

Healthy Minds/Healthy Children Outreach Service: Lessons Learned After Eight Years

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Abstract

Objectives: This article describes the Healthy Minds/Healthy Children Outreach Service (HMHC), an ongoing clinical and educational outreach service which makes use of technology to bridge geographical barriers to help build capacity in front-line professionals to meet children's mental health needs in rural areas. **Method:** A description of the HMHC clinical consultation and educational services is given. Utilization patterns of these services are reviewed. **Results:** Clinical service accounts for approximately 1/3 of the service's activities. Continuing professional development has experienced strong growth since the program's inception eight years ago. The majority of consultees and continuing professional development users have been non-physicians. **Discussion:** Future challenges for program development include increasing physician involvement and continuing to adapt the program's continuing education program to the multidisciplinary professionals who provide support to children in rural areas. Measuring the program's outcome in terms of its effect on clinical care through knowledge transfer has been difficult to do because of methodological research challenges, while successful research in this area will be helpful to determine how collaborative care models can help in the provision of mental health services to youth in rural communities. The growth of collaboration across various professional disciplines and service sectors demonstrates that programs like HMHC can be effective in meeting some of the unmet needs in providing mental health services to children and youth.

Key words: *capacity-building outreach service, youth mental health*

Résumé

Objectifs: présenter les services de consultation clinique et de formation offerts par *Healthy Minds/Health Children (HMHC)*, programme qui utilise la technologie pour surmonter les barrières géographiques et pour renforcer les compétences des professionnels de première ligne afin d'offrir des services de santé mentale aux enfants et adolescents en milieu rural. **Méthodologie:** description des services de consultation et de formation offerts par le programme. Analyse des schémas d'utilisation de ces services. **Résultats:** les services de consultation clinique représentent environ le tiers de tous les services. Les services de formation professionnelle sont en forte augmentation depuis la création du programme, il y a huit ans. La plupart des professionnels qui demandent une consultation clinique ou qui suivent une formation professionnelle ne sont pas médecins. **Discussion:** le programme devra encourager la participation des médecins et adapter la formation aux équipes multidisciplinaires qui offrent des services aux enfants et adolescents en milieu rural. Des difficultés d'ordre méthodologique survenues pendant le projet n'ont pas permis d'utiliser le transfert de connaissances pour mesurer l'incidence du programme sur les soins; toute étude ultérieure qui validera ces résultats expliquera comment appliquer les modèles de soins collaboratifs à la prestation de services de santé mentale à cette population. L'intensification de la collaboration entre les divers secteurs d'activité et disciplines professionnelles montre que des programmes comme le HMHC peuvent combler certains besoins en matière de services de santé mentale.

Mots-clés: *service de formation professionnelle, santé mentale des enfants et des adolescents*

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Submitted: August 17, 2011; Accepted: March 1, 2012

Introduction

Prevalence rates for children's mental health diagnoses in Canada have been well documented at levels of 15% or greater; furthermore, most of these children (>75%) do not access specialized services (Canadian Mental Health Association, 2011; Lipton et al., 2008). Just over half of children and youth with mental health disorders will receive primary care (Canadian Institutes of Health Research, 2011). Family physicians are the *de facto* first-line service providers for Canadians seeking help for mental health issues owing to a shortage of psychiatrists (Gagné, 2005). This is particularly true for youth because of local shortages of mental health professionals, geographically distant specialists, and long wait times to access child psychiatry (Miller, Johnston, Klassen, Fine, & Papsdorf, 2005; Steele et al., 2010a). In addition, geography and rural isolation make it more difficult to attract and retain professionals (Boydell et al., 2006; Cassidy, 2011; Pignatiello et al., 2011).

Historically, family physicians have faced challenges in working with the mental health population due to a lack of training in medical school (Cawthorpe, 2005; Steele et al., 2003) and a lack of support from or access to mental health resources (Kates, Fugere, & Farrar, 2004). Additional factors include complexity of diagnosis, practitioner's gender, self-confidence, past continuing medical education (CME) related to children's mental health, and practitioner beliefs about working with this population (Miller et al., 2005; Steele et al., 2010a). In Canada, the Kirby Commission (Kirby & Keon, 2006) advocated for greater integration of mental health services within primary care and increased knowledge transfer to these practitioners, as well as improved access to services. The Canadian Collaborative Mental Health Initiative (Gagné, 2005) also promotes collaborative practice as a way of enhancing knowledge transfer among practitioners.

