THE COLLEGE OF FAMILY PHYSICIANS OF CANADA
LE COLLÈGE DES MÉDECINS DE FAMILLE DU CANADA

BEST ADVICE

Team-Based Care in the Patient's Medical Home

JULY 2017

INTRODUCTION

Health care teams take many forms, ranging from emergency operating teams to geographically distributed teams that care for ambulatory patients. They are large or small, centralized or dispersed, virtual or face-to-face. Their responsibilities can be focused and brief or broad and long term. The diverse mix of professional backgrounds creates an opportunity to redefine what is considered optimal, based on the needs of the practice and of the community it serves. A high-performing team is essential to creating a more comprehensive, coordinated, and effective care delivery system centred on the patient's needs.

Team-based care is an integral part of the Patient's Medical Home (PMH)* model, as outlined by the principles listed in Appendix A. The continuous, comprehensive, patient-centred care provided by these family practices is made even more effective by building a strong, well-connected team that strives for the same goal. This guide examines the benefits of team-based care for both practice efficiency and patients' health outcomes. The document also provides an overview of the range of health professions that play an important role in interdisciplinary teams. This guide was created in collaboration with organizations representing health care professionals who frequently work with family physicians. With those perspectives in mind, we aim to provide advice about how family physicians can best work with other health care professionals as part of a PMH.

OVERVIEW

Team-based care that is implemented well has the potential to improve the comprehensiveness, coordination, and efficiency of a practice.[1] To achieve this potential, practices transitioning to a team-based care model need to ensure that they are ready to accommodate any changes to the practice culture, the nature of interactions among colleagues and patients, and education and training.

To practice effectively in an interprofessional health care team, you must have a clear understanding of each member's unique contributions, including educational background, scopes of practice and knowledge, and areas of excellence and limitations.[2] Family physicians specialize in providing relationship-based care over time and can ensure their colleagues apply the same principles. Practices that draw on the expertise of a variety of team members are more likely to provide patients with the care they need, and be responsive to community needs. Teams can create integrated interventions to meet the diverse needs of their patients, families, and communities.[3]

Because provincial and territorial governments are responsible for funding health care in their respective jurisdictions, there is variation in how health teams are funded (see Table 1 for examples). A distinction is made between funding of teams versus individual providers. Funding can be allotted to the team as a whole, or to a group of providers who receive independent remuneration but share some costs. Following are two examples of how provincially system-supported health teams are funded.

Interprofessional or intraprofessional?

While this guide examines the implications of working with allied health professionals in an interprofessional team, intraprofessional relationships are another important element of working in teams. This Best Advice guide is the second of two covering the topic of teams; the first guide addresses communities of practice in family medicine (CPFMs).

CFPMs refer to intraprofessional collaborations in care delivery between family physicians. Family physicians with special interests include one or more areas of special interest as integrated parts of the broad scope of services they offer. Family physicians with focused practices are those who are committed to one or more clinical areas as major components of their practice. Communities of practice allow family physicians with these special interests or enhanced skills to better serve their patients and communities by offering a wider range of services, where appropriate.

See the Best Advice guide *Communities of Practice in the Patient's Medical Home* for more information.

*A complete list of the links used in this guide can be found in Appendix C: Resources.

Table 1: Examples of system-supported funding models in Canada

Model type	Location(s)	Description
Primary care networks (PCNs)	Alberta	PCNs link family physicians and other health care professionals to work together to provide care that is specific to community/population needs. Currently, there are 42 PCNs with 3.2 million patients informally enrolled, and 800 other health professionals involved.
Collaborative emergency centres (CECs)	Saskatchewan and Nova Scotia	CECs are staffed by a primary health care team during regular office hours. After regular hours, the centre uses the expertise of registered nurses, nurse practitioners, and paramedics, with an experienced physician available for remote consultation. This helps ensure that the clinics offer extended hours and increase access to primary care providers, as physicians are no longer needed for overnight emergency duty and can keep clinics open. CECs are especially beneficial in rural areas where high acuity emergency cases occur infrequently.
My Health Team (MyHT)	Manitoba	MyHT is an interprofessional model that was developed to improve access to primary care for all Manitobans, increase the focus on patient-centred care, and connect care providers within and across geographic boundaries to provide seamless care.
Family health team (FHT)	Ontario	FHTs are organizational models comprised of a team of family physicians, nurse practitioners, registered nurses, and other health care professionals, to provide community-centred primary care programs and services. Since 2005, 200 FHTs have been serving over 3.5 million enrolled Ontarians across the province.
Family medicine group (FMG)	Quebec	FMGs are groups of physicians working in close collaboration with nurses to provide services to enrolled patients on a non-geographic basis. On average, one FMG serves around 15,000 people, and has 10 physicians, two nurses, and two administrative support staff. Services are provided weekdays, with walk-in services available on weekends and holidays. An on-call telephone response service is also available to assist patients who meet various vulnerability criteria (e.g., elderly, chronically ill).
Canadian Armed Forces Care delivery unit (CDU)	Throughout Canada	A CDU is an interdisciplinary team of military and civilian health care providers who work collaboratively to meet the health needs of a defined group of Canadian Armed Forces members. Each member is assigned to a CDU and when their health care needs dictate, a most responsible family physician is assigned to maintain continuity of their care. At different times, the patient might be seen and treated by other members of the CDU. The goal of this collaborative team approach is to ensure that patients see the right clinician at the right time to address their needs in a flexible, efficient, and holistic manner.

