How Collaborative Mentoring Networks Are Building Capacity in Primary Care

Arun Radhakrishnan, Leanne Clarke and Leslie Greenberg

Abstract
The need for increased capacity in primary care to treat the growing numbers of patients with complex chronic health conditions is well established (Roberts et al. 2015). Meeting that need requires not only more family physicians but also more support and resources to handle challenging cases. The Collaborative Mentoring Networks (CMNs), created in 2001 by the Ontario College of Family Physicians and funded by the Ontario government, have provided that support and proven particularly successful in improving physicians’ competence and confidence in caring for patients struggling with mental health, addictions and chronic pain. The networks give family physicians timely, ongoing access to mentors with greater clinical expertise. In 2017, the networks expanded from two to seven, spreading support to palliative and end-of-life care and medical assistance in dying and focusing on leadership in primary care, early years in practice and rural medicine. CMNs’ early impact involved increased primary care capacity in family practice, better-supported family physicians treating more patients with complex conditions, fewer specialist referrals, less isolation and greater retention.

Introduction
In 2001, before the crises in mental health and opioid misuse spiked to today’s alarming levels, the Ontario College of Family Physicians (OCFP) offered its members an educational innovation to help them respond with greater competence, confidence and capacity to problematic practice issues and clinical challenges (Grywacheski et al. 2019), among which are soaring caseloads and stress levels, growing numbers of patients with increasingly complex medical conditions and intertwined social needs, a lack of local specialists and long waits for care outside the region (Muscedere et al. 2019). Add to that a shared expectation that family physicians will provide all patients with high-quality comprehensive primary care close to home.

Given those pressures – which still resonate today – it is unsurprising that family physicians sometimes felt ill-equipped to consistently meet growing needs and changing expectations, especially for patients with complex, chronic conditions.

In response to these increasing pressures, the OCFP intervened, introducing mentoring networks to boost family physicians’ ability to treat patients with challenging medical needs in primary care. Family physician mentees began to access advice and support from mentors – specialists and family physicians with additional medical and practice expertise and experience – with whom they were matched and from whom they received dedicated, ongoing and multi-faceted guidance tailored to their practice challenges.

The merit of the Collaborative Mentoring Networks (CMNs) extends well beyond their efficacy as a professional development
and knowledge translation (KT) tool. The networks receive positive feedback and high satisfaction rates from family physicians who report a range of beneficial results – notably, improvements in confidence and ability to manage more complex patients in primary care (Table 1). In short, the networks have become an effective way to increase primary care capacity in Ontario.

**Origins and Evolution of the Innovation**

In 2001, one of the most pressing areas of concern for family physicians was treating patients struggling with their mental health, often with other medical conditions and difficult socio-economic circumstances. That gave birth to the first network: the Collaborative Mental Health Network (CMHN). Like those that followed (Table 2), the CMHN was based on a foundation of flexible and multi-faceted mentoring and funded by the Ontario Ministry of Health and Long-Term Care. The second network to emerge, in 2007, focused on medical mentoring for addictions and pain (MMAP). Today, supporting patients with mental health needs and helping to address pain and addictions remain urgent priorities for family physicians.

The success of the first networks in shoring up primary care capacity across Ontario led the government to expand funding for other critical and challenging practice areas. In 2017–2018, the CMNs expanded to support family physicians in palliative and end-of-life care (PEOLC), medical assistance in dying (MAiD), leadership in primary care, rural medicine and early years in practice.

The networks’ value and collective impact have not gone unrecognized. The CMNs landed this year’s Ted Freedman Award for Innovation in Education, bestowed by Longwoods in cooperation with the Canadian Association for Health Services and Policy Research. The national award recognizes the OCFP’s CMNs for their contributions to inspiring, promoting and enabling education in healthcare. The CMNs also earned the 2019 Continuing Professional Development Program Award from the College of Family Physicians of Canada.

The early networks remain highly relevant as mental health, addiction and pain management cases continue to climb, along with the demand for greater primary care capacity to treat them. Through the CMHN and MMAP Network, family physicians facing difficult cases can seek validation that their decisions lead to sound, compassionate and comprehensive care.

