

The Role and Value of Family Physicians in Primary Health Care

ENVIRONMENTAL SCAN

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 **Doctors**
Nova Scotia

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Executive Summary

Introduction

Family physicians are an essential part of the delivery of primary health care,¹ and the health system as a whole. As the health-care system itself changes with efforts to provide better care, better health and better value, family physicians continue to play an integral role. As models of care become more collaborative and the scopes of practice of many health-care providers change, it is critical to clarify and define the role of the family physician and the value that they bring to Nova Scotians. Doctors Nova Scotia (DNS), representing physicians across the province, has an important voice to contribute to this conversation. To further explore the role of family physicians in the evolving health-care system in Nova Scotia, DNS engaged an external consultant, Research Power Inc., to conduct an environmental scan, including a literature review and interviews with key informants. This report presents the findings of the environmental scan.

Background

In Nova Scotia, the Nova Scotia Health Authority (NSHA) has introduced the health home model as a foundation of the primary health care system. The health home is based on the Patient's Medical Home (PMH) model developed by the College of Family Physicians of Canada (CFPC). The family practice team, which can include family physicians, nurse practitioners (NPs), family practice nurses (FPNs), community adaptive team members (e.g., dietitian, social worker, occupational therapist, etc.), and clerical and leadership/management support, is the central element in the health home model.

Care models such as the health home influence the scopes of practice of health-care providers, and scope of practice in turn affects models of care. For regulated health-care providers like family physicians, scope of practice is defined in legislation and regulations from a legal standpoint. However, in practice, true scope of practice can vary across individual providers within a profession and is influenced by factors such as traditional practices, education and training, geography or situational context (e.g., patient needs, availability of other providers and/or equipment and technology, etc.), areas of interest, employers and more.

The Value and Role of Family Physicians

The CFPC has developed a Family Medicine Professional Profile that helps to define the role, skills and expertise of family physicians. Key informants interviewed for this environmental scan identified many of the same features that are described in the CFPC profile.

¹ *The Nova Scotia Health Authority (NSHA) defines primary health care as "a multidimensional system that has a responsibility to organize care for individuals across the continuum of care and understand and work with our partners to improve the health of communities" (Primary Health Care, 2017, p. 3).*

Family Physician Skills and Expertise

Family physicians have unique skills and expertise that they bring to the health-care system. The most frequently described area of expertise was the depth of medical knowledge that family physicians have. Their extensive training and clinical experience prepare them to be strong diagnosticians who can assess patient symptoms often at an early and undifferentiated stage, and effectively develop a diagnosis and an appropriate treatment plan. Their training prepares family physicians to be problem-solvers, make decisions even in situations of uncertainty, and take calculated risks where appropriate. For this reason, family physicians were felt to be in an optimal position to manage patients with complex medical needs.

Family physicians as a profession also provide the most comprehensive scope of practice, providing care to patients across the lifespan, dealing with everything from obstetrics to palliative and end-of-life care. They work in a wide range of settings, including emergency departments, long-term care facilities and inpatient hospital wards. This comprehensive scope makes them an important resource in communities, as they can adapt the care they provide to the needs of the community. In addition, family physicians are generalists, and this background gives them an understanding of many different health issues.

Finally, family physicians build long-term relationships with patients and their families. This gives them important context for decisions about patient care. The trust and mutual respect that patients and family physicians develop can help to facilitate improvements in a patient's health.

Family Physician Roles

Family physicians play many critical roles in the primary health care system in Nova Scotia. They are often the first point of contact with the health system for patients, and provide continuity of care for patients over time, which enables family physicians to deliver high-quality, comprehensive care. Family physicians understand, coordinate and integrate care that a patient may be receiving from other providers (e.g., specialists), which is especially challenging with complex patients. Family physicians also act as advocates for their patients, helping them to access the care and services they need from both inside and outside the health system.

In addition to advocating for individual patients, family physicians play a critical role in advocating with communities to improve population health and advocating with others to ensure the health-care system provides safe, quality, patient-centred care. Through their work, family physicians gain a strong understanding of the health needs and issues in a given community. For example, if there are underlying socioeconomic, cultural or other issues that may influence health status, family physicians can respond both on an individual patient level, connecting patients with community supports and resources, and also at a community level, through partnership with others.

Family physicians play important leadership roles at the practice, system and community levels. Many family physicians lead their own staff and/or collaborative teams. Family physicians also provide leadership at the health system level, providing critical input and guidance on health system improvement based on their experiences in primary health care.

Finally, family physicians play a central role in scholarship that contributes to enhancing primary health care and the health system as a whole. They participate in activities such as teaching and mentoring new physicians, research, and quality improvement.

Other Areas Where Family Physicians Provide Value

In addition to the skills and expertise of family physicians, and the different roles they play in patient care and in the health system more broadly, family physicians also provide value to the system in other ways. They represent an efficient use of resources (e.g., less need for referrals and diagnostic tests than other providers); they can provide economic value to communities both as an employer and as a community resource that draws people to the community (i.e., people prefer to live somewhere they can access a physician); and there is generally a high level of trust in family physicians among both patients and other health-care providers (e.g., specialists).

Trends Affecting the Role of Family Physicians

The role and value of family physicians in Nova Scotia are impacted by the changes happening in primary health care and across the health system in Nova Scotia. Some of these trends are:

- **How health care is organized:** Team-based and collaborative care models are increasingly common, but there is limited evidence on the most efficient way to organize work within teams. Changes are also occurring in the scopes of practice of other health-care providers in primary health care, with other providers taking on some of the tasks that were traditionally performed by family physicians. In addition, family physicians are facing new requirements in their work, such as completing increased documentation, providing more care in community rather than institutional settings, and taking on some tasks that specialists used to perform.
- **Accessibility of care:** Access to primary health care is currently a challenge for many patients in Nova Scotia. Challenges with access affect family physicians: The unmet need for primary health care creates stress and burnout as family physicians work long hours to try and meet patient demand, and some may leave practice completely, exacerbating access problems; it creates fragmentation of care as patients access care where they can (e.g., emergency departments, walk-in clinics); and it has resulted in substituting other providers, such as NPs, for family physicians where no family physicians are available, creating confusion about roles and responsibilities.
- **Payment models:** While all family physicians care for their patients to the best of their abilities, existing payment models such as the traditional fee-for-service (FFS) model influence how family physicians organize their practices and to what extent they are able to participate in activities like collaborative care and system improvement.
- **Family physician interests, needs and demographics:** It appears that the scope of practice of family physicians is narrowing from the broad comprehensive scope of the past. This is due at least in part to the different needs, priorities and career goals of newer physicians. For example, newer physicians do not appear to be as interested in taking on a full-time office-based practice, perhaps because of a desire for more work-life balance (e.g., time for family and self-care), and/or for financial reasons (specializing in a specific area such as emergency medicine is more

lucrative than maintaining a comprehensive office-based practice). In addition, the family physician workforce is aging, creating further risks for access to care as family physicians retire.

- **Technology:** Technology plays an increasingly important role in health care and could help family physicians engage in collaborative care and information-sharing between providers, provide greater efficiency in care delivery (e.g., through email/phone interactions with patients), and support quality improvement. Although efforts are underway to expand the use of technology in primary health care in Nova Scotia, more work remains to be done to address challenges and support effective use of technology.
- **Patient needs and expectations:** Patients are aging and have increasingly complex health needs that require more time and attention from their family physician at each visit. At the same time, patients are more informed and want to be active participants in their own health, changing the historical patient-physician dynamic and relationship.
- **Education and training:** The knowledge base in primary health care continues to expand. This makes it more challenging for family physicians to be generalists and feel confident in their knowledge on a wide range of health-care issues.
- **Government role and context:** The government of Nova Scotia establishes the policies, models, and payment systems that influence health-care providers. Government decisions are also affected by the overall climate of fiscal restraint in the face of rising health-care costs.

Working Collaboratively with Other Providers

Collaborative teams in primary health care are increasingly common in Nova Scotia. Although collaboration is now considered part of best practice in primary health care, the process of implementing collaborative teams is not without challenges and risks. Some of the potential challenges to collaboration include:

- **Barriers to communication**, particularly in relation to an IT infrastructure with a variety of electronic medical record (EMR) systems in use that do not necessarily communicate well with one another.
- **Payment models** that are not structured to support collaboration (e.g., FFS models that do not compensate family physicians for time spent collaborating).
- **Different approaches to patient care** across providers, such as practice styles or communication approaches.
- A **lack of trust and understanding** among different providers that may be due to lack of understanding of each other's roles in patient care or areas of skill/expertise.
- An **uncoordinated approach to changes in scope of practice** for health-care providers, which can contribute to fragmentation of care, confusion about roles and responsibilities among both providers and patients, and turf protectionism. All of this can impact both the quality of care and associated costs of care delivery, as well as presenting barriers to collaboration.
- **Unclear liability** for providers when they are working in collaboration.