Alberta

A primary care network (PCN) is created through a joint venture agreement between a group of family physicians, who form a non-profit corporation (NPC), and Alberta Health Services (AHS).[4] The physician NPC and AHS jointly govern the PCN, and are accountable to Alberta Health through a grant agreement. Funding is provided through the grant agreement for PCNs to hire other health providers and to deliver services and programs that are not included in the Schedule of Medical Benefits. Non-physician health providers—such as nurses, psychologists, and dietitians—are typically compensated through a salary from the PCN budget. Alberta Health provides PCNs with per-capita grant funding of $62 per patient per year, which goes to the physician NPC or the PCN NPC.[4]

Manitoba

The regional health authority is responsible for allocating funding to individual teams. In the physician integrated network (PIN) program, there is no designated baseline funding. Physicians practising in private fee-for-service (FFS) settings are able to participate in the program. This allows them to receive supplementary funding to support interdisciplinary team practice, including salaries of non-physician providers (e.g., nurses or dietitians). Under the My Health Team (MyHT) approach, teams are funded through formal agreements, with plans being pre-approved by the government. Non-physician providers with MyHT are employees of regional health authorities, and are remunerated through salary rates that are based on union contracts. Funds distribution and team composition is negotiated through the MyHT agreement. The Interprofessional Team Demonstration Initiative (ITDI) is another Manitoba primary care initiative that supports the Family Doctor for All commitment, and provides funding to FFS practices to hire non-physician professionals.

Although there are various system-supported funding models in Canada, they are not necessary to create and sustain a successful team. For example, Clinique Médicale Nepisiguit in Bathurst, New Brunswick, was formed in response to community needs. Most of their developments were initiated independently, by leadership and management of the lead family physician and the rest of the health team. The clinic leaders understand the patient population, recruit additional health care providers that meet their needs, and respond to the changing needs of the community by adapting their staffing and services.

It is important to acknowledge that, depending on community resources and physician availability, not every patient will have access to a family physician, or a family physician-led health team. Nurse-led clinics play a crucial role in rural and remote communities, where there may be fewer physicians available. These clinics offer extended hours and an alternative to an emergency room, based on principles of primary health care. These practices collaborate with family physicians to ensure consultation is available for relevant cases.

There is also an element of interconnectedness that goes beyond the care provided by the health care team in a PMH. The concept of a medical neighbourhood is the clinical-community partnership that includes the medical and social supports necessary to enhance health, with the medical home serving as the patient's primary hub and coordinator of health care delivery.[5] The goals of a high-functioning PMH include collaborating with the various medical neighbours to encourage the flow of information across and between clinicians and patients. They include community and social services, ambulatory and hospital care, diagnostic services, acute and post-acute care, pharmacy, and public health agencies.[6] Together these organizations can actively promote care coordination, fitness, healthy behaviours, proper nutrition, and healthy environments and workplaces.[5]

All health care professionals in a health care team provide a specific skill set and knowledge that are valuable to patient care. However, family physicians use their unique and dynamic understanding of human development and social determinants to develop a comprehensive approach to managing disease and illness in patients and their families.[7]

The primary care paradox suggests that specific diseases may be managed well in specialty clinics; the best outcomes for a patient's longevity and quality of life occur through holistic care by a family physician and health care team.[8] Unlike narrowly focused specialties, family medicine includes the biological, clinical, and behavioral sciences, encompassing all ages, sexes, each organ system, and every disease entity.[9]

Before we explore ways to deliver team-based care we should understand the benefits that make it worth pursuing.

BENEFITS OF TEAM-BASED CARE

Expanded access to care

Family practices featuring health care teams have a greater capacity to offer timely access to care for their patients. While most family physicians already offer care after regular hours, newer models of care are accommodating patients by offering extended office hours.[10] Coverage and care provision are then shared among family physicians within one or more practices, as well as by involving other team members.[10] By adding other health professionals to a practice, patients will have access to a more diverse range of services. For example, programs and services offered can include diabetes management, smoking cessation, or lactation consulting.

Several team-based models have shown improved access and reduced wait times, resulting in greater patient satisfaction.[11] A qualitative study of a Waterloo, Ontario, clinic found that providing after-hours clinical services reduced wait times, with services from other health care providers seen as key to improved patient access.[12] In addition to improved access to basic primary care, participants reported enhanced access to extended health services and more holistic care compared to what had been available.[13] These results were echoed in a Conference Board of Canada survey, which found that respondents were most likely to cite improved access to care, reduced wait times, improved health outcomes, and patient satisfaction as benefits in an interdisciplinary practice.[14]

Efficient use of resources

Individuals who have regular access to team-based care in a family practice are significantly less likely to require emergency medical services than those who do not.[15] Additionally, lack of access to a personal family physician and health care team can indicate overuse of health care services.[16]

A Conference Board of Canada report estimates that full coverage by interprofessional health teams for adult type 2 diabetes patients could have saved over $260 million in direct health care costs and about $400 million in indirect costs due to productivity losses in the economy in 2011.[17] The report also estimated that full coverage by interprofessional health teams—specifically case management—for patients with depression could have increased the annual labour force by 52,000 more full-time, fully functional person-years of employment in one year, resulting in adding almost $2.3 billion to the economy in 2011.[18]

Continuity of care

Having a team that is coordinated and connected allows members to effectively attend to the patient's needs, while ensuring that there are no duplications of unnecessary testing and omissions in care. Evidence indicates that high functioning teams can improve continuity of care.[19] A patient survey review found that most patients who experienced continuity of care also had a close relationship with a personal family physician and health care team.[20] For example, patients who had access to nurse practitioners and physician assistants, in addition to their own personal family physician, reported greater continuity of care.[21]

Improved chronic care management

With more patients suffering from multiple chronic diseases, teams can play a vital role in improving clinical outcomes for patients with chronic diseases. Patients with well-controlled chronic illnesses are significantly more likely to have access to a health care team, in addition to their personal family physician.[22] Team members can assist with planning and counselling, and follow-up services. Overall, a team helps improve the health and wellness of patients with chronic conditions, mitigates risk factors, and offsets costs to other parts of the health care system, most notably emergency care.[14]

Refer to the Best Advice guide *Chronic Care Management in a Patient's Medical Home* for advice about chronic care management in a family practice setting.

POTENTIAL BARRIERS

By increasing our understanding of potential barriers to building teams, we can identify solutions.

