMHO sets standards of practice for evaluation and research.</p> <p>CMHO campaigns to increase public awareness of EBP and the standards of practice adhered to by CMHO-affiliated organizations.</p>
Training	<p>CMHO identifies the training needs of CMHO-affiliated organizations.</p> <p>CMHO establishes standards regarding trainers and educational programs—recognizing that changes in practice and skill development require <u>knowledge transfer</u> opportunities, practice, feedback, mentoring, and support.</p> <p>CMHO identifies the best quality training available and facilitates cost-effective delivery through the development of training networks and economies of scale. In the process, CMHO clarifies its relationship with <u>Safeguards</u>.</p> <p>CMHO supports the development of communities of practice across the province.</p>
Funding	<p>CMHO identifies and develops an inventory of alternative funding sources to support the transition to EBP and provides these to CMHO-affiliated organizations.</p> <p>CMHO advocates with the government to support EBP through funding provisions.</p> <p>CMHO collaborates with a broad range of funders (government, foundations, corporations, etc.) and the major research councils in the CMHO-led CMH EBP movement.</p> <p>CMHO hosts an annual symposium to link funders and EBP projects.</p>
Informed Decision Making	<p>CMHO provides and/or facilitates access to technical assistance and training to increase the capacity of CMHO-affiliated organizations to collect and analyze data and produce user-friendly reports.</p> <p>CMHO provides and/or facilitates access to instrumental supports, such as:</p> <ul style="list-style-type: none"> • key data (e.g., Census) and assistance with data analysis • criteria for decision making regarding EBP • standardized measurement tools (e.g., SPSS, testing materials), including discounts for purchase and technical assistance
Leading by Example	<p>CMHO establishes clear timelines for the achievement of identified outcomes.</p> <p>CMHO designs and carries out a formal evaluation of this transformation process, with regular progress updates provided to CMHO-affiliated organizations and the CMHO board. CMHO will also produce articles for publication regarding the process and outcomes.</p>

Case Studies

Positive Clinical Outcomes through Implementation of an Evidence-Based Intervention

Aisling Discoveries Child and Family Services had been providing parenting for infants groups for several years. Though the program was deemed to be an evidence-based intervention and was well received, clinicians and administrators at the agency did not have any information on the effectiveness of the program (i.e., whether or not the program increased parental sensitivity and decreased parenting stress). Program effectiveness was especially important as the group curriculum had to be creatively modified to accommodate the diverse needs of the parents who participated.

With the help of a grant, clinicians were trained and certified in a labour-intensive evidence-based observational assessment, which could then be used pre- and post-program, alongside other instruments, to measure changes in parent-infant interaction. The findings were instrumental in informing specific changes in subsequent program design to better serve the centre's clients, and substantially improve outcomes. However, this kind of improvement in effectiveness is only feasible if it is supported with adequate funding (e.g., the cost of training, certification, and annual re-certification (in EB measures); collaboration with researchers; and, most importantly, clinician time for reflection, analysis, ongoing discussion, training, certification, and data collection.

Contributed by: Yvonne Bohr, Aisling Discoveries Child and Family Services



Evidence-Based Practices with Youth: The Importance of Incorporating Gender, Ethno-Racial and Social Class into Daily Interventions

What evidence-based practices work for which client populations? At the Youth Services Bureau of Ottawa (YSB), the answer to this question is contextualized within the specific risks and attributes of unique clients. We must be wary of a 'one size fits all' model with the children, youth, and families engaged in our services. Three key social factors inform the selection and implementation of quality bio-psychosocial approaches: gender, ethno-racial factors, and social class. Each of these issues can be explored using a cognitive-behavioural therapy (CBT) model.

Research evidence tells us that what works with girls and young women does not work with boys and young men. This is related to the fact that girls see their world in terms of relationships with others (a 'relational' approach), whereas boys are socialized to see themselves as individuals, separated from their families. Trauma, in particular sexual abuse, defines the lives of many young women using our services. CBT must therefore address young women's anger and violence in the context of the social relationships in which they occur. With young men, anger and violence are most often expressed in an instrumental and utilitarian fashion. Traditional approaches to CBT are therefore likely to work, without basing wounded patterns of thinking upon trauma and maltreatment.

At YSB, the ethno-racial origin of young people is a second key ingredient in selecting and implementing appropriate services. Quality CBT with new Canadian, Aboriginal, African and Caribbean, Asian, and other ethnic and racial minority clients is very different compared to CBT interventions with mainstream young people. Many new Canadians come from war-torn countries and have witnessed and suffered atrocities. In many cultures, identifying personal problems and/or seeking counselling is cause for marginalization. Aboriginal peoples have suffered profound loss of culture and identity due to forced assimilation, colonization, and criminalization. Their rates of sui-

cide and accidental deaths are estimated to be among the highest in the world. These examples illustrate the fact that CBT must be grounded in these lived experiences, and cannot be effectively delivered in a 'manualized' method.

