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The Evolving Role of the Physician: Leading in Care, Leading in Health Care System Change

Executive Summary Position Statement & Backgrounder Combined Vision and Roadmap Report

May 2018

Executive Summary

The Evolving Role of the Physician was a three-year project to develop a vision of how the role of the physician should evolve so that physicians can best contribute to (1) high-quality patient-centred care at the front lines and (2) a sustainable and high-performing health care system. It was conducted by the Canadian Medical Forum (CMF), which brings together leaders of Canada's major national medical organizations to discuss major issues for physicians, their patients and the health care system. With this report, released in May 2018, the project comes to an end but inaugurates a 10-year action plan to overhaul key aspects of physicians' roles and the health care system.

As the first phases of this ambitious project, CMF asked Ipsos, a major international market research company, to survey stakeholders about the physician's role and how it is changing. The company conducted:

- Individual interviews with small samples of physician executives/leaders and practising physicians to lay the groundwork for further surveys
- A survey of physicians and other health care professionals
- Two virtual consultation sessions with health care system leaders/administrators
- A survey of a national representative sample of the public

Based on survey results, CMF developed a vision and roadmap for evolution of the physician's role and the health care system, under the following key elements of the vision.

Patient–physician relationship

Patient responses showed the value they place on their relationship with their physician. CMF members agreed that this trust-based relationship must be safeguarded as health care reforms progress. This principle informs the other elements of the vision.

Patients as partners in health care

Patients, physicians and other health care professionals responded to survey questions that patients should be “the most important member of the team.” The CMF supports making patients full partners in their own care. Research shows that patients who are empowered and given full information on risks, benefits, options and outcomes are more likely to improve their health through lifestyle change, adherence to therapy and other steps for their health. Patients who are full partners thus share accountability for the outcomes of care.

Evidence base: How patients see physicians' role

Of patients responding to the survey,

- 46% said physicians should focus on patients rather than on the health care system,
- 35% felt that physicians should remain personally responsible for explaining diagnoses and treatment plans,
- 21% saw physicians as advisors who help patients make decisions about their care,
- 19% believe physicians should maintain a strong interpersonal relationship with the patient (throughout recall appointments),
- 18% saw physicians as their advocates within the health care system.

Multi-disciplinary, team-based care

The top-ranked way to overcome obstacles to patient-centred care, according to survey results, was to work collaboratively in teams. Team-based care involving health care professionals such as nurse practitioners, pharmacists, psychologists and physiotherapists working collaboratively has been advocated or introduced in many jurisdictions and care settings. The CMF believes that such multi-disciplinary team care will become the norm. Physicians working in this type of practice will need advanced skills in interprofessional collaboration, communication and leadership.

Technological change

Rapid, disruptive technological change will both drive and enable health care reforms. It will inform the expectations of patients and society, empower patients, and necessitate changes to compensation models. Physicians need to adapt quickly to anticipate and take advantage of technological change – in therapeutic approaches, communications and information technology, and patient data.

Compensation models

Despite some shift to alternative compensation models, 71% to 73% of payments for health care in Canada remain fee-for-service. Survey respondents criticized fee-for-service as failing to support patient-centred care, team-based care, leadership and other non-clinical roles, or preventive care. The CMF agreed that compensation models must change to support these roles and aspects of care. The CMF does not advocate any specific model, as the most appropriate model may vary depending on the care setting but does foresee that fee-for-service will play a less significant role in the future. Governments and physician organizations must work together to change the predominant models and to ensure these models promote high-quality care and access to care while remaining sustainable in terms of cost.

Evidence base: How physicians can contribute to overcoming obstacles

Physicians and other health care professionals indicated the following ways to overcome obstacles to patient-centred care:

Work in teams, work more collaboratively	16%
Utilize resources effectively	14%
Patient-centred care, or provide care dedicated to patients	12%
Education of patients on limits of resources etc.	10%
Advocacy for health care system and primary care	8%
Advocacy for physicians and health care staff	8%
Work longer hours and increase accessibility for patients	8%

Physician leadership

In surveys, physicians said they want to take on leadership roles — in clinical care, health care organizations, academia, and policy-making. But obstacles to these roles include a lack of time, remuneration, access to policy-makers, and leadership training. The CMF supports greater leadership preparation and opportunities for physicians, but a cultural change is needed to bring physicians to the table as valued decision- and policy-makers with unique perspectives and skills.