**TABLE 1.**

<table>
<thead>
<tr>
<th>Network impact</th>
<th>Provider impact</th>
<th>System impact</th>
<th>Patient impact</th>
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<tr>
<td><strong>Network impact</strong></td>
<td>• In all, 90% of CMHN and MMAP Network members reported improvements in their knowledge.</td>
<td>• Over 60% of members in both networks report seeing more patients with mental health, chronic pain and addiction issues and seeing a wider range of patients. This number has been on a growing trend even during expansion.</td>
<td>• In all, 60% of members in MMAP report that participating in the networks has helped them to positively impact the quality of life of their patients. This rate has remained consistent over the last two years of expansion.</td>
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<td><strong>Network impact</strong></td>
<td>• In both networks, over 83% reported improvements in their competence around clinical skills.</td>
<td>• Over 40% of members report a reduction in consultations with specialists as a result of participating in the network. Nearly 60% report in turn being able to support their colleagues in managing patients with mental health, chronic pain and addiction issues.</td>
<td><strong>Member anecdotes</strong> • “Pain specialist referral in NWO takes 2 years +; getting my questions answered helped me manage a very complicated patient; he is better today for it.”</td>
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<td><strong>Network impact</strong></td>
<td>• In both networks, over 82% reported improvement in their confidence even when managing more complex clinical cases.</td>
<td><strong>Member Anecdotes</strong> • “Collegial discussions and interactions. The feeling of support while dealing with challenging cases.”</td>
<td>• “Due to guidance of mentors, I provide much better care to my patients and help colleagues to provide better mental healthcare as well.”</td>
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<td><strong>Network impact</strong></td>
<td>• The historical rates around knowledge, competence and confidence have remained consistent or have risen even during the current network expansion.</td>
<td><strong>Member Anecdotes</strong> • “Ongoing discussions with local experts and colleagues for complex cases while identifying local resources.”</td>
<td><strong>Member Anecdotes</strong> • “I was close to leaving practice due to feeling overwhelmed; the knowledge and support from MMAP has helped me carry on.”</td>
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<td><strong>Network impact</strong></td>
<td><strong>Member Anecdotes</strong> • “I feel more willing to tackle complex issues and care for patients with complex issues when I have the support from CMHN.”</td>
<td><strong>Member Anecdotes</strong> • “Timely access to clinical questions that can make an impact on patient care but do not require a full consultation.”</td>
<td><strong>Member Anecdotes</strong> • “Collegial discussions and interactions. The feeling of support while dealing with challenging cases.”</td>
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CMHN = Collaborative Mental Health Network; MMAP = Medical Mentoring for Addictions and Pain.
care for these complex, high-needs patients. Meanwhile, the newly formed networks show that the mentorship model can be spread and scaled to other exacting clinical areas, such as PEOLC and MAiD. Also, the OCFP’s Leadership, Early Years in Practice and Rural Medicine networks are ensuring that family physicians are best equipped to focus on the front lines of care and lead change within their own practice context. With health reform under way in Ontario, the networks may represent an additional opportunity to better prepare family physicians to manage change and complex care issues in their region.

TABLE 2. Year network established

<table>
<thead>
<tr>
<th>Year</th>
<th>Mentoring network</th>
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<tr>
<td>2001</td>
<td>Collaborative Mental Health Network (CMHN)</td>
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<tr>
<td>2007</td>
<td>Medical Mentoring for Addictions and Pain (MMAP) Network</td>
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<td>2017–2018</td>
<td>Palliative and End-of-Life Care (PEOLC) Network</td>
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<td></td>
<td>Medical Assistance in Dying (MAiD) Community of Practice</td>
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<td></td>
<td>Early Years in Practice (EYP) Network</td>
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<td></td>
<td>Leadership in Primary Care Network</td>
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<td></td>
<td>Rural Medicine Initiative Network (RMIN)</td>
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Functions and Features

Each network is designed to meet particular objectives and participant needs, but the essence of the CMN approach is to match experienced clinician mentors with family physician mentees who receive dedicated individualized guidance on issues ranging from complex clinical cases, to practice changes, to best approaches for population health programs. Mentors and mentees are matched regionally and establish relationships and communication channel/s of choice — in person, by phone, online, one on one, small-group gatherings or other formats and forums (see Box 1 for a list of key mentoring network attributes and benefits).