Finally, social class is the third key ingredient that should inform the selection and implementation of quality approaches. The clients served by YSB are all low-income, and the depth of poverty experienced by some families is much more profound than others. Many people using our services have serious health, literacy, and other intergenerational problems directly related to poverty. These include: learning disabilities and other cognitive impairments; emotional and behavioural disorders; dropping out of or being excluded from school; living on the street, in shelters, and in substandard housing; substance abuse; unemployment; and lack of access to community services. The basic needs of this population must be addressed long before CBT can even be considered.

Contributed by: Mark Totten, Youth Services Bureau of Ottawa





Implementation of Multisystemic Therapy (MST) in Ontario

Research has shown that fidelity to a given evidenced-based intervention will translate into positive outcomes for families. Continuous quality improvement is integral to the delivery of all evidence-based practices. Here are some things we found helpful with the implementation of Multisystemic Therapy (MST) in Ontario.

- *Recognize that implementation is a process that needs ongoing monitoring, fine-tuning, and course correction.* If we had concluded that “MST doesn’t work in Ontario,” as some had suggested based on the initial research from our Ontario clinical trials, we would have missed an opportunity to learn how to implement the model *with fidelity* within an Ontario context. We made mistakes in implementation that taught us how to implement better.
- *Make sure the evidence-based practice is implemented with the populations for whom it was designed.* EBP is not designed to be used with all groups of clients. If you want to stretch the limits of the EBP for populations you are serving, incorporate a clear evaluation process as you “drift” from the model to test the effectiveness with other groups. Numerous trials using MST with various populations have been performed; in all cases, adaptations to the model had to be incorporated to ensure positive outcomes.
- *Get commitment to EBP from the organization’s leadership.* Without buy-in from our organizations’ leadership, MST would not have survived in Ontario due to the real challenges of implementing an EBP. Leaders must champion MST both within and outside their organizations to maintain buy-in from stakeholders and staff, commit resources, and ensure ongoing fidelity to the model.
- *Commit resources for the ongoing implementation.* Implementing an EBP is often more costly up-front. In a climate of ill-funded mental health programs for children and

youth, it is difficult for many agencies to buy into a program like MST at the outset. However, MST has resulted in true long-term cost-savings as a result of positive outcomes for youth and families.

- *Support staff as the EBP is implemented.* Ensure that staff have the necessary time and resources to complete all components of the EBP. We were fortunate that MST has a very clear model for this support in its design.
- *Ensure fidelity to all components of the EBP model.* Key program requirements of the EBP are there for a reason. Even if it is not clear today, it will be evident at a later date. As we implemented MST, we have experienced instances of “drift” and have been able to trace our resultant poorer outcomes back to our lack of fidelity to the model.
- *Constantly and consistently monitor outcomes.* Evaluation tools that are incorporated into the EBP are there for a reason. If we do not reach the target for any of these measurements, we need to tackle this with organizational support so that we are able to evaluate ongoing barriers to positive outcomes. We need to commit resources to this task as much as we need to commit staff resources to carry out the EBP. MST has been helpful in its incorporation of Continuous Quality Improvement (CQI) throughout the model and creation of a web-based database to help track this information.
- *Include key stakeholders in the continuous review of implementation.* In order for EBP to be effective, those involved with it need to be on board. A good way to ensure this is to include stakeholders in the ongoing review of the implementation. We have found it key to have our clients, referral sources, staff, supervisors, organizational leaders, and others all provide information on how well we are doing—and on the effectiveness of our program.

Contributed by: Susan Meyers, Child and Youth Wellness Centre of Leeds & Grenville and Anne Edmondson, East Metro Youth Services



Transition to a Learning Organization Culture

A few years ago, Vanier Children's Services in London began to change how we think about staff development. Up to that time, it was difficult to schedule staff to present to the agency on training that they had attended outside of the agency, and day-to-day practice rarely changed as a result of these presentations. Instead, we started talking about Knowledge Centres, Communities of Practice, and Working Groups. The theme that emerged was to identify people with interest in a specific area and give them opportunities to learn about and develop skills in that area. Groups have identified leaders who are facilitators or champions rather than experts. The groups are open to anyone from any discipline and from any clinical team who shares that interest. Now, when we see a notice for an interesting training opportunity, we forward it to the people who are most interested and who can put the training in the context of ongoing work.

The format of each working group is specific to the needs and goals of the group. Vanier has had several working groups dealing with particular clinical areas, including collaborative problem solving therapy, emotionally-focused family therapy, cultural diversity, reducing physical restraints, children under age 12 years with police involvement, sexually intrusive behaviours, fire involvement, and woman abuse. Most recently, we began putting together a group for cognitive-behavioural approaches, especially addressing how they are applied in a residential setting.