Changes to compensation models to support non-clinical roles would allow physicians to take on leadership opportunities that are now done on a volunteer basis or “off the corner of the desk.”

High-quality care

In considering changes to physician roles and aspects of the health care system to address the current issues, the CMF reiterated and affirmed the commitment of Canada’s physicians to quality of care. Any changes to the health care system, technology, compensation models and physician roles should be planned carefully to ensure they support high-quality care — defined as care that is safe, effective, patient-centred, timely, efficient and equitable.

Action plan

Bringing this vision to reality will involve:

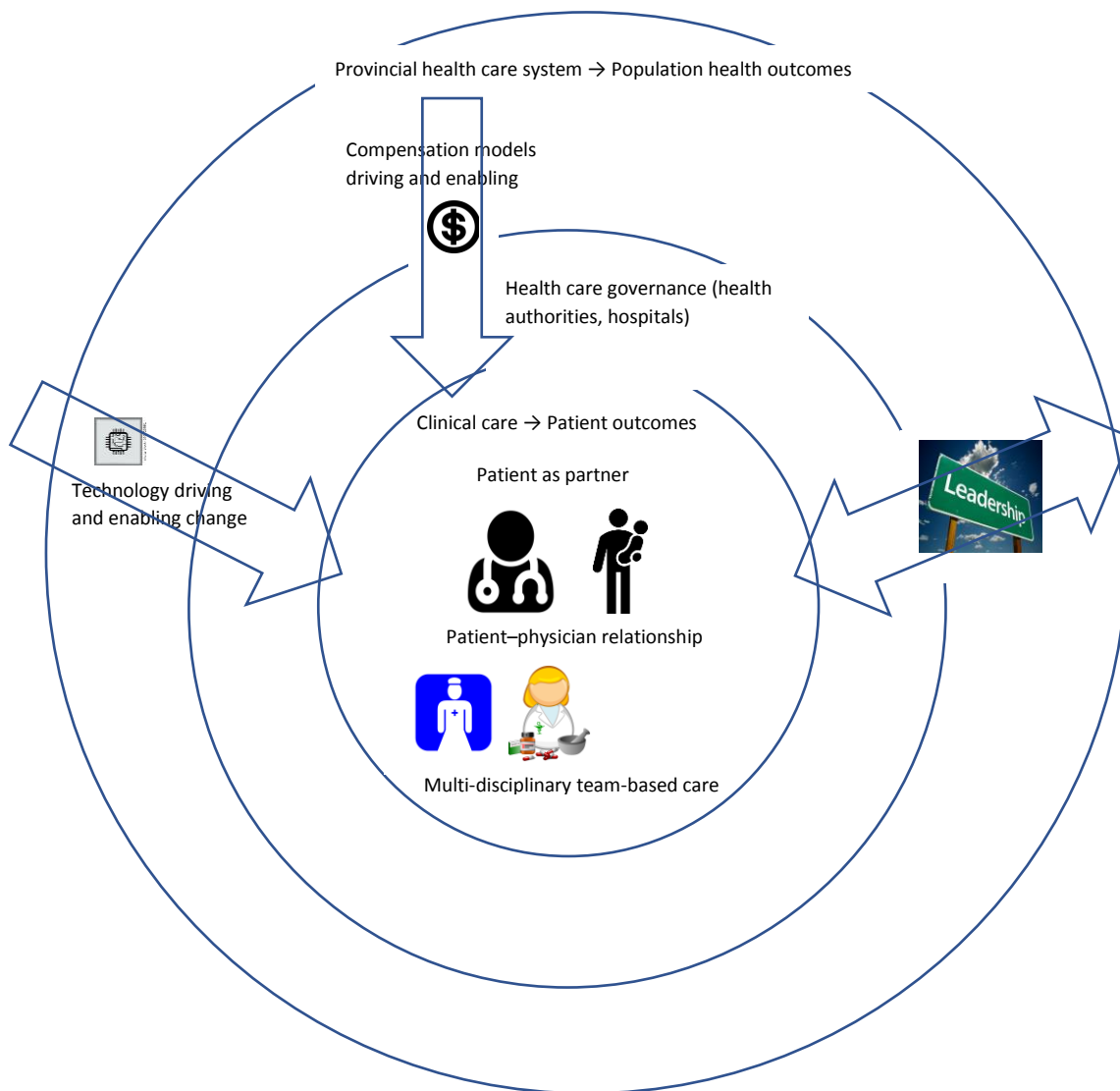
- continued dialogue
- strategic planning
- innovative policies and practices
- advocacy with government at all levels
- changes to education, assessment and training
- further research