Dr. Arun Radhakrishnan, CMN clinical lead, co-chair of the CMHN/MMAP steering committee and a family physician with a practice focusing on chronic pain management, has been engaged in the CMNs for the past 12 years both as a mentee and a mentor. He is a committed champion of mentoring in medicine; his master’s thesis examined the MMAP network’s use of technology and its value as a KT tool in complex practice areas. Dr. Radhakrishnan notes that mentorship as a tool for knowledge translation is a novel concept in medicine to this day. Medicine and nursing have historically viewed mentoring as a mechanism to support career development or retention in academia (Radhakrishnan 2013).

Dr. Radhakrishnan says the networks’ flexible design around different forms of mentorship is significant, factoring in time constraints (70% of e-mail inquiries are answered within an hour) and providing safe spaces for physicians who may feel vulnerable sharing their doubts and dilemmas with colleagues. These are not one-off, chance encounters with a random colleague. CMN mentor–mentee relationships are trusted, continuous and constant, with matches lasting for months and, in a number of cases, years. In many instances – Dr. Radhakrishnan being but one example – former mentees become mentors after accumulating experience and expertise through the networks’ many avenues of learning.

BOX 1. Key attributes and benefits of Collaborative Mentoring Networks

- Responsive — Answers typically received within 48 hours.
- Regional — Mentors who understand your practice realities.
- Compassionate — Supportive space to enhance skills and build confidence in your practice.
- Certified — Earn Mainpro+ credits.
- Adaptive — Mentorship that is tailored to fit your needs.
- On-demand — Support when you need it, how you need it; connect by phone, in person, by e-mail or through the online community.

To illustrate the benefits of continuity in the mentoring relationship, Dr. Radhakrishnan describes the case of a family physician contemplating rotating his patient from oxycodone to buprenorphine/naloxone. Although the physician can turn to guidelines, workshops and tables for decision support, he is aware of the potential for patient harm, so he seeks advice from his mentor to help him transition his patient through the medication switch. That mentor is available to help the doctor plan and adjust the patient’s treatment plan, continuing to respond promptly to ongoing requests for assistance on that case – or on other issues in the future.

Evaluation of the Innovation

Membership in the networks supports clinicians in all areas of the province, from inner cities to suburban communities, to rural and geographically remote regions. In all, 12% of CMHN membership and 23% of MMAP network members come from rural and remote communities. There is also an important variety in members’ practice environments: 65% of family physicians in the CMHN and 70% in the MMAP network work in solo and group practices with no access to funded interprofessional teams – practices historically difficult to reach from a continuing professional development perspective. The power of the program to engage members longitudinally is clear from membership data, which show that more than 57% of CMHN members participate in the network for more than five years; 55% of MMAP network participants remain active for more than three years.
The results presented in Table 1 are drawn from membership data and an annual survey of members in the program that measures its use and self-reported impacts of network participation. To date, only the CMHN and the MMAP Network have reportable data on program use and impacts. The data in Table 1 are from the 2017–2018 program year; historical data from 2015 to 2016 are available. Table 1 also includes members’ comments that provide a greater insight about what they have experienced in the networks.

These results clearly reflect the stability and continuous improvement of the CMHN and the MMAP Network over time and in the midst of significant expansion.

With the approach of the Ontario Ministry of Health and Long-Term Care’s March 2020 deadline for the networks to meet their participant targets, their goals are within sight, having reached 71% of their aim at the end of the first quarter of 2019. The CMNs reported a 77% increase in participation – from 574 members in 2016–2017 to 1,016 members by the end of March 2019. With nurse practitioners and pharmacists joining the PEOLC Network and the MAiD community of practice, the CMNs are poised to support 1,500 family physicians and other primary care clinicians by March 2020 by connecting them to 140 experts across all regions of Ontario.

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The Impact in Practice and on Patients
Dr. Radhakrishnan identifies mentoring as one of the most effective ways to support family physicians dealing with what he calls “sticky knowledge areas” (implicit knowledge) replete with cases where treatment decisions are not straightforward and knowledge is hard to translate. Those areas include a growing proportion of family physicians’ practice, reflecting the rise in multiple chronic health conditions and new and emerging areas of practice, such as MAiD, and areas such as palliative and end-of-life care, where patient needs will only grow.