Some working groups meet occasionally to gather information and develop resource materials. Other groups have led to specialized training for a few staff who then support each others' learning and consult to the rest of the agency. A few working groups meet every month to talk about ongoing issues and changes in practice.

The working groups have led the agency in bringing in training and community resources and in providing clinical case consultation related to their interest. Each group reports quarterly to

the agency-wide quality assurance committee (Value Team) and provides an annual written report. The working groups take the lead in reviewing service data (such as number of clients referred who have specific issues and time on waiting lists), and their findings help with overall agency planning.

Contributed by: Jeff Carter, Vanier Children's Services, London





Adherence in Action: Issues in Implementing a Promising Practice in our Rural Community

How do we honour both the intention and integrity of a treatment model as it transitions from one community and clinic to another?

We kept that question at the front of our thinking as we grappled with introducing the Intergenerational Trauma Treatment Model (ITTM) into our practice at Child and Youth Wellness Centre of Leeds and Grenville, a rural, de-centralized children's mental health agency.

Urban thinkers may have a hard time anticipating rural realities and their impact on service planning. Broad geographic spread, sparse populations, a dearth of service alternatives, and lack of public transit and accessible childcare are some of the factors that rural communities need to account for in making a fit between treatment model and possible barriers to implementation.

The interests of community partners like boards of education and child welfare services entwine themselves around mental health treatment agendas like a robust flowering vine—tended properly, they harmonize and support child and family treatment; neglected, they will choke the promise out of it. Fostering a clear understanding of the treatment protocol is vital to moving forward. Without attention to those necessary conversations, ITTM, with its requirement for committed caregiver involvement and its ambitious outcome aspirations, would not likely have taken root in our community. Our job is to till that terrain between promise and practice, and to do so in a way that makes it understandable for our partners and clients.

When we moved into implementation, we were at risk of underestimating the amount of internal resources and commitment required. These were needed to accommodate the intense learning and reflection required at implementation outset, and for developing the infrastructure to appropriately direct and track referrals and participate in required research.

As the rosy glow of newness waned, staff anxiety in delivering the model increased, as did our struggle to manage referrals. We were forced to step back and respond to those issues, and in doing so we noticed that we had treated the program as an add-on to an already full clinical load for our practitioners. We then began to carve out specific time for practitioners to dedicate themselves to building clinical effectiveness and to delivering ITTM, recognizing that this might limit their contribution to other areas of our centre's work.

As mental health service providers, our most important consideration has to be: does this treatment model meet the unique needs of the children and families it is meant to support? ITTM has the means to respond to particularities in each family story, but it cannot meet the needs of all families. We would be doing a disservice to those children and families if we did not respond to their treatment needs because they failed to succeed in our prescribed treatment model. A core value for children's mental health practitioners is their capacity to reflect and respond to unique needs—and in many ways it is their greatest asset. This capacity continues to inform everything that happens both within and outside of our implementation of ITTM, and ensures that any evidence-based model that integrates itself into our practice does not diminish, but rather enriches this capacity. At the end of the day, any model, practice, or program is best managed as a tool in the well-equipped tool box of a seasoned and caring practitioner. And that is what we want to protect.

Contributed by: Amber McCart and Lorena Crosbie, Child and Youth Wellness Centre of Leeds & Grenville

Glossary

These terms are included for your reference and may not be necessarily found within the body of the text.

Current knowledge includes, but is not limited to, evidence-based practices in children’s mental health. Current knowledge requires ongoing learning that involves: continually posing specific questions of direct practical importance to children, youth, and families; searching objectively and efficiently for the current available evidence relative to each question; and taking appropriate action guided by evidence.

Data-driven decisionmaking process also falls under the broad category of evidence-based practice. It is a comprehensive management information system that collects clinical, fiscal, and outcome data at the client level. Collected data are used to effectively make individual, program, organizational, and system decisions. This ongoing process applies both to innovative practices and to adopting an existing empirically-supported treatment in practice settings. Data is collected in actual practice settings. The focus is on effectiveness rather than efficacy (Kazdin, 2003).

Empirically-supported treatments fall under the broader category of evidence-based practice. Empirically-supported treatments are often disseminated for implementation as entire interventions, usually through training and manuals, and with quality assurance protocols. A number of different hierarchies of evidence have been published (e.g., Task Force on Promotion and Dissemination of Psychological Procedures, 1995) to establish criteria for determining the strength of the research base for a given treatment model, usually based on study design and replications.