In order to collaborate effectively, family physicians and other providers need a range of supports, including:

- **Leadership and support for change**, including support from the government, change management support, and practice-level change support.
- **Clear roles and responsibilities** for each provider that are well understood by all team members.
- **Communication mechanisms and supports**, such as regular meetings, co-location, and EMR and IT infrastructure that supports communication and collaboration.
- **Supportive payment models** that provide appropriate compensation for collaboration (e.g., blended payment model).
- **A purposeful approach to building teams** that includes building a shared vision and goals, training to develop knowledge and skills related to teamwork, and building trust and respect between team members.
- Ensuring that **patients are rostered to a team** rather than to individual providers on the team.
- Access to **data** about the team’s patient population and team activities, and support for and integration of **continuous quality improvement**.
- **Clear liability** for all providers on a team.

Conclusion

Family physicians play a critical role in Nova Scotia’s health-care system as care providers and coordinators; team, community, and health-system leaders; and scholars advancing our understanding of health and health care. They bring immense value to health care in the province through their skills and expertise in diagnosing and managing patients (particularly those with complex conditions), delivery of a comprehensive scope of services, and the long-term relationships they build with patients, families and communities. As the health system continues to evolve, it is critical to think carefully about the roles of all providers in the system, and how all can work together most effectively to care for patients. Family physicians have an important role to play in helping to determine what the future of health care will look like in Nova Scotia, and the role of family physicians within the health system.

Introduction

The delivery of health care in Nova Scotia, and around the world, is changing rapidly as governments and health-care providers work to try and make health care more efficient, effective, accessible and patient-centred. Transformation in primary health care is at the heart of this transition, as primary health care plays such a foundational role in comprehensive and coordinated service delivery in health care (Primary Health Care, 2017). Traditionally, family physicians have been the backbone of primary health care. As the health-care system evolves, there are many changes and trends that affect the role and scope of practice of family physicians in Nova Scotia, such as changing models of care including increased collaboration and team-based care, challenges with the recruitment of primary health care providers and access to care for patients, new primary health care roles and/or changing scopes of practice for other providers (e.g., nurse practitioners (NPs), physician assistants (PAs)² and pharmacists), the increasing role of technology, and changing administrative structures and payment models. In fact, one author notes that, “in a real sense, scope of practice is becoming a fluid state for all healthcare practitioners dependent on local needs, changing technologies, and legislative initiatives...” (Wartman, 2017, p. 5).

As the health-care system in Nova Scotia continues to develop, there is a need to better define the unique role of the family physician in the system and the value they provide – now and in the future of the health-care system. While collaborative care models are becoming increasingly common, family physicians continue to practice in a variety of ways, including as independent practitioners or in group practices with other family physicians. The work to define the role and value of family physicians in the health-care system encompasses all family physicians working in a variety of contexts. Professional associations, regulatory colleges, health authorities and government all have a part to play to ensure that the roles of all health-care providers support efficient, effective and safe delivery of health care that is sustainable for the system.

The Policy and Health Issues Committee (PHIC) of Doctors Nova Scotia (DNS) identified the need to define the role and value of family physicians in the evolving health-care system as the top priority for their work in 2018–19. The PHIC determined that the approach to the work must be collaborative and rooted in evidence. An external consultant, Research Power Inc., was engaged to conduct an environmental scan, including a literature review and interviews with key informants (see the Appendix for a detailed description of the methods). In taking a collaborative approach to this work, key informants from various disciplines (e.g., nurses, pharmacists, family physicians, specialists) and organizations (e.g., professional associations, regulatory colleges, health-care organizations, academia) were identified to participate.

² Currently, there are no physician assistants (PAs) in Nova Scotia; however, PAs have been introduced in other jurisdictions in Canada (e.g., Alberta, Ontario) and are common outside of Canada as well (e.g., United States).

This report presents the findings from the environmental scan with the purpose of defining the role of family physicians in the evolving health-care system and the value family physicians bring to Nova Scotians; trends in health care that are impacting the role of family physicians; and the challenges and supports for effective collaboration.

Background and Context

Primary Health Care in Nova Scotia

Primary health care plays a fundamental role in the health-care system. It prevents illness and death, and contributes to improved health equity (Starfield, Shi, & Macinko, 2005). The primary health care system is the foundation of strong health system performance (Primary Health Care, 2017). The Nova Scotia Health Authority (NSHA) defines primary health care as “a multidimensional system that has a responsibility to organize care for individuals across the continuum of care and understand and work with our partners to improve the health of communities” (Primary Health Care, 2017, p. 3), and notes that “primary health care professionals include family doctors, family practice nurses, nurse practitioners, pharmacists, social workers, dietitians, physiotherapists, behaviourists, psychologists and many others, who all work collaboratively to improve the health and well-being of their patients and clients” (p. 4).

A key part of health-care reform in Canada and around the world has been increasing access to multidisciplinary teams in primary health care (Freund et al., 2015). In Nova Scotia, the NSHA has developed and is in the process of implementing the health home model across the province. This model is based on the Patient’s Medical Home (PMH) model developed by the College of Family Physicians of Canada (CFPC). The PMH is based on 10 central goals: patient-centred care; family physician as the most responsible provider (MRP); team-based care; timely access; comprehensive care; continuity; electronic records; education, training and research; evaluation; and system support (College of Family Physicians of Canada, 2011). Doctors Nova Scotia has also endorsed these goals as central to strengthening primary health care (Doctors Nova Scotia, 2017a). The NSHA’s health home concept is very similar to the PMH model, although the family physician is not specifically identified as the MRP.

The foundation of the health home model is a collaborative family practice team. The NSHA has defined the collaborative family practice team as:

Different types of primary health care providers who collaborate and share responsibility for comprehensive and continuous primary health care for a practice population. With patients and families as core partners on the team, the team consists of various combinations of family physicians, nurse practitioners, family practice nurses, and other providers such as dietitians, social workers, occupational therapists, physiotherapists, pharmacists, learners, behaviourists, medical office assistants, and/or community mental health workers, identified based on the needs of the community. Management/leadership support is important to provide strategic and operational support to the team. Clerical/office staff are considered integral members of the team (Primary Health Care, 2017, p. 12).

What is Scope of Practice?

Each profession in health care has its own scope of practice that affects the role they play in health-care delivery. In a recent report by the Canadian Academy of Health Sciences on optimizing scopes of practice for new models of health care, Nelson et al. (2014) offer the following definition (originally from the Canadian Nurses Association):

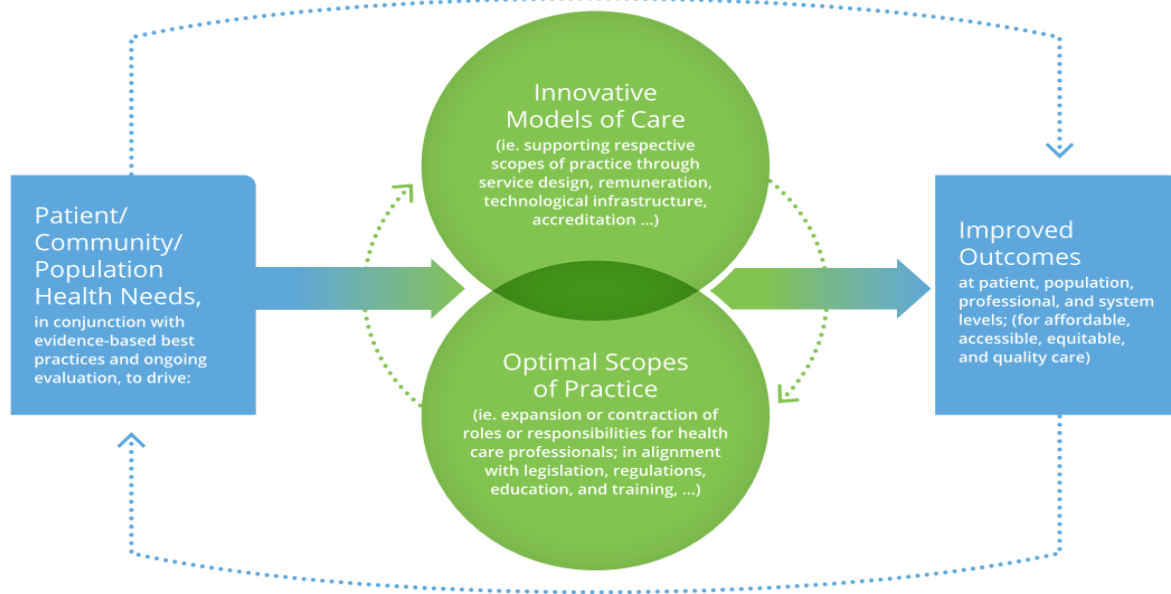
A profession's scope of practice encompasses the activities its practitioners are educated and authorized to perform. The overall scope of practice for the profession sets the outer limits of practice for all practitioners. The actual scope of practice of individual practitioners is influenced by the settings in which they practice, the requirements of the employer and the needs of their patients or clients. Although it can be difficult to define precisely, scope of practice is important because it is the base from which governing bodies prepare standards of practice, educational institutions prepare curricula, and employers prepare job descriptions. (p. 21)

From a legal standpoint, the scope of practice of a profession defines the limits of the tasks and roles that can be performed by a family physician or other health-care provider. From a practical point of view, the actual scope of practice of any individual provider can be influenced by many different factors, including legislation and regulations, traditional practices, education and training, geography or situational context (e.g., patient needs, availability of other providers and/or equipment and technology, workforce requirements, etc.), areas of interest, employers and more. Scopes of practice at both an individual level, and at the level of a given profession, change over time in response to these factors (Kam, 2018; Nelson et al., 2014).