Funding models

Funding and financial incentive models have been identified as a significant barrier to interdisciplinary primary care practice. When one team member—often a physician—receives the funds for primary care services, there may be less incentive to share service provision or decision-making responsibilities with other team members.[14] For example, a FFS model may not be as conducive to interprofessional collaboration as remuneration in alternative funding models may be—it often funds only direct physician-provided services. Community health centres and FHTs offer alternative methods to team-based care practices. However, system-supported models are not the only method used to begin building a team. As mentioned in the Clinique Médicale Nepisiguit case, the FFS physicians reinvested some of the money they earned to hire the health professionals themselves.

Crowfoot Village Family Practice (CVFP), a clinic in the Alberta Health Services Calgary zone, reported improved access to care. The average panel size (patients per physician) at CVFP is 1,700 patients, versus 1,200 in a traditional FFS model.

The clinic receives a monthly payment for each registered patient (based on age and sex). According to CVFP, the patient-based funding model has helped incent team-based care, increase access to care, and increase acute care savings.

Role clarity

When some groups have overlapping or variations of similar competencies, it can result in ambiguous expectations of what a defined role is within a practice. For example, in addition to the family physician, social workers, mental health counsellors, or psychologists can provide mental health counselling. A lack of role clarity can create confusion within the team, resulting in suboptimal care for patients. During the planning and team development phases, roles should be clearly outlined. This is best done at the local practice level relative to community needs and resources. This approach considers changes over the course of a health care professional's career, including skills development, achievement of certifications, and professional interests.[23] It is important to include time for team members to become comfortable in their role, at the outset of team-based care and with any changes to the team.

Role relationships

Team effectiveness and collaboration can be affected when team members perceive or project an artificial professional hierarchy. It should be acknowledged that, depending on who is the most responsible provider in a given situation, team members need to be able to understand each other's responsibilities and accountabilities to ensure quality care and reduce medico-legal risk.[24] Although the family physician often assumes the greatest responsibility in medical decision making, this is not always the case for other areas of care.[25]

Developing and implementing a standard set of behaviour policies and procedures can create clear expectations between different members. Ensure the policies are consistent, universally applied, and do not show favouritism to specific roles. Encouraging informal or formal group interactions can also help enhance collaboration between perceived hierarchical roles, and break down any silos that may exist.

Communication inefficiencies

When health care professionals are not communicating effectively, it affects the team dynamic and jeopardizes patient care. Medical errors can occur if critical information is not being passed on, information is misinterpreted, next steps are unclear, or changes in a patient's status are overlooked. Effective communication is essential for ensuring that care is continuous and patient-centered, as well as coordinated and coherent.

IMPLEMENTATION STRATEGIES

Skill mix and team size

There is no one-size-fits-all model when determining what mix of health care professionals should be part of a practice team. Team composition depends on the professional competencies, skills, and experiences needed to address the health needs of the patient population.[25] These needs vary, depending on the communities' defining characteristics; for example, geography, culture, language, demographics, disease prevalence. Family physicians are encouraged to identify the gaps in health care provision in the local practice environment, and discuss with other health care providers to determine whether adding their skills may be able to meet those needs. Data from electronic medical records—as well as input from patients, community members, and stakeholders—can provide information about the health challenges faced by patients in the community.

The North Perth Family Health Team (NPFHT) in Listowel, Ontario, is comprised of 22 health care providers, including family physicians, nurses, and dieticians. The rural community has a high prevalence of chronic diseases, such as diabetes, heart disease, and chronic obstructive pulmonary disease (COPD). The NPFHT offers a comprehensive program for diabetes management that educates patients in self-management. They also have a COPD program that supports all stages of the treatment plan, including diagnosis, medication education, and lifestyle counselling.

It is important to consider team size, which depends on varying factors, such as:

- Patient population size and health care needs
- Hours available for patient access
- Hours available for each physician to work
- Roles and number of non-physician providers
- Funds available[25]

A larger team is not necessarily the best option for a practice. Too many team members can reduce effectiveness, and create greater strains on effective communication.[26] Conversely, smaller team sizes may reduce accessibility, continuity, and quality of care, and shift the burden to other parts of the health care system (e.g., acute care).[25]

Team composition and skill mix depend on the practice's panel and its needs, including population health and prevention approaches as part of the care.[27] The practice's geographic location and its patients' socioeconomic status affects the practice's panel size and the type of services it provides. Typically, practices in rural settings offer more services than a practice in an urban area.[28] Larger practices can also offer more services, and referrals that are more efficient. It has been shown that primary care teams in disadvantaged communities have greater demands on their time due to the impact of social determinants of health. Their patients consult more frequently, call more often at night, and have poorer self-reported health.[29] The Best Advice guide *Panel Size* further discusses this topic, with details regarding approaches, factors that affect panel size, and measures that gauge performance.

Practices should evaluate existing resources within or outside of their community to explore whether further opportunities for collaboration are needed. Evaluation of needs and quality improvement should be a continuous and iterative process to ensure the practice is keeping up with the needs of the community.

Patient-centredness: "Nothing about me, without me"

Health care teams should work together to establish shared goals that reflect patient and family priorities and that can be clearly articulated, understood, and supported by all members. Teams that are more patient-centred in their approach to care are associated with increased continuity of care, higher patient satisfaction, and increased provider satisfaction.[1] Providing continuous care centered on the needs of the community and individual patients is a key feature of family physicians' expertise and should be emphasized and shared with other members of the team.

Patients can also be engaged with practice-level procedures and policies. Patients can help set the direction and vision for the changing care-delivery model. Ask patients to provide their thoughts on topics such as:

- Additional health professionals that would be an asset to the practice
- Service needs that require further assistance (e.g., a diabetes program)
- Methods for sharing health information, and whether different health care providers in the practice are well-connected
- Feedback on planning and delivery of team-based care; this can be as simple as placing an anonymous comment box in the waiting area, or creating a patient advisory committee such as the one set up in the Memorial University of Newfoundland's family practice clinic

Team member relationships

A positive team dynamic encourages relationships that are collaborative, open, and inclusive. Just like in any other team, in order for every member to succeed they must share a unified vision. The health professionals should work together with the goal that each patient is receiving the most comprehensive care possible. This means that while the team members work interdependently, they should also acknowledge the unique contributions other members bring to the team.