Families also face difficulties accessing services, particularly when they reside in rural areas. Geography, transportation, economic and cultural issues make access more difficult for many. Reduced anonymity, coupled with stigma, deter accessing services in rural areas even when they are available.

The ongoing demand by families for accessible children's mental health services, the isolation of rural practitioners, and the need for professionals to have timely access to current sources of information to aid and guide their practice, have led to the development of a collaborative service in southern Alberta. This article will articulate these needs and describe Healthy Minds/Healthy Children Outreach Service (HMHC), an ongoing clinical and educational service that was created in an attempt to address some of the needs of families and professionals in rural southern Alberta. The

article also describes some lessons learned following eight years of service delivery.

The Development of the HMHC Service

Children's mental health has been an identified priority in Alberta for several years (Alberta Health and Wellness, 2006; 2008), with emphasis being placed on building the capacity of individuals, families, communities, and government services to meet this clinical need. This led to the creation of HMHC in 2003 to address some of the unmet needs for accessible services and professional education in rural southern Alberta, including the First Nations of Treaty 7. HMHC was mandated to provide clinical consultation, support, and continuing professional education to primary mental health care providers. Primary care physicians and front-line mental health professionals within the health, education, First Nations, and child welfare sectors were targeted.

Prior to the creation of HMHC, Alberta Health had conducted a survey of primary care physicians attending a CME conference asking them to describe their practice and learning needs in the area of their children's mental health (Cawthorpe, 2005). The survey yielded data that were consistent with that found elsewhere in the literature (Cockburn & Bernard, 2004; Miller et al., 2005; Steele et al., 2009). Responding physicians reported they did see children and youth with mental health concerns, most often presenting with mood, anxiety, attentional, or behaviour disorders. They often referred these patients to specialists and did not consider themselves particularly well-trained in the field or sufficiently confident to maintain these cases in their practices.

Given the large geographic area that HMHC was mandated to cover, where the distance covered north to south or east to west is three hours by car, and with accessibility decreased in winter weather, a consultation-liaison model of clinical service delivery (McElheran, Eaton, Rupcich, Basinger, & Johnston, 2004) was chosen in which the primary recipient of service is the front-line service provider. In order to maximize the dissemination of knowledge and skill, patients are seldom seen directly. Consultations may be about specific cases, or about specific themes, e.g. diagnostic categories. Front-line service providers are usually present if a patient is seen, and the main objective in these sessions is to demonstrate a technique that the service provider will be able to use when seeing other similar patients. The use of technology was encouraged to help bridge distance and improve cost-efficiency. This included the use of video-conferencing, internet-based education (CPD), and the creation of a website so that professionals would have the easiest and most cost-effective access to resources (www.hmhc.ca). As noted elsewhere (Lipton et al., 2008), there is ample evidence to support the effective use of electronic platforms for continuing education. A partnership was forged with the

Program activity ¹	Percentage of program activity
Clinical (consultation to front line mental health workers)	27%
Education (preparation and teaching)	31%
Networking (liaising and promotion)	14%
Administrative (team meetings, supervision, documentation)	28%
¹ Refers to clinical team only. Online CPD team statistics are primarily education oriented.	

Service recipient		Principal activity		Outcome of consult	
Physicians	10%	Diagnostic	14%	No follow up	18%
Non-physician community practitioners	30%	Treatment strategizing	78%	Planned follow up	59%
Child welfare staff	13%	Medication consult	2%	Refer for specialized service	13%
School based providers	26%	Updating a prior consult	5%	Book for video team conference	9%

Faculty of Social Work at the University of Calgary to make use of their extensive experience in internet-based distance education.

Results

Growth in HMHC services has been marked over the eight years of its existence. Team membership has increased from two staff in the first year to twelve by the sixth year. The increase in staff reflected both an increasing demand for service, and an increase in funding commitment concomitant with a provincial prioritization of children's mental health. The distribution of professional affiliations of consultants fluctuated according to recruitment trends, but usually consisted of at least one licensed psychologist and social worker, and a child psychiatrist.

Clinical Activity

Clinical activity is now approaching nearly 4000 events annually. An event is defined as one of: a clinical consultation; a professional inservice; preparation for an inservice; or a team case conference/meeting. Table 1 describes the type of activities performed by the clinical team.