Having all providers working to full scope of practice (i.e., the full range of skills a provider is trained and authorized to perform) is sometimes considered the ideal in health care. However, Nelson et al. (2014) note that the term “optimal scope” is preferable. The optimal scope for each type of provider may also vary in different locations and situations, particularly in the context of team-based care where the optimal scope for one provider may be heavily influenced by the other available health-care providers and their competencies and scopes of practice.

It is also important to understand how actual and optimal scopes of practice relate to models of care (how health services are organized and delivered), and how each influences the other. As illustrated in Figure 1, scope of practice is influenced by models of care, including how health care is organized. Changing scopes of practice can influence how models of care are structured, and which providers are best suited to which roles and tasks within a given model (Nelson et al., 2014). It is therefore critical to have a strong understanding of how these two elements interact in a given context.

Figure 1: Relationship between Models of Care and Scopes of Practice*



*Reproduced from Nelson et al. (2014), Figure 2, page 23.

The Value and Role of Family Physicians

Overview

A key document that articulates the role of family physicians in the health-care system is the Family Medicine Professional Profile developed by the CFPC, which was highlighted as an important reference by some key informants interviewed for this environmental scan. The profile outlines the responsibilities, work settings, special features and contributions, and the required skills and training for family physicians in Canada. It identifies four key responsibilities of family physicians: comprehensive medical care for all people, ages, life stages and presentations; leadership; advocacy; and scholarship (quality improvement, teaching, research) (College of Family Physicians of Canada, 2017b).

The CFPC notes that:

Working together, family physicians provide a system of accessible and high quality first contact, comprehensive and continuity-based health care. Despite diverse regional practice needs and patterns, each family physician is oriented towards this collective mandate within their community. Individually they take professional responsibility for the over-arching and pro-active medical care of patients, ensuring follow-up and facilitating transitions of care and/or referrals when required. More than a series of tasks, it is through relational continuity and a commitment to a broad scope of practice that the complexity of care is meaningfully addressed. The care provided by family physicians improves the overall health of the population. (College of Family Physicians of Canada, 2017b, p. 1)

The Royal College of Physicians and Surgeons of Canada (RCPSC) has developed a framework for physician competency and training that can also shed light on the key competencies of family physicians. The framework, known as CanMEDS, is the most widely accepted and applied physician competency framework in the world (Royal College of Physicians and Surgeons of Canada, 2018). This framework has also been adapted specifically for family medicine: CanMEDS Family Medicine Competency Framework (CanMEDS-FM). CanMEDS-FM defines and describes family physician competencies in seven different roles, similar to those outlined in the general CanMEDS framework (College of Family Physicians of Canada, 2017a):

- Family medicine expert (medical expert in the general framework)
- Communicator
- Collaborator
- Leader
- Health advocate

- Scholar
- Professional

Many aspects of a family physician’s role, skills and expertise that were identified by key informants were similar to those included in these key documents (CanMEDS framework and Family Medicine Professional Profile). The following sections describe the skills and expertise family physicians bring to Nova Scotians, the key roles that they play in the health system, and other areas where family physicians provide value.

Family Physician Skills and Expertise

Each type of provider working in primary health care has specific training, skills and expertise that they bring to patient care. Key informants identified several unique skills and expertise that family physicians have that other health-care providers may or may not have to the same extent, including the depth of their medical knowledge and ability to diagnose; their comprehensive scope of practice; and their long-term knowledge of patients and their families.

Depth of Medical Knowledge to Support Diagnosis, Triage of Patient Needs/ Health Concerns, and Management of Complex Patients

*The CFPC Family Medicine Profile notes that “family physicians use **holistic, integrative reasoning** to reach a patient-centred diagnosis and treatment plan with particular expertise in multi-morbidity and chronic illness. They see patients with undifferentiated concerns, early during the natural course of illness and **think creatively to resolve complex and atypical situations.**” (College of Family Physicians of Canada, 2017b, p. 2)*

Consistently identified by key informants as a strength of family physicians is their ability to assess patients, establish a differential diagnosis and develop an appropriate treatment plan. Key informants

Family physicians spend more time in training all the way through, including surgical rotations, medical rotations, etc., so see more things in greater depth. This helps them develop a plan for diagnosis and resolving issues.

noted that the extensive training and education a family physician undergoes is focused on developing the depth of medical knowledge needed to effectively assess and diagnose patients. In their training, family physicians develop a strong scientific understanding of medicine (e.g., including biology, physiology, anatomy, pharmacology, etc.), address other behavioural and

socio-economic subjects, and complete many clinical hours in which they are exposed to a wide range of clinical situations and pathology. This educational process gives them a core foundation when they start their careers as family physicians and a good understanding of the various specialties they may interact with on behalf of their patients. This enables them to effectively develop differential diagnoses based on patient presentation and establish treatment plans (Beaulieu-Volk, 2015) (Anderson, 2013), and also to effectively manage patients who have complex medical needs (Collège des médecins du Québec, 2017). These abilities make family physicians essential to effective comprehensive patient care and are central

to the Family medicine role in the CanMEDS-FM framework (College of Family Physicians of Canada, 2017a).

One of the competencies identified in the CanMEDS-FM framework is the fact that family physicians are problem-solvers who are able to think critically to try and find solutions for the health-care needs of patients (College of Family Physicians of Canada, 2017a). A few key informants noted that family physicians are trained to approach the medical decision-making process differently than other providers. Specifically, they are comfortable with uncertainty, working with incomplete information and taking calculated risks when required. Family physicians are skilled at integrating information about the patient from other sources (e.g., testing, specialists, community resources, etc.) and interpreting the information to and with patients to facilitate shared care-planning in the context of the individual.

Family physicians are key to integrating and problem-solving multiple complex issues. They help determine when a patient needs treatment and when they do not. They figure out advice from multiple specialties that sometimes conflicts. They are problem-solvers.

Comprehensive Scope of Practice

College of Family Physicians of Canada (2017b) Key Family Physician Responsibility: Comprehensive medical care for all people, ages, life stages and presentations. This care includes all clinical domains both acute and chronic, and from prevention to a palliative approach. Family physicians work across care settings and regulatory environments including: Primary Care, Emergency Care, Home and Long-Term Care, Hospital Care, Maternal and Newborn Care.

Some key informants highlighted a comprehensive scope of practice as a key feature of family physicians' roles. These key informants spoke of the comprehensive care family physicians provide for people from birth to death and everything in between.

Family physicians are medical professionals, counsellors, priests, financial advisors, and know little pieces of everyone else's scope of practice.... They help bring people into the world and leave the world in the best and most dignified manner and [take care of] everything in between – babies, chronic illnesses, helping solve problems and more.

Family physicians are generalists who can work across a range of care settings (office-based care, long-term care facilities, hospitals, etc.) and be involved in care at multiple levels (e.g., advanced procedures, surgical assisting, etc.). While each individual family physician may not work in all of these areas, as a profession, family physicians have the broadest and most comprehensive scope of practice. This makes them a valuable and unique resource in

communities as they can adapt and respond to the specific needs in a given community (Collège des médecins du Québec, 2017). As the CFPC notes, "Family physicians are a resource to their practices and communities as highly skilled generalists, working effectively in diverse conditions, complexity and uncertainty. They manage a broad range of medical presentations and conditions, flexibly adapting their skills in response to local resources and care needs" (College of Family Physicians of Canada, 2017b, p. 2). This generalist and comprehensive approach of family physicians is also described in the Family Medicine Expert competency in the CanMEDS-FM framework (2017a).

Long-term Knowledge of Patients and Their Families

The CFPC Family Medicine Profile notes that “**Relationships are central** to the care provided. Family physicians are committed to the person; getting to know them and what matters in the context of their life and family and this informs the goals of care and the approach taken. **They form therapeutic bonds based on compassion and personal knowledge accrued over time**, offering trusted counsel, advocacy and accompaniment. It is within these relationships and their unfolding narratives that illness and suffering is recognized, understood, and mitigated.” (College of Family Physicians of Canada, 2017b, p. 2)

A commitment to high-quality, relationship-centred care is one of the competencies outlined in the CanMEDS-FM framework (College of Family Physicians of Canada, 2017a). Family physicians build on this relationship to provide comprehensive care and promote patient well-being (Collège des médecins du Québec, 2017; Wartman, 2017). Some key informants identified the long-term knowledge that family physicians have developed about patients and their families through an ongoing patient-provider relationship as a key feature of family physician care (though other providers may also have long-term relationships with patients). Research has shown that patients with access to care from the same physician over the years have fewer hospitalizations and better health outcomes, based in part on the relationship and trust that patients and their family physician have established over time (College of Family Physicians of Canada, 2011).