Communication is a key component to strengthening relationships between team members. Not only does it help relay responsibilities of the team, it also helps define a practice's culture[19] and reduce unnecessary duplication of services.[30] Having open and clear communication lines creates a community that is encouraging, trusting, transparent, and respecting. A positive team dynamic facilitates trust between team members, which is an essential prerequisite for a positive practice culture, including open communication.

Team members that listen to each other and respect differences in views describe having more positive interactions.[11] Scheduled team meetings or daily "team huddles" can be a great way to enhance communication and bring the team together. These meetings can be a productive way to discuss program delivery, care planning,

care coordination, and any other patient care issues the team needs to address.[31] Education rounds, regular staff meetings or huddles, advanced use of technologies, and co-location of team members are all solutions to individual- and practice-level barriers to effective interprofessional collaboration.[32] Holding regular meetings is only one way of enhancing communication. Meetings should be arranged without placing undue time burden on busy staff. Also, the type of communication that works best may differ between teams and the unique needs/preferences of their members.

Technology

Electronic medical records (EMRs) are useful for communication and information sharing among team members. Physicians indicate that they are better able to share patient information with members of their team, whether onsite or remotely, when comprehensive, legible, and accurate patient histories are available.[33] For example, a multidisciplinary practice in Prince George, British Columbia, uses EMRs as a communication tool at weekly team meetings, so that the patient file is visible to all team members while they discuss care plans.

Patient-held records, such as the MyHealthNS initiative in Nova Scotia, enable patients to have direct access to their own information including lab tests and diagnostic images. These platforms can enable electronic communication between patients and health care team members.

Technology also allows patients and physicians to be linked with clinicians from other disciplines who do not work in the same location or organization. If feasible, a practice can consider integrating and collaborating with outside programs as a virtual team. In geographically remote areas, electronic communication is crucial for information sharing and even remote delivery of care to patients.

Effective communication and EMR integration are important determinants of interprofessional collaboration and effective team relationships.[13] This kind of seamless integration improves communication among providers, results in less conflicting advice from care providers, and facilitates the transfer of data between providers.[13]

The Best Advice guide *Adopting EMRs in a Patient's Medical Home* provides information about how to adopt EMRs, and the benefits to team members and patients.

Teamwork

Team effectiveness can be perceived differently depending on the viewpoint. Patients may judge a team's effectiveness based on the services received, while team members may focus more on job satisfaction and achieving shared team objectives. At the practice level, team effectiveness may focus more on efficiency and financial performance. These competing perspectives stress the importance of having well-defined goals and indicators to measure team effectiveness. The Team Climate Inventory is a beneficial tool that teams and clinics can use to evaluate team function according to four areas: vision, participative safety, task orientation, and support for innovation.[34]

To ensure that practice-wide efforts to provide team-based care are having the desired effect, practices should discuss ways to define and measure success, and then incorporate lessons learned into ongoing care provision. Practices should define and track goals related to providing patient-centered, team-based care. Measurements can examine not only the quantitative efficiencies of a practice, but qualitative too—for example, the quality of relationships among team members. Practices can also get a patient-centred perspective by providing opportunities for patient feedback on their interactions with the provider team in a short verbal conversation or brief written questionnaire at the end of visits. Appendix B contains a list of resources that provide guidance for using patient feedback to improve their experience in a practice.

OTHER HEALTH PROFESSIONALS IN A COLLABORATIVE TEAM

Collaborative, multidisciplinary team members work closely together, with their respective services often complementing each other. It is important to understand what is involved in each role on the team, and how a patient can benefit from different services. By accessing the most appropriate health care provider, patients will be able to have their needs best addressed without compromising time or quality.

The CFPC acknowledges the assistance and contribution that the following organizations provided for creating the health professional role descriptions.

These are general descriptions of a profession; individuals within the profession will have various skillsets based on their individual experiences and competencies. The list is not exhaustive. The mix of interprofessional teams should be determined above all by the needs of the community the practice serves.

Registered nurses and nurse practitioners

CANADIAN NURSES ASSOCIATION | ASSOCIATION DES INFIRMIÈRES ET INFIRMIERS DU CANADA

Registered nurses (RNs) and nurse practitioners (NPs) play a vital role in the success of a collaborative primary care team. They work as part of the team to promote health throughout the lifespan with the goal of improving health outcomes and facilitating access to services. NPs are registered nurses who have additional education and nursing experience, which enables them to function both autonomously and collaboratively to provide comprehensive care in primary care settings.

Depending on the needs of a practice or community, RNs and NPs bring expertise in an area of practice to improve the care of patients requiring specialized care, such as palliative end-of-life care, chronic disease management (e.g., diabetes), or prenatal care.

RN responsibilities include:

- Health promotion, disease prevention and management, coordination, education, direct patient care, and health assessments for patients and families across the continuum of care
- Collaboration with and referrals to other community services (e.g., public health, home care, community groups)
- Oversight and contributions to clinic/centre high-quality care (e.g., infection control, emergency preparedness, etc.)
- Coordination of health promotion activities in the community
- Coordination of specialty clinics/education/research/administration/quality improvement

NP responsibilities include all of the above, and authority to autonomously do the following,[†] consulting for relevant additional expertise when necessary:

- Diagnose and treat illnesses
- Order and interpret tests
- Prescribe medications
- Perform medical procedures
- Admit and discharge patients
- Complete physical and mental health assessments
- Make specialist referrals

Dietitians

Dietitians of Canada
Les diététistes du Canada

It is estimated that 20 to 25 per cent of all visits to a family physician are for nutrition-related conditions.[35] Dietitians can provide valuable support within a team about issues such as maternal and infant nutrition, optimal growth and development, and early detection of nutrition problems. Dieticians work with patients to create dietary plans that promote healthy eating and balanced nutrition. They also provide services that address nutrition-related issues, such as prenatal nutrition, cholesterol levels, diabetes management, weight management, gastrointestinal disorders, and improving daily energy levels.