To achieve the vision, member organizations of the CMF agreed to an action plan. They will incorporate the vision and roadmap in their planning and projects over the next decade. They also agreed to advocate for the changes to the health care system this report calls for with decision- and policy-makers.

Evidence base: Barriers to physicians participating in health care system design and change

Physicians and other health care professionals said the following barriers prevented involvement in the health care system:

Time constraints	34%
System-level barriers to involvement with governments	18%
Remuneration model, lack of compensation, or fee-for-service structure	15%
Lack of money/funding	15%
Inadequate training	12%
Workload, inability to add other duties	12%
Lack of interest	8%
Lack of knowledge	8%
Lack of participation in planning and decision-making roles	8%



Physicians will lead transformative change to the health care system: The Evolving Role of the Physician report

OTTAWA, [May 2018] — Health care in Canada is evolving quickly, and Canada’s physicians will not only adapt to this change, they will also be among the leaders in ensuring that it goes in the right direction, improving outcomes and ensuring high quality care, said Dr. Cecil Rorabeck, chair of the Canadian Medical Forum (CMF). The CMF brings together leaders of Canada’s major national medical organizations to discuss issues of priority to physicians, their patients, and the Canadian health care system.

Dr. Rorabeck spoke today upon the release of CMF’s report, *The Evolving Role of the Physician: Leading in Care, Leading in Health Care System Change*, that caps a three-year project. The ambitious project, launched in 2014, developed a collective vision on how physicians’ roles would change in the future to further enhance high-quality patient-centred care at the front lines and contribute to a sustainable and high-performing health care system. (See Background: Evolving Role of the Physician Project.)

In the report, the CMF has outlined a vision for physicians’ roles and health care in Canada, to be achieved over the next decade. Key elements of the vision for future health care are the following:

1. Health care reforms must safeguard the patient–physician relationship, based on trust.
2. Patients will become full partners in their own care, sharing accountability for outcomes.
3. Interprofessional, multi-disciplinary team-based care — adopted in many jurisdictions and care settings to date — will become the norm.
4. Technological change will drive the expectations of patients and society, empower patients, and change the way care is delivered, requiring physicians to adapt to take advantage of the opportunities technology presents.
5. Compensation models must change to support physicians’ non-clinical roles (including leadership), patient-centred care, team-based care, preventive care, and technological change. As a consequence, this report does not advocate any particular model, but foresees that fee-for-service will play a less significant role in the future.
6. Physicians must be essential leaders in health care, at all levels and in all parts of the system, and this role must be supported by all aspects of the physician ecosystem — from education through professional development and compensation models.

7. Changes to the health care system, compensation models and physician roles must support high-quality care — care that is safe, effective, patient-centred, timely, efficient and equitable.

Canada's physicians and their patients across the country agree that our health care system urgently needs reform to improve quality and outcomes, according to surveys of both groups conducted by Ipsos as part of the project.

Some of the needed changes are already underway, with progress on many initiatives and projects, but much more work is needed to transform health care. And transformation must be continuously evaluated to ensure that changes to the health care system result in improved patient health and effective and efficient health care delivery.

"We must act now to ensure that these changes benefit patients, physicians, and Canadian society generally," said Dr. Rorabeck. "Without strong leadership, there is a risk that change could go in the wrong direction. Physicians must be both among the engaged participants and the leaders in this change, working with their partners in health care, to ensure the best health outcomes for all Canadians while being good stewards of our health care resources."

Future vision

CMF's member organizations, representing physicians at all stages of their careers and from all aspects of medicine in Canada, agreed on a vision of how the physician's role should change over the next decade.

Patients will increasingly visit teams of health care professionals from many disciplines. Yet they will maintain a unique, trust-based relationship with their physician, without necessarily expecting the physician to be the sole care provider. Patients will also be considered full partners in their own care.