A key strength of family physicians is having relationships with patient and family. They know them long-term, in an ongoing relationship, not just episodic care.

Family Physician Roles

Family physicians play several critical roles in supporting the health and well-being of Nova Scotians. These include coordinating patient care; advocating on behalf of patients and community needs; providing leadership; and teaching and scholarship.

Coordinating Patient Care

The CFPC Family Medicine Profile notes that “Family physicians are the **drivers of cohesion and continuity** in the health care system. They work collaboratively with patients and practice colleagues to **coordinate, and integrate care with other health care providers**. Continuity occurs within episodes of care and over time and encompasses dimensions of interpersonal relationships, maintenance of medical records and the organized flow of patient information including unique considerations in support of personalized and compassionate care.” (College of Family Physicians of Canada, 2017b, p. 2)

In many cases, the family physician is the patient's first point of contact with the health system. Family physicians provide patients with continuity of care and can assist patients with advocating for themselves with other health-care providers or other services outside of health care, and supporting patient self-management (Lam, 2016) (Phillips et al., 2014). Some key informants spoke about the essential role that family physicians play in coordinating patient care. This is especially critical for patients with more complex needs who may also be receiving care from multiple specialists, as family physicians have a strong ability to understand the interplay between multiple health conditions. For patients with complex medical needs who have multiple specialists involved in their care, a few key informants discussed the importance of family physicians leading the care team to ensure effective management of all conditions.

Family physicians pull together and integrate all the various pieces in a patient's care...they are the quarterback, they coordinate and orchestrate.

Advocacy

College of Family Physicians of Canada (2017b) Key Family Physician Responsibility: Advocacy for access to culturally safe, affordable, and high-quality comprehensive health care along with the social conditions that promote health. This requires outreach and engagement, working with community partners including those experiencing hardship and/or barriers to care.

As noted above, family physicians play a critical role in advocating for their patients, helping them to access the services and support they need to effectively manage their health. Family physicians also

Family physicians are well placed to understand the determinants of health in a community...and have a prime position to observe community needs such as food scarcity, income issues, etc.

support community advocacy working with citizens to understand and respond to community health needs. A family physician in general practice works with many people in a community and has an opportunity to gain insight into the strengths, challenges, and common health concerns affecting the population. Family

physicians can then play a role, in partnership with others, in identifying and implementing solutions to these issues (Canadian Medical Association, n.d.). Family physicians also play a vital role in advocating for an effective and efficient health-care system that supports safe, high-quality patient care.

Providing Leadership

College of Family Physicians of Canada (2017b) Key Family Physician Responsibility: Leadership at all levels for accessible, high quality, and comprehensive first contact and continuity-based health care that responds to local conditions; and for research that advances an understanding of this care.

Providing leadership is an important aspect of the family physician role discussed in the literature (Anderson, 2013) (Phillips et al., 2014) and also by some key informants. Leadership is one of the seven key roles of family physicians in the CanMEDS-FM framework, and it involves providing leadership at the practice, system and community levels (College of Family Physicians of Canada, 2017a). The Canadian

Medical Association (CMA) notes that “physicians are well-positioned to assume leadership positions within the health-care system. They have a unique expertise and experience with both the individual care of patients, as well as with the system as a whole” (Canadian Medical Association, n.d., p. 12). It is also critical to involve family physicians in the process of making decisions and setting policies that affect primary health care and the health system as a whole (Canadian Medical Association, n.d.). Family physicians can provide important insight and leadership into the process of health system improvement (Saskatchewan Medical Association, 2016). It has been shown that organizations that effectively engage physicians in health system design, change processes and leadership development opportunities are more likely to experience improved outcomes (Denis et al., 2013).

Teaching and Scholarship

College of Family Physicians of Canada (2017b) Key Family Physician Responsibility: Scholarship (Teaching/QI/Research) as reflected in practice-based quality improvement activities, an evidence-informed approach to care, and as teachers and mentors. Family physicians advance the knowledge of the discipline through a continuum of research activities.

The literature notes that family physicians have an important role to play in training new family physicians and advancing the knowledge base that supports primary health care, which was also discussed by some key informants. Family physicians act as role models and mentors to medical students and residents as well as students from other health professions (e.g., NPs, family practice nurses or FPNS, etc.). It was noted that family physicians who are working to increase research and education in family medicine should be viewed as academic physicians, similar to other specialties. A few key informants also noted that there is evidence to support that research about how best to identify and manage issues in primary health care can only be studied in a primary health care setting. For example, the contextual integration of medicine and person in the family and community over a lifetime can only be done in primary health care, thus research about how best to do this can only be done in this setting.

Other Areas where Family Physicians Provide Value

In addition to the skills and expertise of family physicians, and the different roles they play in patient care and in the health system more broadly, several other areas in which family physicians can provide value were also identified, each mentioned by a few key informants:

- Care delivered by family physicians represents an efficient use of resources. A few key informants indicated that family physicians may order fewer referrals and diagnostic tests than other providers.
- Having a family physician in a community can provide economic value to the community. Access to a health-care provider may be a key consideration for people thinking of moving to the community, so a family physician presence could help to draw new residents. In addition, family physicians can also be small employers, providing employment opportunities in a community.

- There is generally a high level of trust in family physicians among both patients and other health-care providers (e.g., specialists). Other health-care providers who are newer or have taken on new/expanded scopes of practice may be less familiar to the public/other providers and therefore levels of trust in their abilities may be lower initially.

Trends Affecting the Role of the Family Physician in Nova Scotia

The role of the family physician in Nova Scotia is affected by many trends and changes currently underway. Some of these are happening across the health system more broadly (e.g., access to care, changes to how care is organized), some are related to changing interests and demographics among family physicians themselves, and still others due to changes in patient needs and expectations.

How Health Care is Organized

The structure and organization of the health-care system influences family physicians in Nova Scotia. Many key informants identified aspects of the health system that affect family physicians, including an increasing focus on collaborative and team-based care; changes in the scopes of practice of non-physician providers, and various other increased requirements or demands for family physicians.

Increasing Focus on Collaborative/Team-based Care

There is broad agreement that collaboration between health professionals can have many positive outcomes, such as improving coordination of care, enhancing patient health and satisfaction, and improving the work environment for health-care providers (McInnes, Peters, Bonney, & Halcomb, 2017). Primary health care providers are increasingly working together to ensure quality, safe and appropriate care and collaborative teams are becoming more prominent within Nova Scotia's health-care system, across Canada, and around the world (Freund et al., 2015; Wartman, 2017; Xue, Goodwin, Adhikari, Raji, & Kuo, 2017).

Family practice is no longer an individual sport. This is part of the problem and also part of the solution.

Some key informants noted that this increased focus on developing and delivering collaborative care affects the role of family physicians. As discussed above, new models of care may require family physicians to practice in different ways, learn new skills and/or focus on different tasks. Dahrouge et al. (2014) point out that even when providers have scopes of practice with significant overlap, there has been little guidance on how the various professionals involved in team-based care should divide tasks or work together. This can lead to confusion or less than optimal work allocation within teams. Also, while the NSHA has identified family physicians as key providers in family practice teams, the health authority has not clearly indicated that every patient should have a family physician as their most responsible

provider (MRP).³ A few key informants indicated that this has led to confusion about roles and responsibilities of each provider on a team. This confusion, coupled with lack of understanding of roles, has the potential to negatively impact collaboration – a key pillar of Nova Scotia’s evolving health-care system.

Changes in the Roles and Scope of Non-Physician Providers

As part of efforts to improve the health system, in particular to address challenges with access to care or specific populations with high needs, new health care roles have been developed or implemented (e.g., PAs, NPs) and other roles have changed or expanded (Nelson et al., 2014). In some cases, providers other than family physicians have taken on tasks that previously only family physicians performed (e.g., pharmacists, NPs, FPNs, etc.). Changes to scope of practice can be achieved in various ways, including task-shifting and delegation of tasks (Nelson et al., 2014). Some key informants described this as a key trend affecting family physicians in Nova Scotia. The changing scope and tasks of other health-care providers can affect the role of family physicians by affecting which patients access a family physician and for what type of care and services.

Changes in the Roles and Scope of Family Physicians

Some key informants identified ways in which changing requirements and community and health-system needs have influenced family physician tasks and workload, including task-shifting from specialists, increases in community care and documentation requirements:

- A few key informants also indicated that family physicians are being asked to take on more tasks that were performed by specialists in the past. This could be a result of long wait times for specialist care (i.e., the family physician has to manage the patient while they are on a waiting list). It could also be due to new tasks family physicians are being asked to perform, such as following up on bloodwork for specialists.
- Across the health system, more care is moving into community settings. For example, older individuals are living in their homes longer, and patients are leaving the hospital earlier after major procedures. A few key informants noted that while this is generally a positive thing for patients, it increases the demand on primary health care providers to support these patients and can also be challenging in terms of ensuring that continuity of care for patients is maintained. It was also noted that some family physicians are moving into specific practice areas (e.g., mental health, sexual health, newcomer health, hospitalist medicine, palliative care, care of the elderly, etc.) to help address community and patient needs. The DNS report on primary care in Nova Scotia argues that these roles are appropriate for family physicians, but that the right supports need to be in place to enable family physicians to provide more complex care (Doctors Nova Scotia, 2017a).