The APA criteria for *empirically-supported treatments* address *efficacy* (i.e., whether change can be attributed to the inter-

vention), whereas *effectiveness* studies provide evidence of whether or not change occurs in community-based settings (Nathan, Stuart, & Donlan, 2000).

Evidence of either efficacy or effectiveness provides a good research base for decision making, but they best inform community-based practice when there is evidence of both.


Evidence-based practice is an approach or philosophy that permeates and influences practice. It is a *process* of thoughtfully searching the literature and considering the best available evidence in light of client values, preferences, clinical status, circumstances, and practitioner expertise, and basing decisions on this evidence. Possible issues include general principles about practice (e.g., Beutler, 2000). As developed in medicine, evidence-based practice was defined as “the conscientious, explicit and judicious use of current evidence in making decisions about the care of individual [clients]” (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1997, p.2). Evidence-based practice as a *process* includes clients as informed participants about the evidentiary base of proposed services, including uncertainty (Gambrill, 2006).

Practice parameters typically review the current state of knowledge in a particular area. They present guidelines that fall into one of the following categories of endorsement:

- *Minimal standards* are recommendations based on substantial empirical evidence, overwhelming clinical consensus, or both.
- *Clinical guidelines* are recommendations based on empirical evidence, strong clinical consensus, or both.
- *Options* are practices that are acceptable, but not required.

Not endorsed are practices that are known to be ineffective or to cause harm.

Implementation of evidence-based practices – An ever-evolving body of research evidence has begun to develop in



the field of children’s mental health, providing knowledge about which treatments and interventions are efficacious and/or effective. The CMHO Accreditation Standards regarding Implementation of Evidence-Based Practices address important considerations organizations should attend to for successful implementation.

Implementation is “a specified set of activities designed to put into practice an activity or program of known dimensions” (Fixsen et. al., 2005).

Innovation is described as the act of introducing something new. This term is used in reference to evidence-based practices (EBPs) and evidence-based treatments (EBTs). Innovation is also an important feature of the evolving children’s mental health field.

Knowledge exchange refers to the two-way dialogue and exchange of information between those who generate and those who receive and use knowledge. Knowledge uptake and knowledge exchange are ongoing processes.

Knowledge transfer is a process whereby relevant information is made available and accessible to decision-makers for application in practice, planning, and policy making. It occurs not only at the end of a process, project, or research study, but is also ongoing. Knowledge exchange refers to the two-way dialogue and exchange of information between those who generate knowledge and those who receive and use it. It is operational throughout the project or research study. Together, these two elements serve to facilitate the use of research in practice.

Knowledge uptake is a process whereby relevant information is made available and used by decision-makers for application in practice, planning, and policy making. Knowledge uptake is an active, participatory process that takes into consid-

eration individual preferences and needs.


Learning culture focuses on enhancing an organization's ability to learn and its commitment to learning. It provides an environment where continuous learning is supported through knowledge accessibility and on-going professional development.

Program/service evaluation is a form of applied research that is distinguished by its purpose, approaches, and outputs. Research design principles are applied, as appropriate. Evaluation often takes place in settings or under conditions where there may be fewer controls than might be present for a formal research study. Evaluation facilitates judgments about a program's merit or worth, and addresses practical questions that help to inform decision-making. Evaluation is an in-depth process that not only studies program outcomes, but also seeks explanations for why things work and whether the program or service produced the outcomes.

Quality improvement is a set of structured activities in a children's mental health centre that provide information about quality, leading to the continuous improvement of the overall quality of services. Quality improvement can be applied to various aspects of centre operation (e.g., human resource and financial procedures), in addition to programs and services to clients. With respect to services, quality improvement seeks to meet the needs of children, youth, and families with maximum effectiveness and efficiency, and to maximize outcomes.

Reflective practice is the habit, structure, or routine of examining experience and learning from it.

Research is a systematic investigation, including development, testing, and evaluation, designed to develop or con-



tribute to generalizable knowledge. In its broadest sense, research can apply to many different types of systematic investigation. For the purpose of CMHO accreditation, the term applies to formal research where the scientific method is used to address one or more specific research questions. The research design and methodology are carefully selected to ensure sufficient scientific rigour, with due attention to standard ethical practices and with special consideration for the potential vulnerability of research subjects. A primary purpose of research is to develop or contribute to generalizable knowledge, in order to advance knowledge in the field. As such, the dissemination of research findings includes staff, clients, community partners, and other local stakeholders, but also strives to reach beyond these audiences to the broader scientific community.

Safeguards is a training program designed to meet the highly specialized training needs of staff serving vulnerable children, youth, adults and families in Ontario. It began in 1995 as a joint training project of five provincial associations; CMHO is one of the five partner associations. As a partner association, CMHO member centre staff can participate in evidence-based practice training sessions free of charge or for a nominal fee.

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