Physicians will continue to be accountable for providing high-quality care. As one of the major players in the health care system, they will continue to work to improve health outcomes for patients, contributing to the goal of care that is safe, timely, efficient, effective, patient-centred and equitable. They will welcome patients' full participation in their care. As part of this transformation, they will be reimbursed through innovative compensation models that move away from reimbursing procedures and focus on quality and the broader health needs of the patients whom they serve. Physicians will continue to be accountable for the patient outcomes that they can influence through their practice.

Physicians will take on greater leadership roles throughout their careers. This leadership will span roles from the front lines of health care, to regional, national and international settings. Physicians need ongoing professional development, protected time and appropriate remuneration to support their leadership activities.

Organizations representing physicians and future physicians, as well as post-secondary institutions and academic health centres, can prepare and support physicians, medical students and trainees for their future roles through activities such as:

- Education, assessment and ongoing development throughout the career cycle: pre-medical education to retirement
- Role modelling, mentoring and coaching
- Quality improvement initiatives
- Assessment of physician knowledge and skills before entry into practice and throughout practice
- Standards for medical education and practice
- Physician health and wellness
- Self-regulation of the profession
- Advocacy

The *health care system* will innovate to provide high-quality care. Medical innovation will accelerate in delivery of health services, medical approaches and therapies, medical and information technology to enhance care, and novel approaches to engage with patients.

In the various structures and settings for health care delivery in the future, physicians will provide greater leadership, and their role as health care leaders will be respected and seen as essential for the transformation of health care.

The CMF calls on *governments and their agencies* at all levels to support efforts to improve the quality of care and outcomes. Governments need to work with physicians as trusted partners in the health care system, and to support more physicians in leadership roles with and within governments.

CMF roadmap to achieve vision

“Achieving this vision will not be an easy task,” acknowledged Dr. Rorabeck. “Fortunately, most of CMF’s member organizations are already starting down this road, with transformative projects to change the direction of the Canadian medical ecosystem.”

The organization has drafted a roadmap of how its member organizations, through these various projects, will realize the vision.

“It won’t happen overnight. But we are committed to seeing this through the long-term and providing the leadership and momentum to make sure these projects stay on track. We’re looking forward to a decade that may be difficult but equally exciting, as we work on behalf of physicians and their patients.”

Background

The Evolving Role of the Physician Project

In 2014, the CMF embarked on an ambitious project to develop a collective vision on the evolving role of the physician, on the clinical front line and in the health care system more broadly. The overall project aimed to answer two questions:

How should the role of the physician evolve so that physicians can best contribute to:

- **high-quality patient-centred care at the front lines?**
- **a sustainable and high-performing health care system?**

The project had four research phases, carried out by Ipsos, an international market research company:

- In-depth individual interviews with small samples of physician executives/leaders and of practising physicians to lay the groundwork for later phases
- A survey of physicians and other health care professionals, using an electronic workbook and administered either online or on paper at conferences
- Two virtual consultation sessions with health care system leaders/administrators
- A survey covering a national representative sample of the general public

During the survey period (Nov. 28, 2014, to January 15, 2016), 377 physicians and 86 other health care professionals responded to the online electronic workbook and questionnaire. The public sample included 1001 Canadians from across the country with a broad range of contact with the health care system in the previous six months.

Main findings

Both patients and their physicians believe that the continued primacy of the patient–physician relationship, based on trust, is paramount. But both groups surveyed believe there are serious obstacles to patient-centred care, particularly time constraints and the episodic nature of care. These issues stem from tight resources, including constrained health care funding and the limited number of physicians and other health care providers. Working collaboratively with other physicians and in interprofessional teams, and utilizing resources effectively, were among the solutions recommended by physicians.

Physicians and patients both said the health care system needs to be reformed, to better meet the needs of patients. They agreed that the system needs to centre on the patient, who should be more involved in his or her own care, sharing accountability for planning and outcomes.

Leadership emerged as a major theme, with physicians saying they want to take on greater roles throughout health care delivery and the health care system. However, they said they encountered obstacles to taking on these roles. Current payment models do not provide compensation or incentives for non-clinical roles such as leadership. Physicians expressed a need for greater education and training in all aspects of leadership as well as protected time and appropriate compensation. They also found a lack of transparency in health care decision-making and few avenues to influence policy-making at many levels.