Many doctors are overwhelmed by paperwork and administration.

³ While the CFPC PMH model specifies that the MRP should be a family physician, the NSHA health home model does not indicate the specific type of care provider who should fill this role.

- A few key informants noted that the ever-increasing requirements for documentation (e.g., insurance forms, medical letters, etc.) place a significant burden on family physicians and are an activity for which they do not receive any financial compensation. One key informant estimated that up to 30% of family physician time was spent on documentation.

Accessibility of Health Care

Some key informants identified challenges in the accessibility of care as a key factor influencing the role of family physicians. Many Nova Scotians are currently having difficulty accessing primary health care. As of Sept. 1, 2018, almost 57,000 Nova Scotians had placed their names on the NSHA’s “Need a Family

The current crisis in access means it is time for family physicians to adapt their scope to help improve access.

Practice” registry and had not yet been placed (Nova Scotia Health Authority, 2018a). Given that in 2016 Statistics Canada noted that only 723,000 (of 948,000) Nova Scotians aged 12 and over report that they have a health-care provider they regularly see or talk to when they need normal care or advice for their health (Statistics Canada, 2018), it is likely that the “Need a Family Practice” registry underestimates the need for primary health care providers in Nova Scotia. Even those patients who do

have a family physician may not be able to access timely appointments to address more acute health needs. The provincial government has identified a need to recruit 512 FTE family physicians over the next 10 years, both to replace departing family physicians and to respond to increased patient needs (Doctors Nova Scotia, 2017a). However, some key informants noted that recruitment of new family physicians is also a challenge.

Challenges with access to health care across the system can affect family physicians in various ways:

- It can create stress and burnout as family physicians work longer hours to try to meet the needs of an increasing patient load. A recent DNS report that presented the results of a survey of Nova Scotia physicians found that the physician workforce is fragile, and many physicians reported feeling overextended, disengaged, ineffective or fully burnt out (Doctors Nova Scotia, 2017b). This, in turn, can impact physician recruitment as new family physicians may be discouraged from practising here without better work-life balance. The NSHA website indicates there are currently 62 primary care vacancies in the province (Nova Scotia Health Authority, 2018b).
- In order to meet the needs of patients for accessible primary health care, other providers are being added to primary health care teams in some communities. This may create confusion among patients and health-care providers in terms of roles and responsibilities and coordination of care, and as previously noted, become a barrier to effective collaboration.
- Challenges with access to specialist care or wait times for diagnostic procedures can place a greater burden on family physicians to either complete tasks that specialists previously completed themselves, or to offer care to increasingly complex patients while they wait for access to a diagnostic test or specialist. Access to specialists may also have an impact on family physician scope of practice; one Canadian study found a

There is a lack of access to diagnostics...patients are waiting a year or more for tests...these patients are being managed in the primary health care environment as they wait.

positive correlation between broader scope of practice and the family physician to specialist ratio (Wong & Stewart, 2010).

- Lack of access to a primary health care provider creates a situation where patients may access care in other places (e.g., walk-in clinics, emergency departments, pharmacy, etc.). This reduces continuity and causes fragmentation of care. It can also lead to more “simple” issues and health needs (e.g., an ear infection, a flu shot, a sore throat) being addressed in other settings without integration into the overall health record and care plan. This increases the relative load for family physicians who are appropriately caring for more complex patients without appropriate remuneration.

Payment Models

Some key informants highlighted the existing models of payment for family physicians as a key influencer of family physician roles and scope of practice. Key informants noted that the fee-for-service (FFS) model rewards family physicians for specific behaviour and disincentivizes other behaviour. For example, family physicians must see a certain number of patients per hour/day/week/etc. in order to earn enough revenue to cover their overhead costs and earn an appropriate income. The current FFS

Family physicians may be prevented from paying attention to what they are skilled at because they need to do minor things in order to ensure adequate remuneration.

model in Nova Scotia does not appropriately support time for participating in collaborative care, providing input into health system issues (e.g., to provide input on health system needs and priorities, assist with physician recruitment, etc.), or providing the time-intensive complex care that some patients with multi-morbidity may require (Doctors Nova Scotia, 2017a). Some key informants indicated FFS is not an appropriate business model

because it does not adequately compensate family physicians as they appropriately focus their care on patients with complex conditions that take more time to address (i.e., FFS incents family physicians to see more patients with less complex care needs in a day). Although all family physicians want to provide the best care possible for their patients, financial structures and incentives do influence behaviour. Family physicians also earn substantially less than many other specialist physicians, which can be a disincentive for new physicians to pursue family practice and may also contribute to family physicians feeling undervalued.

Family Physician Interests, Needs and Demographics

Like all professionals, an individual family physician's role can be affected by changes in their interests, needs and priorities over time. These changes, as well as the demographics of the individuals who make up Nova Scotia's family physicians, can have an impact on the overall scope and role of family physicians more broadly across the province. A few key informants described how the scope of practice of family physicians has narrowed over time, and this has been documented in the literature as well (Coutinho, Cochrane, Stelter, Phillips, & Peterson, 2015; Doctors Nova Scotia, 2017b; Kam, 2018; Phillips et al., 2014; Wong & Stewart, 2010).

Key informants indicated that family physicians, particularly recent graduates, do not seem to be as willing to take on a comprehensive, full-scope primary health care practice, and described several factors that may contribute to this trend:

- The stress and burnout family physicians experience (as described above) is a deterrent to pursuing a comprehensive scope when this creates an unsustainable workload. Newer family physicians, like younger employees in many sectors, want work-life balance and are not willing to give up all of their time to their work (Canadian Medical Association, n.d.).
- Family physicians, especially those who are younger, seem to be less interested in a full-time office-based practice and more interested in having a mix of roles and working only part-time in office-based care, leaving time for other activities (e.g., specializing in other clinical areas, research, etc.) (Collège des médecins du Québec, 2017). A few key informants also mentioned that there appears to be more interest among newer family physicians in working in teams, and in more supported situations (e.g., team-based care where there may be a practice manager to handle administrative duties) versus in an independent, solo practice.
- In general, future practice will need to adapt to create a sustainable lifestyle that includes appropriate management of complex patients, sharing responsibility for comprehensive care and ensuring a manageable workload for family physicians.
- Remuneration models are such that specializing in specific areas (e.g., emergency medicine) is more financially rewarding than a full-scope primary health care practice. With the elimination of the Comprehensive Care Incentive Program in the 2015 Master Agreement, there are fewer incentives to support comprehensive scope of care (Doctors Nova Scotia, 2017b).

Thirty years ago, all doctors had their own office and did everything, but now in primary health care there are many more options. Family physicians can do emergency medicine, geriatric care, work in the hospital, etc.

In addition, the family physician population in Nova Scotia is aging. As more physicians retire, the needs and priorities of younger family physicians will become increasingly relevant for physician recruitment and retention. The age demographic of Nova Scotia's family physicians also has the potential to worsen access issues when a vacancy left by a retiring family physician cannot easily be filled.

Technology

Access to a high-quality information system that provides family physicians and other health-care providers with the means to communicate with one another and share information relevant to patient care could help to support patient care, collaboration, and evaluation and quality improvement. The increasing use of technology has an impact on all provider roles, including family physicians, as the technology for providing health care changes and patients have even greater access to health information, giving them more control and ownership over their own care (Wartman, 2017). Some key informants highlighted the critical role that technology can play in supporting primary health care and enhancing collaboration.

However, key informants also identified challenges with current technology. Although Nova Scotia family physician use of EMRs is in line with other provinces (80% adoption) and all EMRs receive the benefits of “e-Results” from the NSHA and IWK Health Centre laboratories and diagnostic imaging services, there is a need to enable greater integration to allow physicians to access their patients’ data across the health-care system more easily. The provincial government is currently supporting the implementation of the “One Patient One Record” solution, which will integrate clinical systems within hospital settings and subsequently provide the cross-system integration and access family physicians require. However, some key informants discussed challenges with implementation, including the slow pace and time-consuming process.

Technologies commonly in use today (telephone, email) also impact family physician roles and scope, and collaboration between providers. These technologies could be used by family physicians to provide care to patients more efficiently, reduce patient travel requirements, enhance coordination of care, and support better chronic disease management (Canada Health Infoway, 2011). In the past, this non-face-to-face care has not been compensated in the FFS model. More recently, fees were introduced to compensate for care provided by telephone, but the billing rules associated with those fees have been a significant disincentive to the use of telephone-based care. The Nova Scotia Department of Health and Wellness (DHW) has recently introduced additional incentives to support family physicians’ use of technology, including stipends to support non-face-to-face care and use of an EMR (Doctors Nova Scotia, 2018a). However, while these changes do support virtual care, DNS has noted some challenges with these incentives in terms of eligibility requirements and limited functionality in MyHealthNS (Doctors Nova Scotia, 2017b).