Family physician Susan Woolhouse and North Bay pharmacist Pam Simpson know all too well that current levels of primary care expertise and experience to meet that demand are wanting (CIHI 2018; Costante et al. 2019). Dr. Woolhouse is the newly named co-chair of the PEOLC/MAiD steering committee and one of only a few hundred Ontario physicians providing MAiD. Of the small percentage of primary care providers offering MAiD, the majority are family physicians. A small number of nurse practitioners also provide MAiD. She believes that without sufficient opportunity for mentoring and training, the majority of primary care providers would not be comfortable providing MAiD. As someone who has been both a mentee and a mentor, she understands why.

MAiD is the least developed of the CMNs and currently has no active mentor program. Dr. Woolhouse suggests that to support physicians in providing compassionate care to patients seeking MAiD, the community of practice is well positioned to evolve into a full mentoring network. She says there is a critical need for MAiD mentoring, noting that a community of practice is useful for those already familiar with MAiD but less so for those fresh to the service. The real need is for face-to-face or virtual interactions with mentors and safe spaces for family physicians to ask the “naïve” question.

Ms. Simpson is a member of the PEOLC/MAiD steering committee and the manager of a rural community pharmacy. With the supply of experienced palliative care providers short and the demand for services high (and getting higher as the population ages), she sees access to palliative care expertise across professions as essential in helping non-specialized physicians follow their own patients through their palliative stages and provide compassionate palliative and end-of-life care (CIHI 2011; Statistics Canada 2015, 2017). She says the collaborative, multi-professional approach is key and applauds the CMNs for making a place for pharmacists and nurse practitioners on its committees.

She says it is simply not possible or sustainable for siloed palliative care teams to provide all the palliative care that is required today and in the future. She believes the solution is to draw on the collective experience and expertise of health providers across professions to empower family physicians and nurse practitioners to provide palliative and end-of-life care. The more support for providers, the better it is for patients and their families, she says.

Research by Dr. Radhakrishnan, conducted in 2017–2018 during his first year as the 2017–2018 Associated Medical Services Phoenix Fellow, was able to explore how mentorship supports a focus on compassionate care for those with mental health issues, chronic non-cancer pain and addictions. His qualitative study drew from interviews with CMHN and MMAP Network members in 2018 and found that mentorship was able to support the following important components of compassionate care:

- Non-judgment of patients was benefited through non-judgmental clinical spaces for clinicians.
- Distress tolerance in supporting complex patients was supported through conversations with mentors.
- Mentorship supported clinicians in gaining skills to sensitively navigate difficult patient conversations (Radhakrishnan 2018).

In an article co-authored by CMHN/MMAP steering committee co-chair Dr. Jon Hunter, the CMHN model of
mentoring was found to create a hierarchy of knowledge – not power – contributing to a trusted relationship between the mentee and the mentor that is an important context for effective education (Hunter et al. 2008).

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Opportunities for more integrated/joined-up care
As Table 1 shows, mentoring and CMNs make their mark at various levels – clinical, practice, population health and system – and contribute to improved provider experience, patient care and system transformation.

The OCFP says that the CMN offers a good clinical mix that captures challenging areas to manage – mental health, addictions and pain, palliative care and MAiD – and also reflects the wider community’s needs. The other networks support rural physicians and those transitioning into practice and produce future leaders who fuel improvements in practice and in the broader health system.

If a robust primary care sector is a predictor of high-performing health systems – and evidence shows it is – then the strength and resiliency of family physicians who see more patients by far every day than any other health system partner are key to acquiring what high-performing systems achieve and the Quadruple Aim seeks: improved health outcomes, better patient and provider experience and system sustainability (Delnoij et al. 2000; Starfield et al. 2005).

Dr. Radhakrishnan notes that because a certain level of emotional strain comes from feeling isolated and uncertain, KT on its own will not remedy the problem. The support and encouragement in the non-judgmental spaces that CMNs offer can make it possible for the physician to continue to be an asset to the patient, community and system, he says.

Dr. Sarah Newbery, clinical lead and chair, Rural Medicine Initiative Network and Leadership in Primary Care Network, concurs and underscores that the CMNs are perfectly positioned within the Patient’s Medical Home and support the Quadruple Aim framework (Bodenheimer and Sinsky 2014; College of Family Physicians of Canada 2019).