There are many things that dietitians can do to address a nutrition problem—health promotion and disease prevention strategies, as well as specialized nutrition therapy and rehabilitation strategies.

The Hamilton Service Organization Nutrition Program integrates registered dietitians into the offices of family physicians. The program is based on a model of shared care: dietitians and family physicians work together to care for patients, with each providing services according to their skills and patient's needs.

A registered dietitian visits each participating practice regularly. Each physician receives about 10 hours of nutrition services per month. For example, in a four-physician practice, a dietitian would be present for two days each week.

The program is funded through a grant from the Ontario Ministry of Health and Long-Term Care's Institutional Supplementary Program, which supplements capitation funding received by practices. Participating physicians are in rostered family medicine practices.

Responsibilities include:

- Counsel and support clients to change their eating habits to promote good health and prevent chronic illness (e.g., high blood pressure, diabetes, heart disease)
- Develop and implement plans for individuals, groups, and communities based on a comprehensive needs assessment; monitor progress, provide ongoing support, and evaluate outcomes
- Apply knowledge of health determinants, and work with communities, groups, and individual clients to plan and implement programs

[†]Provincial legislation places varying restrictions on scopes of these activities. Province-specific information sources will carry detailed information on NP scopes of practice in your province.

Psychologists

Psychologists in a family practice setting assess, diagnose, and treat mental and behavioural problems. Patients typically are referred by the team's family physician or nurse practitioner. Direct services include assessment and intervention for a range of issues, including depression, anxiety, stress, chronic pain, addictions, dementia, and developmental and learning disorders. Psychologists also have a role in assisting patients navigating end-of-life decisions and in assessing patients' capacity to give consent to medically assisted death.

> Ensure open communication: Psychologists treat problems that are either ongoing, or take some time to resolve (typically 10 to 20 sessions). It is important to patient outcomes that care providers work in a way so that different health treatment goals are in line with each other rather than at cross purposes.

Psychologists' work can also be indirect, consulting with team members about managing specific issues and problems, and developing or evaluating interventions, programs, or patient outcomes.

Responsibilities include:

- Carrying out needs assessments of the practice's patient population
- Designing and evaluating evidence-based mental health programs to meet these needs
- Planning and supervising the delivery of mental health services by other members of the team
- Identifying and managing the psychological issues that may get in the way of patients making changes necessary to improve their health; may help patients adhere to medication or other treatment protocols and better manage chronic physical illness
- Helping a patient's family manage the demands and fatigue of care giving

Social workers

Social workers specialize in understanding the biopsychosocial factors that affect individuals, families, and support systems. They can examine the complexities of a situation and help patients navigate care plans, treatments, and required services in the context of their own home environment. Social workers help individuals reintegrate into their families, communities, and society after being isolated for medical reasons, while focusing on interventions that assist in supporting the well-being of all parties.

> Communities with high unemployment may benefit from the assistance of a social worker, as they are trained in employment counselling. The clinical social worker at Central Interior Native Health prioritizes social needs such as income assistance, advocacy, housing, economic, and travel needs. They work with the health team in case advocacy, conferencing, and coordination, and are proactive on issues affecting the social determinants of health.
>
> The clinic's EMR also has a social history feature used by social workers, addictions workers, and the Aboriginal support worker. This component also helps physicians and nurses better understand how various social factors contribute to the patient's overall condition.

Social workers, as part of a health team, play an integral role within the primary health care system by helping patients access social programs, take an active role in their own health care, and understand the external factors that influence individual and community health. They may also provide education about topics such as family violence, addictions, mental health, and ageism. By working within the framework of the determinants of health, social workers make the necessary links between the physical, social, emotional, and economic impacts of health.[36]

Responsibilities include:

- Assessing social problems by obtaining case history and background information
- Contributing knowledge to the health team about family dynamics, family functioning, and attitudes toward others and interpersonal behaviour
- Providing information regarding patient and caregiver ability to interpret and understand the team's recommendations and care prescribed
- Providing individual, family, caregiver, and group counselling
- Helping patients and caregivers navigate the health system, and access necessary services

Physician assistants

Physician assistants (PAs) work with physicians to help improve access to quality care. PAs are trained as generalists; therefore, their scope is broad. The PA role in the team is based on negotiated autonomy between the PA and their supervising physician(s) in accordance with the PA's experience and training within the physician's scope of practice.

When employing a PA, it is important for the physician to understand the PA's abilities and the supervisory relationship required. Although the PA can work collaboratively with multiple physicians, there must be one lead supervising physician who is responsible for the PA.

While supervision can occur remotely, physicians are responsible for ensuring their availability to PAs. PAs can see patients independently of the physician. However, it is important that the scope of practice is understood and communicated to the PA, as well as other health professionals working in the practice.