Platforms such as MyHealthNS are not being used effectively...overall, how do we support primary health care practices to use technology effectively to support patient care?

Emerging technologies will also increase opportunities for family physicians to provide care in new and different ways. The CMA’s Health Summit backgrounder on technology (Canadian Medical Association, 2018), states that internationally, three major developments hold the potential to revolutionize the delivery of medicine and health care in Canada:

- virtual care (the use of electronic means to reduce or replace face-to-face interaction);

- big health data (including artificial intelligence/machine learning, and precision medicine); and
- other technology developments (including robotics, 3D printing, and health apps).

As these technologies move through their maturity cycles, all providers will be impacted in their role in providing patient care. It will be critical that tools/supports are provided to help family physicians and providers incorporate such technologies into their practice to support patient care.

Patient Needs and Expectations

The family physician role has expanded from the model of 30 years ago that focused on providing episodic care to address more acute needs. What is needed now is a much more holistic approach to caring for a sicker population that will not only treat and manage illness, but also address prevention and support the patient in self-management (Lam, 2016).

Some key informants spoke about changes in both the needs and expectations of patients as factors that influence the family physician's role. The population of Nova Scotia is aging, and there are more people who have multiple chronic conditions. The complexity of the patients that family physicians care for has increased with the growing burden of

Family physicians are being asked to provide care for patients who are sicker than they ever have been and take on new roles such as caring for those with cancer, dementia or palliative care needs.

disease, and with the shift in care from hospital or other institutional setting to home and the primary health care provider. The health system and family physicians will need to manage the size of a practice population that increasingly includes more complex patients requiring additional time and a multi-professional approach. Modifying expectations regarding practice size in the light of an aging society while maintaining access is central to future successful family practice.

In addition, patients are becoming more educated about their own health and engaged in their own care. Health information is much more readily available to patients, changing the traditional doctor-patient paradigm (Wartman, 2017). Many patients no longer simply want to do what their doctor tells them; they want to better understand their health care choices and share in the decision-making about their care.

Education and Training

The knowledge base required to be a family physician is changing. A few key informants noted that

In the past, family physicians had a much broader scope and did their best in different settings. Now every setting has its own expectations, certifications and requirements.

more knowledge and expertise is required in more areas as medical knowledge grows over time, and that there are increasing expectations for family physicians to have certifications or specific knowledge to work in different areas (e.g., emergency medicine, providing methadone, etc.). This can make it more challenging for family physicians to function as

generalists, and may influence family physicians to focus more time in the specific areas where they have training or certification, rather than having a more comprehensive scope of practice.

Government Role and Context

Some key informants highlighted the critical role that Nova Scotia's provincial government and the NSHA play in primary health care in the province, and the influence they have on the family physician role. The government and the NSHA set policies and directions for care, and control payment models and other financial incentives. Family physicians are affected by the current environment of fiscal restraint, and also by the bureaucracy and administrative requirements within the government and the NSHA that may affect how quickly they can respond to changing needs and circumstances. A few key informants noted that the transition from the District Health Authorities to the NSHA has caused some issues in the relationships between the health authority and physicians (e.g., around roles and expectations related to physician recruitment). Recent DNS reports have described a lack of physician engagement by both the NSHA and the DHW as contributing to low morale among family physicians and recommended that family physicians be more meaningfully engaged in helping to transform the primary health care system.

Decision-makers are looking at value for money across the [health] system... this affects family physicians as well.

Working Collaboratively with Other Providers

Working in collaboration with other providers is increasingly common in Nova Scotia's primary health care system, as it is in other health systems across Canada and around the world. Key informants were asked to identify potential challenges to and risks of collaboration, as well as the supports and resources that are needed to support effective collaboration.

Challenges and Potential Risks

Although collaboration is now considered part of best practice in primary health care, the process of transitioning from a system where family physicians work primarily individually to one in which most family physicians work in collaborative teams is not without challenges and risks. Key informants identified some of these challenges and risks, including barriers to communication, such as poor IT infrastructure to support communication; payment models that do not support collaboration; different or conflicting approaches to patient care; a lack of understanding and trust between different providers; lack of a coordinated approach to changing the scopes of practice of providers; and uncertainty around liability.

Barriers to Communication

Some key informants identified barriers to communication as one of the main challenges to

There are barriers that interfere with [collaboration], mainly around access to information...this difference in access to information makes it difficult to provide care, without complete information.

collaboration. This was particularly noted in relation to a lack of IT infrastructure to support communication between providers, particularly those that are not located in the same physical space. While efforts are underway to enhance this IT capacity (e.g., MyHealthNS, SHARE), barriers still exist. This means that providers are sometimes operating with incomplete information (e.g.,

if a patient receives a flu shot from a pharmacist or a walk-in clinic, this does not necessarily get communicated back to the family physician).

Payment Models

A common finding in the literature is that payment models do not support collaboration between providers, particularly the FFS model, and this was also discussed by a few key informants (Anderson, 2013; Beaulieu-Volk, 2015; Freund et al., 2015; McInnes, Peters, Bonney, Halcomb, & Lam, 2016; Nelson et al., 2014; Schadewaldt, McInnes, Hiller, & Gardner, 2013). Fee-for-service models do not provide family physicians with compensation for the time they spend collaborating with others. Additionally,

when a payment is tied to a specific provider performing a specific task, this creates financial barriers to involving other types of providers in patient care. The Saskatchewan Medical Association notes that, “recent analyses and policy discussions have almost universally concluded that on balance, FFS on its own is not, and cannot be made to be, compatible with contemporary health and health system goals” (Saskatchewan Medical Association, 2016, p. 6). Differences in payment models among providers practising together (e.g., some physicians on FFS and some on an alternative payment plan, or APP) can also contribute to different workflows and may create resentment among team members (e.g., some providers can take vacation time and others may feel they cannot).

Different Approaches to Patient Care

The literature has found that different approaches to or philosophies about patient care can be a barrier to bringing different providers together, which was noted by a few key informants (Schadewaldt et al., 2013). There may be ideological differences, differences in practice style or differences in how providers communicate with patients. While a strong team can identify and work through these differences, if they are not addressed they can lead to a lack of team cohesion and confusion among both providers and patients. For example, a patient may be given conflicting information by two different health-care providers. This highlights the importance of specific, funded support for team development.

Lack of Trust and Understanding

A few key informants noted that a lack of trust between different providers is a barrier to collaboration. In some cases, this may be due to poor understanding of the roles and responsibilities of other providers, or their training or scope of practice. A study of interventions related to scopes of practice in health care found that a lack of respect and understanding was the most commonly reported barrier associated with expanded or new scopes of practice (Nelson et al., 2014). When providers do not understand or trust the roles or motivations of other providers, this can potentially harm collaboration and lead to territorialism or job protectionism.

Lack of Coordinated Approach to Changes in Scope

A few key informants noted that changing health-care practices is not a straightforward process, which was also supported in the literature. As a recent report on health workforce oversight in Ontario points out, each health profession is regulated separately by a college and often by separate legislation as well, which can lead to an uncoordinated and siloed approach to managing regulated health professions (Waddell, Moat, Lavis, & McMaster Health Forum, 2017). There is no single regulator managing the increasing team-based care that is part of primary health care, which is a risk to collaboration and can lead to a competitive environment among providers with overlapping scopes of practice.

When you have multiple professions prescribing and ordering tests...there is no one coordinating this activity, and there is a lack of oversight.

If each profession makes scope of practice changes in isolation from the other professions, this can have negative consequences across the health system. For example, it may result in fragmented and poorly coordinated patient care (Lam, 2016); it may lead to confusion and uncertainty among patients and health-care providers (Mastracci et al., 2014; Niezen & Mathijssen, 2014); it may have negative impacts on the income or workload of some providers; it can result in

established professionals seeking to maintain and protect their professional boundaries (Nelson et al., 2014; Niezen & Mathijssen, 2014). All of these issues can also create barriers for collaboration between different providers, which was noted by some key informants. These key informants spoke about the importance of various provider groups engaging each other when changes in legislation or standards are being made, to help ensure greater understanding about why changes are occurring and facilitate buy-in.

In addition, Imison, Castle-Clarke, and Watson (2016) found that without careful design of both health services and individual roles, changes to scopes of practice in the form of new and extended roles can actually increase the demand for service; create supplements rather than substitutions for existing services; increase costs; threaten the quality of care; and/or result in fragmented care. In order to successfully shift tasks from one provider to another, one profession has to be willing to give up the task, and the other profession has to have the skills/education and interest in performing the task (Freund et al., 2015). Ultimately, changes to scope of practice should only move forward if they will contribute to the triple aim goals of health-care improvement.

Unclear Liability

Unclear liability or concerns about liability were noted by a few key informants as a potential barrier to collaboration, and were also identified in the literature (Schadewaldt et al., 2013).