She says the kind and quality of assistance available through the CMNs can bridge the distance between physicians’ uncertainty and concern over clinical issues and their ability to confidently deliver high-quality primary care to patients who would otherwise be referred or untreated.

Dr. Newbery believes that over time, it can also turn a discouraged and isolated family physician into one who experiences satisfaction and happiness in the job – something particularly important for rural physicians struggling with their own loads and locums, who often have few avenues for meaningful support. She says serving patients and populations requires engaged colleagues and a culture that allows joy in practice.

Drs. Radhakrishnan and Newbery both point to where the CMN’s greatest potential for impact resides: within practices without funded interprofessional teams, which account for approximately 75% of family physicians in Ontario (Owens 2016). Mentoring plays an intensely significant role with this cohort according to Dr. Radhakrishnan. Although the networks certainly help all family physicians move closer to the Patient’s Medical Home vision of practice, he suggests it is among those solo or group practices where the real magnitude of the impact – the value in terms of isolation, connection, retention of patients and inclusion in a Patient’s Medical Neighbourhood – can be felt and could be further increased (College of Family Physicians of Canada 2019).

The root of the CMN program – the vision – is to increase primary care capacity and also collaboration between family physicians and other providers in primary care with expertise critical to the family doctor’s practice and population health. Dr. Radhakrishnan and other network leaders report that those interprofessional connections are occurring at CMN regional meetings, special sessions and annual conferences and focus on a range of clinical, practice and system issues relevant to their communities.

Dr. Newbery says the resiliency of family physicians, the capacity of primary care to meet the needs of patients with complex conditions and the role of primary care as the efficient and effective foundation for the health system are essentially interconnected, and the networks contribute to all components. When the practice and knowledge of family physicians can be continuously reinforced through supportive relationships and expert advice, those physicians can provide more comprehensive care. System navigation is simplified, referrals minimized and the risk of unnecessary and costly retesting reduced.

She says the CMNs – especially the Leadership in Primary Care Network – provide opportunities for members to work toward a more fully realized Patient’s Medical Home and help family physicians contribute to shaping the future of primary care within the Ontario Health Team model.

Dr. Radhakrishnan says there is a malleability and power to mentoring that supports family physicians to bring fresh, practice- and patient-centred input to the re-imagining of health systems.

Lessons Learned
After examining almost 20 years of experience designing, refining and expanding the CMNs, a handful of key success factors emerge, along with reminders of how to push past barriers to sustain the networks’ gains and guide future ones.
• Choose the right topic areas. Does it merit engagement? Is it furthering primary care capacity? Does it address an expressed need of providers and patients?
• Create the right kind and number of networks with the right design. Networks need to be flexible and tailored to meet the needs of their audience.
• Expand to clinical and practice areas where warranted. Not all areas need mentoring networks. These are best suited to enable knowledge translation in clinical or practice areas that are hard to codify.
• Tend to the community, feed it and set the table for organic growth: balance size with community. Monitor existing networks and manage newer ones. It takes time to create vibrant communities. The CMHN evolved from the ground up over four to five years; the goal for the newer ones is to make them equally vibrant and valuable.
• Promote the merit of mentoring. The one-on-one and group interactions are highly valuable and worthy of greater visibility. Elevate awareness about the existing and expanded networks and promote their worth and the practical benefits of fulfilling CPD requirements in a flexible and time-efficient way.
• Remember the importance of shared purpose between mentor and mentee, sustained interaction and shared approach and sensibility. Whatever the venue, platform or arrangement, the interaction must hold value.
• Pursue new opportunities. The networks must be nimble and responsive to new and emerging needs, not static infrastructure. Explore possibilities for new areas of focus, such as family physician health, that could emerge from the field.
• Evaluate. The OCFP, in partnership with the Centre for Effective Practice, is conducting a broad evaluation of the CMHN with an eye to the future and renewed funding in April 2020.

Conclusion
When the OCFP created the first collaborative mentoring network almost 20 years ago, it was clearly on to something – something successful and sustainable, with the potential to strengthen the health of the profession, the professional, the patient and the system simultaneously.

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