Responsibilities include:

- Conducting patient interviews, taking medical histories, and performing physical examinations
- Diagnosing and treating illnesses
- Ordering and interpreting diagnostic tests
- Developing treatment plans, and counselling about preventive health care

Other providers

As previously stated, this guide is not meant to include a comprehensive list of all the possible health care providers that can be added to a primary care practice. Based on a review of the National Physicians Survey, the health specializations referred to so far are included in a significant proportion of family practices across Canada.[37] However, depending on practice needs, other providers may be more beneficial for achieving the best patient outcomes, such as:

- Physiotherapists manage acute and chronic conditions, activity limitations, and participation restrictions. They also help with the rehabilitation of injuries, and the effects of disease or disability with therapeutic exercise programs and other interventions.
- Occupational therapists (OTs) enable individuals, groups, and communities to identify, engage in, and achieve desired potential in the "occupations of life." OTs work with patients to plan how to prevent or overcome the barriers in their life.
- Chiropractors assess, diagnose, and manage musculoskeletal conditions using non-invasive, non-pharmacological manual therapies, such as joint manipulation and mobilization, and other modalities complemented by exercise recommendations and rehabilitation.
- Pharmacists provide optimal drug therapy outcomes in collaboration with patients, caregivers, and other health care providers. They identify medication use issues, take responsibility for drug therapy decisions, and monitor outcomes.[38]
- Speech language pathologists identify, diagnose, and treat communication and swallowing disorders. Audiologists identify, diagnose, and manage individuals with communication disorders, such as peripheral or central hearing loss, tinnitus, and vestibular and balance disorders.

These lists are not exhaustive. Each family physician will identify community needs unique to their situation, and should establish a team of relevant health care providers that will address those needs. Factors such as health human resource availability, access needs, and available funding are just a few things that determine if an addition to a team is feasible. It should be noted that a health care professional does not need to be hired as a full-time team member. For example, a practice can hire a dietician for specific days to lead a diabetes education program and see scheduled patients. Practices can also host other health care professionals, such regional health authorities, to provide care to patients on-site. Practices should find out what resources are available in their community, and what areas they can improve on to better meet patient needs.

CONCLUSION

Interprofessional teams can uphold the foundation of a strong primary care system among increasingly complex health challenges. By providing patients with a comprehensive array of services that best meet their needs, team-based care can lead to increased access, higher patient and provider satisfaction, and better resource efficiency. Although there are presently many systems in place that support the creation of health care teams, practices can also create a successful team on their own. To ensure team success, no matter the type of practice, providers must have a clear understanding of the different role responsibilities, and ensure that there are tools available to engage open dialogue and communication. Teams within the PMH are supported by a model that is flexible and adaptable to each situation. As an important part of a PMH, teams are central to the concept of patient-centred care that is comprehensive, timely, and continuous.

Appendix A: Guiding principles

Following are guiding principles of Goal 3 from *A Vision for Canada Family Practice – The Patient's Medical Home*:

3.1 A Patient's Medical Home may include one or more family physicians, each with his or her own panel of patients.

3.2 Family physicians with special interests or skills, along with other medical specialists, should be part of a Patient's Medical Home team or network, collaborating with the patient's personal family physician to provide timely access to a broad range of primary care and consulting services.

3.3 On-site, shared-care models to support timely medical consultations and continuity of care should be encouraged and supported as part of each Patient's Medical Home.

3.4 The composition of the teams or networks of health professionals and providers in Patient's Medical Homes may vary from one practice and community to another.

3.5 The location of each of the members of a Patient's Medical Home's team should be flexible, based on community needs and realities; team members may be on-site in the same facility or may function as part of physical or virtual networks located throughout local, nearby, or—for many rural and remote practices—distant communities.

3.6 The personal family physician and nurse should form the core of most Patient's Medical Home teams or networks, with the roles of others such as physician assistants, pharmacists, psychologists, social workers, physio- and occupational therapists, and dietitians to be encouraged and supported as needed.

3.7 Physicians, nurses, and other members of the Patient's Medical Home team should each be encouraged and supported to develop and sustain ongoing professional relationships with patients; each caregiver should be presented to each patient as a member of his or her personal medical home team.

3.8 Nurses and other health professionals who provide services as part of a Patient's Medical Home team should do so within their professional scopes of practice and personally acquired competencies. Their roles in providing both episodic and ongoing care should support and complement—but not replace—those of the family physician.

3.9 The roles and responsibilities of the team members of each Patient's Medical Home should be clearly defined. The leadership and support roles assigned to the different team members for the clinical, governance, and administrative/management responsibilities required in a Patient's Medical Home will vary from service to service and practice to practice, and thus should be determined within each setting.

3.10 Health system support, including appropriate funding, should be available to support all members of the health professional team in each Patient's Medical Home.

3.11 Each health provider/professional team member must have appropriate liability protection.

3.12 Ongoing research to evaluate the effectiveness of teams in family practice/primary care should be carried out in Patient's Medical Homes.

Appendix B: Patient feedback

Following are tools to help you use patient feedback to improve patients' experiences when they visit your practice.

- The Picker Institute's *Using patient feedback* guide provides information about topics such as what patient feedback is and how to obtain it, how to interpret survey results and share feedback, and how to create an action plan and get key stakeholders involved
- The Health Service Executive's *Staff Guide—Using patient feedback to improve healthcare services* helps service providers effectively capture, understand, analyze, and use the feedback from service users. It highlights the need for patient involvement to be meaningful and embedded in each service.
- The Patient Experience Journal article *Evaluation and measurement of patient experience* provides an overview of the various methods of obtaining patient experience feedback

Appendix C: Resources

Following is a list of the websites[‡] found throughout this guide, in the order in which they appear.

- Patient's Medical Home — http://patientsmedicalhome.ca/
- Best Advice guide *Communities of Practice in the Patient's Medical Home* — http://patientsmedicalhome.ca/resources/best-advice-guides/communities-practice-patients-medical-home/
- Alberta Primary Care Networks — www.health.alberta.ca/services/primary-care-networks.html
- Collaborative Emergency Centres — https://www.saskatchewan.ca/residents/health/accessing-health-care-services/primary-health-care/collaborative-emergency-centres, http://novascotia.ca/dhw/primaryhealthcare/CEC.asp
- My Health Teams — www.gov.mb.ca/health/primarycare/public/myhts/index.html
- Family Health Team — www.health.gov.on.ca/en/pro/programs/fht/
- Family Medicine Group — www.msss.gouv.qc.ca/en/sujets/organisation/gmf.php
- Canadian Armed Forces Care Delivery Units — www.forces.gc.ca/en/caf-community-bases-wings-cfsu-ottawa/health-gen-info-pkg.page

[‡]All website addresses are valid as of 2017 May.