The Evolving Role of the Physician: Leading in Care, Leading in Health Care System Change

A Vision for the Role of the Physician

Why is the role of the physician changing?

The landscape in which Canadian physicians work is changing around them. The forces for change are coming from outside of medical practice — disruptive technologies, novel threats to health, economic downturns — and from within the system — rapid policy shifts, team-based care, new compensation models, cutting-edge therapies, and changing health care structures. Some of the change is evolutionary and incremental, while other changes are revolutionary and transformative. And these changes are hitting home, affecting physicians' day-to-day work as well as their ability to care for their patients. Physicians are increasingly concerned about the pace and effects of change. Students and residents say they expect their practices to be very different from those of their colleagues currently in practice.

What roles will physicians play in this rapidly changing environment? Can they manage the outcomes of change to create roles in which they feel engaged, informed and empowered, rather than being buffeted by the changes, to eventually find their roles are less valued, less satisfying and ultimately less effective for their patients?

The challenge for Canadian physicians in the future is to be agile and adaptable to emerging roles, new knowledge and technology, and changing aspects of practice. They may choose to fulfil a variety of roles throughout their career: as clinicians, educators, researchers, knowledge translators, and leaders at many levels of the health care system, as well as making other contributions to medicine and Canadian society. They want to make their own choices in a positive, nurturing environment that promotes their own health and work/life balance.

At the same time, physicians wish to contribute to making changes in the health care system, which they say are desperately needed. They believe their perspective from the front lines of health care uniquely qualifies them to provide leadership in that change, with the objectives of improving outcomes for patients and the professional lives of physicians.(6)

In the context of this shifting landscape for physicians, the Canadian Medical Forum (CMF, see sidebar) launched the Evolving Role of the Physician project (see sidebar) in 2014. This report presents a **vision** for the physician of the future in Canada, based on the results of a multi-phase survey of Canadian physicians, other health care professionals, and patients, along with other recent research and reports on physicians' roles. It also provides a **roadmap** for how physicians and their organizations, through the CMF, can achieve this vision.

Vision

In the future, Canadian physicians will be fully prepared and supported to step into **many**

challenging roles during their careers. These roles may include traditional functions in clinical care, teaching and assessment, and medical leadership, but also novel and emerging roles in practice-based research, knowledge translation and dissemination; leadership in a wide range of emerging organizations throughout the health care system; and involvement in medical technology, health care quality, public policy, etc.

Regardless of role, physicians will continue to work at all times **for the benefit of patients and the public**, to whom they are primarily accountable.

The Canadian Medical Forum

The CMF was formed in 1990, bringing together leaders of Canada's major national medical organizations to discuss issues of priority to physicians, their patients, and the Canadian health care system.

The organizations are the:

- Association of Faculties of Medicine of Canada
- Canadian Federation of Medical Students
- Canadian Medical Association
- College of Family Physicians of Canada
- Fédération médicale étudiante du Québec
- Federation of Medical Regulatory Authorities of Canada
- Medical Council of Canada
- Resident Doctors of Canada
- Royal College of Physicians and Surgeons of Canada
- Society of Rural Physicians of Canada.

Some organizations participate as observers:

- Canadian Forces Health Services Group
- HealthCareCAN
- The Canadian Medical Protective Association

The Forum focuses on such issues as medical education, training, certification, licensure, practice, portability, and physician resources, as well as issues affecting medical students and residents.

During its history spanning more than 20 years, the Forum has examined cross-cutting issues relevant to many of its member organizations and to many aspects of the health care system. These have included physician workforce and solutions to physician shortages. The Forum's project on the Evolving Role of the Physician follows in this tradition.

Their knowledge and perspectives will be represented at **the many levels of the health care system**:

- (1) direct patient clinical care, including care teams;
- (2) hospitals, regional health authorities, and other structures for delivery of health care;
- (3) governance and functioning of the health care system, including resource use, outcomes and policies.

They will work to ensure that **fundamental aspects of patient health care enable these roles**. **Compensation models** must evolve to support excellence not only in the physicians' clinical roles but also in their leadership and other non-clinical roles, as well as ensuring a sustainable health care system. Where existing compensation models pose barriers to physician roles, both as front-line providers and health system leaders, these barriers must be removed. Therefore, innovative compensation models are needed that support high-quality care and access to care, at sustainable cost levels. While this report does not advocate a specific compensation model, it does foresee that fee-for-service will play a less significant role in future models.