Clinical activities are delivered primarily by consultant(s) attending points of primary care or by email/telephone. Video-conferencing constitutes a minority of activity (10%), but is also growing and now number over fifty events per year. The slower uptake of this service is similar to what has been found elsewhere (Steele et al., 2010a).

Table 2 describes the main clinical service recipients, the consultation activities provided, and the outcomes of those activities.

Activity involving liaisons with First Nations' care providers now comprises approximately 20% of clinical activity. Almost all clinical activity has included the front-line professional, and only a small percentage (<10%) has included direct patient contact. This is consistent with an initial objective of building capacity at the primary care level versus shifted-out models of direct care where the consultant clinician operates at the primary care site (McElheran et al., 2004). The greatest area of growth in clinical activity has occurred in the area of professional in-servicing, as care providers seek updated knowledge relevant to their work. Additional clinical resources, including several thousand desktop reference manuals containing treatment aids (screening instruments and treatment algorithms) and information prescriptions (vetted bibliographic reference lists and websites), have been widely distributed.

Continuing Professional Development

HMHC has developed an annual series of accredited online courses in children's mental health that offer presentations by experts in the field. Online discussion boards (similar to texting) are provided to stimulate dialogue between presenters and multidisciplinary learners. Growth in the online continuing professional education services has also been very significant. This has been sustained by additional funding designed to improve access and permitted the waiving of registration fees for these courses. As a result, registrations have increased eighteen-fold since the first year and

over 900 registrants are now enrolled in online courses. Notably, over 20% of registrants are coming from smaller communities (population <10,000), a rate slightly greater than the overall urban/rural population distribution in Alberta. This matches HMHC's objective of providing service to rural practitioners.

Physician uptake has been lower than expected in the continuing education area, numbering only 5% of total registrants despite HMHC surveys of their learning needs, programming in areas specific to physician content (e.g. medications updates), and promotional efforts focussed on primary care physicians. The greatest participation in courses is from non-physician mental health practitioners (psychologists, social workers, nurses, school-based professionals, etc.) working in the public and not-for-profit sectors. Strong interest has recently been expressed by school-based personnel, and has led to the provision of a pilot course to assess the utility of online continuing education for front-line teachers in the area of children's mental health.

Feedback from course registrants has consistently been positive (>90% satisfaction) in terms of course relevance, applicability, and user-friendly technology. Participants have favourably reviewed the interactive component of the discussion boards. They often deemed the discussion boards as equally valuable educationally as the didactic presentations.

Discussion

After eight years of service, several things are now known about the utilization of the HMHC service.

Ongoing discussions with rural communities are clearly indicating that local service capacities are limited, both in terms of quantity and specialization. Complex mental health cases continue to present a challenge to smaller communities, and the availability of HMHC services has been welcomed and well received. The priority for government ministries to provide cost-effective, quality clinical and continuing professional educational services and the needs of isolated rural professionals for timely and accessible supports, are being addressed. The program has concentrated on capacity-building with an emphasis on technology, and it has reached a wide variety of professionals, while physician involvement in CME has been lower than anticipated. Efforts have also been made to measure the impact of capacity-building on the delivery of clinical services, while more work is needed in this area.

Capacity-Building through the Use of Technology

The capacity-building model utilized by HMHC exemplifies application of the multiplier effect (Steinhauer, 1991) in the wide dissemination of knowledge and skills. The

provision of online continuing education has been a major step forward in capacity-building. Recipients have consistently reported on the convenience of this learning modality, ease of access, and satisfaction with the opportunity to interact with colleagues about matters of clinical interest. However, this benefit comes with the loss of direct patient contact, and diminishes the valuable opportunity for practitioners to learn through live observation and supervision.

The availability of video-conferencing offers another convenient medium to provide live interaction with multiple audiences that bridges geographic barriers. However, there is a need for formal academic training programs to include instruction in video-conference practice (Pignatiello et al., 2011). HMHC has found that many professionals remain reluctant to utilize this technology. For some, there is anxiety about the mystique of the technology, while for others, it may not be available due to over-subscription, lack of privacy, or may still require travel to a video-conference site. The recent development of desktop video terminals presents a possible solution to these challenges, but still requires a financial investment in infrastructure and equipment. Popular internet-based social network sites (e.g. Skype) do not provide needed security and privacy. In addition, providing education through this medium still demands real-time scheduling, which can be awkward to fit in to a busy clinical schedule.