- Clinique Médicale Nepisiguit — http://patientsmedicalhome.ca/resources/resources-for-health-care-providers/patients-medical-home-takes-team-2/
- Best Advice guide *Chronic Care Management in a Patient's Medical Home* — http://patientsmedicalhome.ca/resources/best-advice-guides/best-advice-guide-chronic-care-management-patients-medical-home/
- Best Advice guide *Panel Size* — http://patientsmedicalhome.ca/resources/best-advice-guides/best-advice-guide-panel-size/
- MyHealthNS — https://myhealthns.ca
- Best Advice guide *Adopting EMRs in a Patient's Medical Home* — http://patientsmedicalhome.ca/resources/best-advice-guides/best-advice-guide-adopting-emrs/
- *A Vision for Canada: Family Practice – The Patient's Medical home* — http://www.cfpc.ca/uploadedFiles/Resources/Resource_Items/PMH_A_Vision_for_Canada.pdf
- Canadian Nurses Association — www.cna-aiic.ca/en
- Dieticians of Canada — www.dietitians.ca
- Canadian Psychological Association — www.cpa.ca
- Canadian Association of Social Workers — www.casw-acts.ca
- Canadian Association of Physician Assistants — https://capa-acam.ca
- Canadian Physiotherapy Association — https://physiotherapy.ca
- Canadian Association of Occupational Therapists — www.caot.ca
- Canadian Chiropractic Association — https://www.chiropractic.ca
- Canadian Pharmacists Association — www.pharmacists.ca
- Speech-Language & Audiology Canada — www.sac-oac.ca
- Picker Institute *Using patient feedback* — www.nhssurveys.org/Filestore/documents/QIFull.pdf
- Health Service Executive's Staff Guide *Using patient feedback to improve healthcare services* — www.hse.ie/eng/services/yourhealthservice/hcharter/ask/feedbackstaffguide.pdf
- *Patient Experience Journal* Evaluation and measurement of patient experience — http://pxjournal.org/journal/vol1/iss1/5

References

1. Schottenfeld L, Petersen D, Peikes D, Ricciardi R, Burak H, McNellis R, et al. *Creating Patient-centered Team-based Primary Care*. Rockville, MD: Mathematica Policy Research; 2015.
2. Grant R, Finocchio L, Pew Health Professions Commission, California Primary Care Consortium. *Interdisciplinary collaborative teams in primary care: a model curriculum and resource guide*. San Francisco, CA: Pew Health Professions Commission, 1995.
3. O'Daniel M, Rosenstein AH. Professional Communication and Team Collaboration. In: *Patient Safety and Quality: An Evidence-Based Handbook for Nurses,* ed. Hughes RG. Rockville, MD: Agency for Healthcare Research and Quality; 2008.
4. Alberta Health. *Primary Care Networks Review*. Edmonton, AB: Government of Alberta. Available from: www.health.alberta.ca/documents/PCN-Review-2016.pdf. Accessed 2017 May.
5. Patient-Centered Primary Care Collaborative. Medical Neighbourhood. Available from: www.pcpcc.org/content/medical-neighborhood. Accessed 2017 March.
6. Taylor EF, Lake T, Nysenbaum J, Peterson G, Meyers D. *Coordinating Care in the Medical Neighborhood: Critical Components and Available Mechanisms.* Rockville, MD: Agency for Healthcare Research and Quality; 2011. Available from: https://pcmh.ahrq.gov/sites/default/files/attachments/coordinating-care-in-the-medical-neighborhood-white-paper.pdf. Accessed 2017 May.
7. The College of Family Physicians of Canada. Four Principles of Family Medicine. Available from: www.cfpc.ca/Principles/. Accessed 2017 May.
8. Stange KC, Ferrer RL. The paradox of primary care. *Ann Fam Med,* 2009;7(4):293-9.
9. American Academy of Family Physicians. Family Medicine: Comprehensive Care for the Whole Person. Available from: www.aafp.org/medical-school-residency/choosing-fm/model.html. Accessed 2017 May.
10. The College of Family Physicians of Canada. *Timely Access to Appointments in Family Practice*. Mississauga, ON: The College of Family Physicians of Canada; 2012. Best Advice. Available from: http://patientsmedicalhome.ca/resources/best-advice-guides/best-advice-guide-timely-access/. Accessed 2016 October.
11. Virani T. *Interprofessional Collaborative Teams*. Ottawa, ON: Canadian Health Services Research Foundation; 2012. Available from: www.cfhi-fcass.ca/Libraries/Commissioned_Research_Reports/Virani-Interprofessional-EN.sflb.ashx. Accessed 2015 August.
12. Stalker CA. *How have physicians and patients at New Vision family health team experienced the shift to a family health team model? A pilot study: Final report*. Waterloo, ON: Lyle S. Hallman Faculty of Social Work; 2010.
13. Gocan S, La Plante MA, Woodend AK. Interprofessional Collaboration in Ontario's Family Health Teams: A Review of the Literature. *J Res Interprof Pract Educ*, 2014;3(3) Available from: http://jripe.org/jripe/index.php/journal/article/viewFile/131/84. Accessed 2017 May.
14. Dinh T, Stonebridge C, Theriault L. *Recommendations for Action: Getting the Most out of Interprofessional Primary Health Care Teams*. Ottawa, ON: Conference Board of Canada; 2014. Available from: www.conferenceboard.ca/e-library/abstract.aspx?did=5988. Accessed 2016 September.
15. Khan S, McIntosh C, Sanmartin C, Watson D, Leeb K. *Primary Health Care Teams and Their Impact on Processes and Outcomes of Care*. Ottawa, ON: Statistics Canada; 2008. Available from: www.statcan.gc.ca/pub/82-622-x/82-622-x2008002-eng.pdf. Accessed 2017 May.
16. Mautner DB, Pang H, Brenner JC, Shea JA, Gross KS, Frasso R, et al. Generating hypotheses about care needs of high utilizers: lessons from patient interviews. *Popul Health Manag* 2013;16(Suppl1):S26-33.
17. Dinh, T. *Why interdisciplinary health care teams are better for Canadians and the health system*. Conference Board of Canada. Available from: www.conferenceboard.ca/economics/hot_eco_topics/default/14-03-13/why_interdisciplinary_health_care_teams_are_better_for_canadians_and_the_health_system.aspx. Accessed 2017 May.
18. Dinh T, Bounajm F. *Improving Primary Health Care Through Collaboration: Briefing 3—Measuring the Missed Opportunity*. Ottawa, ON: The Conference Board of Canada; 2013. Available from: www.conferenceboard.ca/e-library/abstract.aspx?did=5479. Accessed 2016 September.
19. Task Force on Collaborative Practice. Executive Summary. *In: Collaboration in Practice: Implementing Team-Based Care*. Washington, DC: American College of Obstetrician and Gynecologists; 2016.
20. Haggerty JL, Roberge D, Freeman GK, Beaulieu C. Experienced continuity of care when patients see multiple clinicians: a qualitative metasummary. *Ann Fam Med* 2013;11(3):262-71.
21. Mittelstaedt TS, Mori M, Lambert WE, Saultz JW. Provider practice characteristics that promote interpersonal continuity. *J Am Board Fam Med* 2013;26(4):356-65.
22. Green BB.. Caring for patients with multiple chronic conditions: balancing evidenced-based and patient-centered care. *J Am Board Fam Med* 2013;26(5):484-5.
23. Nelson S, Turnbull J, Bainbridge L, Caulfield T, Hudon G, Kendel D, et al. *Optimizing Scopes of Practice: New Models for a New Health Care System*. Ottawa, ON: Canadian Academy of Health Sciences; 2014.
24. Canadian Medical Protective Association. Physicians and nurse practitioners: Working collaboratively as independent health professionals. Available from: www.cmpa-acpm.ca/-/physicians-and-nurse-practitioners-working-collaboratively-as-independent-health-professionals. Accessed 2017 May.
25. Dinh T. *Improving Primary Health Care Through Collaboration: Briefing 2—Barriers to Successful Interprofessional Teams*. Ottawa, ON: The Conference Board of Canada; 2012. Available from www.conferenceboard.ca/e-library/abstract.aspx?did=5181. Accessed 2016 September.