Technological change will be transformational in the next decade. Disruptive technologies will drive the expectations of patients and society, empower patients, and ultimately necessitate changes to compensation models. Physicians and their organizations must anticipate and adapt to changing **medical, information and communication technologies** and integrate them into care and practice for the benefit of patients.

Key elements of future health care

In developing this vision, the CMF agreed on the following key elements:

1. Health care reforms must safeguard the patient–physician relationship, based on trust.
2. Patients will become full partners in their own care, sharing accountability for outcomes.
3. Interprofessional, multi-disciplinary team-based care — adopted in many jurisdictions and care settings to date — will become the norm.
4. Technological change will drive the expectations of patients and society, empower patients, and change the way care is delivered, requiring physicians to adapt to take advantage of the opportunities technology presents.
5. Compensation models must change to support physicians' non-clinical roles (including leadership), patient-centred care, team-based care, preventive care, and technological change. As a consequence, this report does not advocate any particular model, but foresees that fee-for-service will play a less significant role in the future.

6. Physicians must be essential leaders in health care, at all levels and in all parts of the system, and this role must be supported by all aspects of the physician ecosystem — from education through professional development and compensation models.
7. Changes to the health care system, compensation models and physician roles must support high-quality care — care that is safe, effective, patient-centred, timely, efficient and equitable.

Report objectives

This report has several objectives:

To start a national conversation

The role of physicians needs a fresh look, not only by physicians, but also by other health care professionals, health care administrators, policy-makers at all levels of the health care system, and patients and their advocates. By posing some of the key questions and offering options for physicians' roles, this report aims to start a dialogue among the many players, toward an enriched, involved role for Canada's physicians.

To direct innovation

Dramatic technological innovation and health care system reforms are coming in all jurisdictions, affecting all aspects of care. What do physicians and other actors in the health care system wish to achieve

through innovation? Will technological innovations be the primary drivers of change that may not benefit patients rather than serving as tools to support meaningful, intentional and valuable change? This report provides guidance to help determine whether technological innovations support physicians for the ultimate benefit of their patients.

Evolving Role of the Physician Project

In 2014, the CMF embarked on an ambitious project to develop a collective vision on the evolving role of the physician, on the clinical front line and in the health care system. The overall project aimed to answer two questions:

How should the role of the physician evolve so that physicians can best contribute to:

- **high-quality patient-centred care at the front lines?**
- **a sustainable and high-performing health care system?**

The project had four phases, carried out by Ipsos, a major international market research company:

- In-depth individual interviews with small samples of physician executives/leaders and of practising physicians to lay the groundwork for later phases
- A survey of physicians and other health care professionals, using an electronic workbook and administered either online or on paper at conferences
- Two virtual consultation sessions with health care system leaders/administrators
- A survey covering a national representative sample of the general public

During the survey period (Nov. 28, 2014, to January 15, 2016), 377 physicians and 86 other health care professionals responded to the online electronic workbook and questionnaire. The public sample included 1001 Canadians from across the country with a broad range of contact with the health care system in the previous six months.

Results from this research inform this report.

To ensure that physicians are prepared for their future responsibilities

Physicians' work and the health care system are evolving rapidly. While some innovations in the organization of care have had a positive impact on quality of care and patient outcomes, some of the evolution taking place is not focused on the needs of patients and their care. Rather, it is meant to achieve other goals, such as cost containment or efficient administration. How can this evolution be managed so that physicians ultimately have roles in which they can best serve patients and society? How can we ensure that changes to physicians' education, training, and working environments, as well as to the broader health care system (see sidebar), allow physicians to excel in these roles?

1. The role of the physician in high-quality patient-centred care

The vision for the physician of the future involves a **renewed commitment to patient-centred care**. While the patient has been central to conceptions of the physician's practice since Sir William Osler's *The Principles and Practice of Medicine*, and indeed as far back as Hippocrates, in today's context, patient-centred care must be transformative, focusing on the **patient's role in the care team**.