Differences in Service use Among the Professions

The greatest participation in courses has been from non-physician mental health practitioners, who come from a variety of disciplines. The programme must now grapple with providing responsive and streamlined learning opportunities to a quickly growing audience. This presents unique challenges. For example, course content and complexity must be carefully matched to the baseline mental health knowledge of multiple professions. The volume of online discussion has grown to the point where they risk becoming too cumbersome for learners to efficiently navigate and derive educational pearls. Also, many busy clinicians prefer to forego much of the theoretical background to topics, opting for more immediately applicable clinical tools. An ethical question has been raised as to the limits of just-in-time learning in the absence of providing sufficient context, theory, and direct clinical supervision of newly acquired clinical skills. Outreach services can build capacity and enhance skill, but should not be taken as, or mistaken for, supervised training in mental health service provision.

In terms of the specific learning needs of rural primary care physicians, needs assessments have shown a physician preference for face-to-face educational activities in home communities (individual or group) as opposed to electronic platforms (Steele et al., 2009; Steele et al., 2010b).

However, the geographically-scattered distribution of rural physicians continues to pose a cost-efficiency challenge to providing continuing education and skill-building consultation through face-to-face methods.

HMHC continues to explore ways to increase utilization of services by primary care physicians. Traditional fee-for-service compensation mechanisms limit the incentive for physicians to provide mental health services (McElheran et al., 2004). Children's mental health services often involve collaborative efforts which may not be fully remunerable under traditional payment plans. Alternative payment arrangements have mitigated this somewhat, as has a proliferation of shared mental health care programmes. As noted by Miller et al. (2005), HMHC has found that primary care physicians who are committed to providing children's mental health services and who have taken CME in the field are the most likely to make use of available consultation and education. In addition, the advent of primary care networks has led to the hiring of some behavioural specialists. The long-term benefits of the work of behavioural specialists on primary care teams have yet to be studied.

Impact of Capacity-Building on Clinical Services

There is a dearth of research evaluating the impact of web-based CME on patient outcomes (Curran & Fleet, 2005; O'Brien et al., 2006). Since various methods cited in the literature, such as chart-stimulated recall or objective structured clinical examinations, involve time-consuming or obstructive measures that are difficult to implement, HMHC has explored other methods of measuring knowledge uptake. In one such attempt to measure the impact of online continuing education on primary physicians' practices, HMHC encountered numerous methodological challenges, including those noted elsewhere in the literature (Teshima, 2007). Recruitment of physicians was very difficult, and those who agreed to participate were already committed to self-development in children's mental health, likely skewing the results. Although HMHC found a trend that supported the effectiveness of this form of learning, no definitive conclusions could be drawn. Realistically and efficiently demonstrating the effectiveness of knowledge-transfer in primary care practice remains an ongoing challenge.

Future Directions

The continuing prioritization by Alberta Health Services to expand outreach to remotely located professionals, and the collaboration across government ministries, will hopefully provide the impetus for ongoing programme development. In the meantime, HMHC continues to seek out additional community networks with which to liaise. For example, HMHC now works with rural first-responders who deal with crises involving children. Police, fire, emergency

medical services, First Nations staff, and Victim's Services all work with children who are victims of, or witnesses to, trauma. These responders have indicated a lack of specialized training in working with children, but are able to make use of the education and other supports HMHC provides. The effectiveness of these initiatives will continue to be assessed, and this feedback will be utilized in ongoing service planning. Discussion also needs to continue with those who serve children and youth with mental health challenges (Education, Child and Family Services, Youth Justice, etc.) and who have been using our program to determine their unique learning and support requirements.

The value of the HMHC program has been clearly demonstrated by the growth in utilization of clinical and educational services, and in the extensive feedback received in the first eight years of its existence. The growth of collaboration across various professional disciplines and service sectors demonstrates that programs like HMHC can be effective in meeting some of the unmet needs in providing mental health services to children and youth.

Acknowledgements / Conflicts of Interest

The authors would like to acknowledge the staff members of the Healthy Minds/Healthy Children Outreach Service, including clinical consultants, online professional education personnel and administrative support staff, as well as the Faculty of Social Work at the University of Calgary. Healthy Minds/Healthy Children Outreach Service is wholly funded by Alberta Health Services, Addiction and Mental Health. The authors have no financial relationships to disclose.

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