Supports for Effective Collaboration

Key informants identified a number of supports that are required for effective collaboration between family physicians and other providers, described in the table below. There is a large body of literature addressing collaboration in primary health care; although some references are included in the following section, an in-depth review of this literature was out of scope for this research.

Leadership and Support for Change

Some key informants identified leadership and support for change as a critical enabler to collaboration. This includes government leadership in setting policy and establishing supportive environments and structures (e.g., requirements, payment models, etc.); change management support; practice support such as a practice facilitator or dedicated team leader or coordinator (Nelson et al., 2014); and engagement of all team members in decision-making (Collège des médecins du Québec, 2017; Doctors

Nova Scotia, 2018b; Nelson et al., 2014). The perspectives on leadership models within teams varied – some expressed a preference for a family physician as the team leader, while others recommended a shared decision-making model.

Clear Roles and Responsibilities

Some key informants emphasized the importance of establishing clear roles and responsibilities within teams. Ensuring each team member has a good understanding of their own and others' competencies and responsibilities is also critical. This can help to facilitate the optimal organization of patient care (Canadian Medical Association, 2008; Collège des médecins du Québec, 2017; Doctors Nova Scotia, 2018b; Donald et al., 2017; Freund et al., 2015; Nelson et al., 2014; Schadewaldt et al., 2013; Stringer, Curran, & Asghari, 2013). A few key informants noted that teams should have flexibility in assigning roles and responsibilities across team members in response to team member skills and interests and community/patient needs and priorities.

Communication Mechanisms and Supports

Some key informants identified structures and processes that support communication within teams as a key enabler to collaboration. These could include regular meetings (e.g., daily huddles, weekly meetings) to discuss both patient concerns and team issues (Beaulieu-Volk, 2015; Doctors Nova Scotia, 2018b; Donald et al., 2017; Nelson et al., 2014; Schadewaldt et al., 2013), shared electronic records (Collège des médecins du Québec, 2017; Freund et al., 2015), and co-location in one physical space (Doctors Nova Scotia, 2018b; Schadewaldt et al., 2013). Key informants particularly highlighted having a strong IT infrastructure to support communication as critical (i.e., a common electronic health record that can be accessed by all providers) (Canadian Medical Association, 2008; Doctors of BC, 2015).

Supportive Payment Models

Some key informants noted that supportive payment models are needed to facilitate collaboration (Doctors Nova Scotia, 2018b). Payment models should provide appropriate compensation for the time required for collaboration and could include financial incentives for collaborative practice. They should also consider the tasks that family physicians are allocated on a team, and provide appropriate compensation for these tasks (e.g., in an FFS model, if family physicians are seeing more complex patients who need longer appointments, they should be remunerated appropriately for this). A few key informants mentioned that a blended payment model that supports collaboration and patient rostering should be implemented. This model is also recommended by DNS (Doctors Nova Scotia, 2017a).

Purposeful Approach to Building Teams

Some key informants said that when building teams, it was critical to have a purposeful approach that was well-planned and included appropriate supports. Simply locating people in one physical space is not sufficient to build a team. A strategy to develop a team should include elements such as identifying the right people to participate (from the perspective of both skill mix and personalities that mesh) (Beaulieu-Volk, 2015) and having proactive and explicit discussion about the roles and responsibilities of each

team member; ensuring that prospective/current team members have a positive attitude towards team-based care (Beaulieu-Volk, 2015; Schadewaldt et al., 2013); developing a shared vision, purpose and philosophy for the team (American Hospital Association's Physician Leadership Forum, n.d.; Collège des médecins du Québec, 2017; Doctors Nova Scotia, 2018b); training to develop teamwork-related knowledge and competencies (American Hospital Association's Physician Leadership Forum, n.d.; Nelson et al., 2014); building trust and respect between team members (Bardet, Vo, Bedouch, & Allenet, 2015; Canadian Medical Association, 2008; Doctors Nova Scotia, 2018b; Donald et al., 2017; Schadewaldt et al., 2013); and embedding team processes into organizational culture and activities (Nelson et al., 2014).

Patients Rostered to a Team

A few key informants noted the importance of having patients rostered to the whole team rather than to individual providers. This can help to ensure that the patient sees the team member who is most appropriate to meet their needs for each visit.

Data and Continuous Quality Improvement

A few key informants spoke about the need for access to data to support evaluation and quality improvement. Teams can use practice-level information to understand the patient population (e.g., demographics, utilization, common illnesses/diseases, risk, etc.), as well as to identify unmet patient needs and opportunities for enhancing collaboration. Teams can then use this information to inform team roles and responsibilities and can implement strategies to address any identified issues (Beaulieu-Volk, 2015; Nelson et al., 2014). Using an EMR that allows patient data to be extracted and analyzed is a critical support to this process.

Clear Liability

A few key informants identified having clear liability and an understanding of medico-legal risk as important to collaboration. The Canadian Medical Protective Association (CMPA) notes that a good understanding of accountabilities and scopes of practice among regulated health professions is key to understanding liability. The CMPA and the Canadian Medical Association (CMA) advocate that all health professionals have adequate and appropriate liability insurance (Canadian Medical Association, 2008; Canadian Medical Protective Association, 2007).

Conclusion

This report illustrates the critical role that family physicians play in Nova Scotia’s health-care system. They are highly educated health-care providers who excel at diagnosing and planning treatment for patients and managing patients who are medically complex. They deliver a comprehensive scope of services and have a generalist background, positioning them to be able to adapt to the needs and priorities of health care in a given community. They build long-term relationships with patients and use the insight gained through these relationships to help provide effective care and support the patient in improving their health. In addition to providing direct patient care, family physicians coordinate care for their patients; advocate on behalf of their patients and the health needs in their communities; act as leaders in teams, communities and the health system more broadly; and play an important role in teaching, advocacy, research and quality improvement.

The health system is changing in an effort to provide better care, better health outcomes and better value, and these changes have an impact on family physician roles and responsibilities. Family physicians know that change is needed to improve the system. As this change process occurs, key informants highlighted the following questions for consideration:

- How can family physicians provide leadership and contribute to the change process?
- How do health-care stakeholders best facilitate communication between different professions to understand fears around change and break down barriers?
- What are the best models for implementing team-based primary health care?
- How do health-care stakeholders best reflect and incorporate the patient perspective in these changes?
- If family physicians focus increasingly on diagnosing, planning treatment for and managing more complex patients, what changes are needed to support this transition?
- How can health-care stakeholders ensure that family physician quality of life and appropriate compensation are addressed in the changes that are made?
- What is the best way to ensure that the role of family physicians is understood and valued?

Going forward, it is clear that the role of the family physician continues to evolve and change. As we move further into the twenty-first century, technology and innovation will play an increasingly large role in health care and society as a whole. The traditional views of health care and provider roles and responsibilities are shifting and changing. Historically, health care has been based around concepts of clinical autonomy, assumptions of scarcity, volume as a measure of productivity, patient dependency on health-care providers, and specialist and disease-focused care. Health care is in the process of transitioning to a model that includes collaboration, value as a measure of productivity, encouraging patient autonomy and self-management, and generalist and person-focused approaches (Saskatchewan Medical Association, 2016). Family physicians are adapting to these new realities and may require new or different skills in the future, such as skills related to technological proficiency, teamwork and collaboration, communication, and understanding risk and biases (Nohr, 2016; Wartman, 2017). One author notes that “by making a determined and conscious effort to return to their historical roots,

physicians can excel at two traditional skills: (1) respecting the right of patients to make choices according to their values and understanding how these values impact care decisions; and (2) having real and tested abilities to provide the uniquely human services that patients need, most notably empathy and compassion” (Wartman, 2017, p. 10). It is critical that family physicians be engaged and involved partners in discussions about what the future of health care will look like in Nova Scotia, and the role of all physicians within the health system.

Appendix A: Methodology

Literature Review

A comprehensive review of the literature related to scope of practice for family physicians, including how their scope of practice is different from and can best complement those of other types of providers who work collaboratively with physicians (NPs, pharmacists, PAs, midwives) was conducted, including both academic/peer-reviewed and grey literature.