However, the surveys conducted as part of the Evolving Role of the Physician project identified many obstacles to providing patient-centred care, mainly related to a lack of sufficient resources to meet the needs of patients (see Roadmap). As health care budgets tighten and the needs of a diverse population grow, how can these obstacles be overcome to provide **safe and effective patient-centred care**?

Some of the proposed approaches **involve patients in planning and managing their own care**. Patients who are empowered with knowledge about their own health and are given prevention and treatment options with full information about risks and benefits can play a critical role in their own care.(8-11) When patients make their own decisions, they are more likely to adhere to therapy and to take preventive measures such as lifestyle change.

As well, **working collaboratively in inter-professional and multi-disciplinary teams** is advanced as a way to provide patient-centred care. Team practice is increasingly the reality for many physicians, especially in hospital settings, and is expanding to other settings such as primary care. Other health care professionals may play a front-line role, such as nurse practitioners in many team practices, or take the lead in some aspects of care, such as

pharmacists in specialized drug therapy or physiotherapists in sports medicine. However, the results of surveys conducted for this project show that patients prefer to discuss diagnoses and treatment plans with their physician, and physicians want to maintain their relationship with patients, in order to provide **compassionate care** and **continuity of care**. How can appropriate **use of inter-professional teams** be integrated and combined with the primacy of **the patient–physician relationship**, based on trust?

As part of the College of Family Physicians of Canada’s Patient Medical Home (PMH) model of care, the family physician continues to be the most responsible provider, working closely and collaboratively with other providers in a team-based environment. High performing PMH type models such as Family Health Teams (FHTs) in Ontario have been shown to be associated with fewer emergency room visits, better adherence to treatment, better rates of participation in preventive health measures, and better satisfaction by patients and providers. Primary Care Networks (PCNs) in Alberta, Family Health Teams (FHTs) in Ontario, Groupes de médecine de famille (GMFs) in Quebec, Manitoba’s My Health Team and BC’s Patient Medical Homes are based on the Patient Medical Home model of care; other provinces are considering its adoption at the time of writing this report.

Depending on the situation, physicians may function as clinical **leaders**, as **coordinators** of care, or as **expert consultants** to teams led by other professionals. Team-based care is also critical to **integrated care**, which aims to provide an accessible and seamless experience for patients regardless of the health care provider or level of care. That is, when patients transition from one level of care to another, such as from community care to hospital or long-term care, there should be no gaps in communication or care.⁽¹³⁾ In an integrated care environment, providers will require a high degree of **knowledge and skill in team-based care** as well as **communication, collaboration** and **coordination skills**.

In all care environments, physicians will continue to serve as a **patient advocate and navigator** through the stages of health promotion, illness prevention, treatment and follow-up, and through the levels of the system, including ambulatory, hospital and home care. Physicians and patients have increasing access to sophisticated knowledge sources. Physicians will continue to be the primary **patient educators**, helping patients understand their health, illness, treatment and outcomes. This task is becoming more and more complex. With the democratization of knowledge, medical knowledge is available to patients as

Health promotion is the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions.
— World Health Organization definition

well as to their health care providers. Respondents to surveys conducted for this project pointed out that patients often arrive at the clinical encounter with health information they have found. However, they may not be able to understand more technical information, or they may be heeding information that is not evidence-based. Physicians must help patients become critical and discerning users of this health information.

Preventive care, to improve outcomes for individual patients, and **health promotion**, aimed at improving the social determinants of health, will be at the forefront, especially in primary care. Physicians who see patients at a point when they can intervene to prevent illness will take a more proactive role.

To deliver services in team-based and integrated-care settings, physicians must make **greater use of technology**. Almost a quarter of Canadians already interact with health care professionals online. Electronic medical records are used by 85% of Canadian physicians, up from 24% in 2007. And digital and online systems are now delivering traditional sources of medical information such as test results, diagnostic imaging, peer-reviewed literature, clinical practice guidelines, and drug and therapeutic information. Telemedicine allows physicians to be part of a team thousands of kilometres away, and “virtual health care” connects teams down the block or around the world.

Physicians will also need to adapt to disruptive technologies that will transform their practice, from adopting new modes of communication to cutting-edge medical technologies. To ensure that these technologies benefit patients and care environments, physicians must not only **integrate and manage digital information**, but also **participate in development** of electronic medical and information tools that will help them deliver high-quality care efficiently.