26. Borrill CS, Carletta J, Carter AJ, Dawson JF, Garrod S, Rees A, et al. *The Effectiveness of Health Care Teams in the National Health Service*. Birmingham, England: Aston Centre for Health Service Organization Research; 2000.

27. The College of Family Physicians of Canada. *Panel Size*. Mississauga, ON: College of Family Physicians of Canada; 2012. Best Advice. Available from: http://patientsmedicalhome.ca/resources/best-advice-guides/best-advice-guide-panel-size/. Accessed 2017 May.

28. Olatunde S, Leduc ER, Berkowitz J. Different practice patterns of rural and urban general practitioners are predicted by the General Practice Rurality Index. *Can J Rural Med* 2007;12(2):73-80.

29. Carlisle R, Avery AJ, Marsh P. Primary care teams work harder in deprived areas. *J Public Health Med* 2002;24(1):43-8.

30. Stewart BA, Fernandes S, Rodriguez-Huertas E, Landzberg M. A preliminary look at duplicate testing associated with lack of electronic health record interoperability for transferred patients. *J Am Med Inform Assoc* 2010;17(3):341-4.

31. Rosser WW, Colwill JM, Kasperski J, Wilson L. Progress of Ontario's Family Health Team model: a patient-centered medical home. *Ann Fam Med* 2011;9(2):165-71.

32. Dingley C, Daugherty K, Derieg MK, Persing R. Improving Patient Safety Through Provider Communication Strategy Enhancements. In: *Advances in Patient Safety: New Directions and Alternative Approaches (Vol. 3: Performance and Tools)*, eds. Henriksen K, Battles JB, Keyes MA, Grady ML. Rockville, MD: Agency for Healthcare Research and Quality; 2008 Aug. Available from: www.ncbi.nlm.nih.gov/books/NBK43663/.

33. The College of Family Physicians of Canada. *Communities of Practice in the Patient's Medical Home*. Mississauga, ON: The College of Family Physicians of Canada; 2016. Best Advice. Available from: http://patientsmedicalhome.ca/resources/best-advice-guides/communities-practice-patients-medical-home/. Accessed 2016 October.

34. Anderson N.R., West M.A. 1998. Measuring climate for work group innovation: development and validation of the team climate inventory. *J Organ Behav* 1998;19(3):235-58.

35. Royall D, Brauer P. *Moving Forward—Role of the Registered Dietitian in Primary Health Care: A National Perspective*. Toronto, ON: Dietitians of Canada; 2009. Available from: www.dietitians.ca/Downloads/Public/phc-position-paper.aspx. Accessed 2017 May.

36. Canadian Association of Social Workers. Social Work & Primary Health Care. Available from: www.casw-acts.ca/en/social-work-primary-health-care. Accessed 2016 October.

37. National Physician Survey. Q3ci Please specify up to three professionals [who provide services that are part of your practice dsomain]- Results for Family Physicians. 2013. Available from: http://nationalphysiciansurvey.ca/wp-content/uploads/2013/09/2013-FPGP-EN-Q3ci.pdf. Accessed 2016 October.

38. Task Force on a Blueprint for Pharmacy. *Blueprint for pharmacy: the vision for pharmacy*. Ottawa, ON: Canadian Pharmacists Association; 2008. Available from: www.pharmacists.ca/cpha-ca/assets/File/pharmacy-in-canada/blueprint/The%20Vision%20for%20%20Pharmacy_Apr%201%2009.pdf. Accessed 2017 May.