Academic Literature

To identify academic literature, the PubMed, CINAHL and Health Business Elite databases were searched for related English-language articles published in the last five years (2013–18). The search used appropriate terminology, alternative spellings and synonyms, Boolean operators and relevant syntax for the requirements of each database. The search strategy that was used is summarized as follows:

- Search ("Physicians, Family"[Mesh]) OR "General Practitioners"[Mesh]) OR "Physicians, Primary Care"[Mesh]) OR family physicians") OR "family physician") OR "family doctors") OR "family doctor") OR "family practitioners") OR "family practitioner") OR "general-practitioners") OR "general-practitioner") OR "physicians, primary care") OR "primary care physicians") OR "primary care physician") OR "family practice") OR "family practitioners") OR "family-practitioner")
- **AND** Search TI Role OR TI roles OR "scope-of-practice" OR TI SOP OR TI skill* OR TI "practice-parameters" OR TI "practice-parameter" OR TI "practice-parametre" OR TI "practice-parametres" OR TI "job-description" OR TI "job-descriptions" OR TI career* OR TI "terms-of-employment" OR TI "term-of-employment" OR TI "position-description" OR TI "position-description" OR TI contract* OR TI competen* OR TI task OR TI tasks OR TI abilities OR TI ability OR TI responsibil* OR TI career* OR TI boundar*
- **AND** Search TI "team-based" OR TI "multi-disciplinary" OR TI "multi-discipline" OR TI "multidiscipline" OR TI "multi-professional" OR TI "patient-care-team" OR TI "patient-care-teams" OR TI "patient-team" OR TI "patient-teams" OR TI "nurse-practitioner" OR TI "nurse-practitioners" OR TI "clinical nurse specialist" OR TI "clinical nurse specialists" OR TI "pharmacist*" OR TI "nurse" OR TI "nurses" OR TI physiotherapist* OR TI "physical therapist" OR TI "physical therapists" OR TI "physician-assistants" OR TI "physician-assistant" OR TI midwif* OR TI midwif* OR TI "practice setting" OR TI "practice settings" OR TI "independent practice" OR TI "independent practices" OR TI "independent-practise" OR "independent-practises" OR "solo practice" OR TI "solo practices" OR TI collaborat* OR TI interprofession* OR TI intraprofession* OR TI team OR TI teams OR TI interdisciplin* OR TI intradisciplin* OR TI multidisciplin* OR TI multiprofessional*

The searches yielded many results but were narrowed down by a skilled reference librarian to approximately 150 results. The titles and abstracts of these results were reviewed by the consultants for relevance. From these results, 50 articles were obtained in PDF and reviewed in further detail.

Grey Literature

Grey literature was identified through systematic searches of relevant government and institutional websites (e.g., physician associations, regulators, provincial governments, international organizations such as the American Medical Association, National Health Service in the U.K., etc.), as well as through general Google searches and a review of reference lists from other relevant articles/documents.

Key Informant Interviews

Interviews were conducted with 27 key informants from Nova Scotia and other jurisdictions to gather information related to scope of practice for family physicians, and to validate and get input on the information learned through the literature review. Potential key informants were identified by DNS, and those who participated in an interview are listed below. An interview guide was developed with the input of DNS to help ensure all areas of interest were addressed. A copy of the interview guide is available in Appendix B. Interviews were conducted primarily by telephone and lasted 30 to 45 minutes. Detailed notes were taken during each interview.

List of Key Informants

The key informants in the table below participated in interviews. Participants are listed alphabetically by last name.

Name	Role/Title	Organization (if applicable)
Mr. Owen Adams	Chief Policy Advisor	Canadian Medical Association
Dr. Maria Alexiadis	Department Head, Family Practice, Central Zone	Nova Scotia Health Authority
Dr. Greg Archibald	Head, Department of Family Medicine	Dalhousie University
Ms. Allison Bodnar	CEO	Pharmacy Association of Nova Scotia
Dr. Fred Burge	Professor, Department of Family Medicine Director, Primary Care Research Unit	Dalhousie University
Ms. Cathie Carroll	Executive Director	Nova Scotia College of Family Physicians
Dr. Natasha Deshwal	President Elect	Nova Scotia College of Family Physicians
Dr. David Gass		N/A
Dr. Rick Gibson	Senior Medical Director, Primary Health Care and Department of Family Medicine	Nova Scotia Health Authority
Dr. Janneke Gradstein	Medical Site Lead	Cumberland Regional Health Care Centre
Dr. Gus Grant	CEO & Registrar	College of Physician and Surgeons of Nova Scotia

Name	Role/Title	Organization (if applicable)
Ms. Deborah Hart	Executive Co-Chair	Nurse Practitioner Association of Nova Scotia
Dr. Lynne Harrigan	Vice-President, Medicine and Integrated Health Service (title at time of interview)	Nova Scotia Health Authority
Ms. Janet Hazelton	President	Nova Scotia Nurses Union
Dr. Tim Holland	President	Doctors Nova Scotia
Mr. Bruce Holmes	Executive Director	Nova Scotia Regulated Health Professions Network
Dr. Simon Jackson	Professor of Medicine and Cardiologist	Division of Cardiology, Department of Medicine, Dalhousie University QEII, Halifax Infirmary Site
Dr. Tammy Keough-Ryan	Attending Staff Nephrologist, Division of Nephrology	Nova Scotia Health Authority
Ms. Anne Marentette	Pharmacy Practice Manager	Nova Scotia College of Pharmacists
Dr. Ruth Martin-Meisner	Professor, School of Nursing	Dalhousie University
Dr. Lyle Mittelsteadt	Professional Affairs, Assistant Executive Director	Alberta Medical Association
Dr. David Petrie	Department Head	Emergency Medicine, Halifax Infirmary Department of Emergency Medicine, Dalhousie University
Dr. Crystal Todd	Department Head, Family Practice, Western Zone	Nova Scotia Health Authority
Ms. Michele Turner	Executive Co-Chair	Nurse Practitioner Association of Nova Scotia
Ms. Deborah Viccars	Director of Policy, Economics & Policy Analysis	Doctors of BC
Ms. Sohani Welcher	Project Manager, Provincial Registered Nurse Prescribing Strategy	Nova Scotia Health Authority and IWK Health Centre
Dr. Rod Wilson	Physician Advisor, Physician Services	Department of Health and Wellness

In addition, several key informants were invited to participate but declined or could not be reached:

- Ms. Mary Jo Monk, Senior Policy Analyst, Primary Health Care, Department of Health and Wellness
- Dr. Roop Conyers, Lead, Valley Family Medicine Residency Program
- Dr. Deanna Field, Lead, Truro Family Medicine Residency Program
- Dr. Tena Frizzle
- Dr. Jim MacKillop, Former Lead of Sydney Family Medicine Residency Program
- Ms. Cindy Cruickshank, Director of Workforce Planning, Department of Health and Wellness (Dr. Rod Wilson participated in an interview on behalf of the department)
- Ms. Sally Loring, Senior Director, Maternal and Child Health, Nova Scotia Health Authority (did not feel she could contribute meaningfully to the discussion)

- Ms. Sue Smith, CEO & Registrar, College of Registered Nurses of Nova Scotia (felt a response from the NP Association or the NSNU would be more appropriate)

Appendix B: Interview Guide

Key Informant Interview Guide Family Physician Scope of Practice Environmental Scan Doctors Nova Scotia

August 22, 2018

Introduction and Purpose

The delivery of health care in Canada, and in Nova Scotia, is changing rapidly as governments and health-care providers across the country work to try and make healthcare more efficient, effective, and accessible. Primary Health Care providers are working together to ensure quality, safe and appropriate care and collaborative teams are becoming more prominent within our healthcare system. Doctors Nova Scotia (DNS) has a key role to play in clarifying and defining family physicians' scope of practice in the evolving health-care system and working in collaboration with others in the health system to ensure scopes of practice for all providers support efficient, effective and safe delivery of health care.

We are therefore undertaking an environmental scan on family physician scope of practice to identify the scope of practice for family physicians in Nova Scotia, including how their scope of practice is different from and can best complement those of other types of providers who work collaboratively with physicians (e.g., nurse practitioners, pharmacists, physician assistants, midwives).

All key informants who participate in an interview will be listed by name in the Appendix of the report of the findings produced by Research Power Inc. (RPI). However, information gathered in the interviews will only be reported in aggregate across all interviews and will not be associated with you personally or your organization in the report. You may be referenced by name as the source for factual information that you provide (e.g., description of relevant regulatory information). The report prepared by RPI will be used by DNS to develop a report of the environmental scan findings, which will be made publicly available.

Do you have any questions?

Do you consent to participate in the interview?

Yes No

Questions

1. From your perspective, what are the key trends and changes in the health-care system that affect the role of family physicians in Nova Scotia? (*Prompt if required: e.g., growing use of technology, collaborative models of care, various funding models, providers working to full scope of practice*)

2. In your opinion, what is unique about the role, expertise, and/or skills of a family physician?

Sub-questions:

- Are there tasks or roles in primary health care that only a family physician can fulfil? Please describe.
3. What benefits or advantages does a family physician provide compared to other types of health-care providers who can meet primary health care needs (e.g., a nurse practitioner, a midwife, a pharmacist, etc.)? What about disadvantages?

Sub-questions (only asked to some key informants where relevant):

- In your opinion, what are the key differences between the scope of practice of a nurse practitioner and that of a family physician?
 - In your opinion, what are the key differences between the scope of practice of other providers (such as a pharmacist, a physician assistant, a midwife) and that of a family physician?
4. How can effective collaboration between family physicians and other providers be achieved? What supports and resources are needed?

Sub-questions:

- What are the challenges to effective collaboration between family physicians and other providers?
 - What is needed to ensure all providers are working to full scope to provide safe patient care?
5. Do you have any additional feedback you would like to share?

Thank you very much for your input.

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