Compensation models play a critical role. In results of surveys conducted for this project, physicians and other health care professionals say that current models in many cases fail to support

Defining the health care system

In this report, the health care system in Canada is defined broadly, to include health care services, organizations and professionals. Health care may be delivered under the aegis of provincial governments, municipalities or the federal government.

While Canada’s health care system is often thought of in terms of Medicare-covered services such as physician visits and hospital care, it includes services that are not covered or covered only for certain populations, such as drug therapy, physiotherapy, home care, and dental care. It also includes professionals who may not be remunerated through Medicare, depending on the milieu in which they practise. These include pharmacists, occupational therapists, psychologists, dentists and others.

As well, some provinces allow private physician services and clinics, and some services are paid for by patients if they are not deemed medically necessary. All of these are included in the definition.

patient-centred care, multi-disciplinary team care, or physician leadership. Compensation models need to change to support preventive care, team-based care, use of technology, continuing professional development, and an agile and adaptable medical workforce that may choose among multiple roles throughout their careers. Compensation models may differ depending on particular care settings and physician roles. As a consequence, this report does not advocate any particular model, but foresees that fee-for-service will play a less significant role in the future. Rigorous evaluation of intended and unintended impacts of compensation models needs to be undertaken to inform subsequent models. Models must support high-quality care and access to care, while remaining at sustainable cost levels.

2. The role of the physician in the health care system

As the Advisory Panel on Healthcare Innovation stated in its 2016 report, “health care remains disjointed, with poor coordination and alignment within and across the various professions, acute and chronic care institutions and community care.”(4)

Physicians surveyed for the Evolving Role of the Physician project said that the need for health care reform is urgent. Lack of a coordinated approach from health authorities and system leaders, rising costs, increasing specialization, and the “silver tsunami” of an aging population are among the factors contributing to a strained system. The Canadian public agrees, with 68% of those surveyed for this report saying that fundamental changes to the health care system are needed.

Physicians believe they have a role and a responsibility to help create a health care system that **provides high-quality care: safe, effective, patient-centred timely, efficient, and equitable.**(14) To achieve this, they need to provide leadership at all levels of the health care system.

Clinicians in direct patient care are involved in the health care system. As many physicians have commented, clinical teams *are* the health care system. Policy decisions affect patient care at the clinical “coalface.” Similarly, “coalface” decisions affect costs and timely care for patients and providers throughout the system and influence policy.

Physicians surveyed for this project said that they have a responsibility to take on **leadership roles**, both at the “meso” level, contributing to primary care networks, hospital administration, regional health authorities, etc., and at the “macro” level, in health care system reform and health policy within physician organizations, public institutions and governments.

However, physicians said that there are barriers to their participation in and leadership of the health care system (see Roadmap). One of the major obstacles is that making contributions in non-clinical roles is often difficult because they are not remunerated by current compensation models. As a result, physicians have described contributing to non-clinical projects “off the corner of their desk.” They also said that they need leadership knowledge and skills.

To help them take on leadership roles, the conditions must exist to allow more physicians to become involved in leadership at the system level.

What will this role look like? Physicians of the future will be **educated to understand the health care system** and to be **engaged, informed and involved** actors within that system. They will bring leadership and management skills to their practice and to the multi-disciplinary teams in which they work.

Depending on the context in which they work, they may **participate, influence or lead**. They must be comfortable in fluid, changing situations where they may be called upon to **navigate ambiguity and uncertainty**. They will bring current medical knowledge to the care or management team, where they will function as **knowledge translators and implementers**. They will increasingly move into roles in **governance** of the health care system and in **policy advocacy**, at the table with governments of all levels.

3. The multiple roles of the physician

Canada has a **national standard** for the necessary competencies for the medical expert, CanMEDS. This standard provides the basis to prepare physicians for the **complex and multiple roles** that they may play throughout their career, as well as for changes in those roles resulting from a health care system in flux. Medical students and physicians-in-training describe a workforce in transition, in which short-term assignments, role shifts and

relocation are the new normal. Those in the health care system describe dynamic and diverse settings, in which care is moving more and more into the community and to novel clinical models.

Thus, while many established physicians have chosen to fulfil many roles during their career, this will be even more the case for their colleagues entering practice. This report does not detail all of these roles — which are better covered elsewhere(15, 16) — but emphasizes the **array of choices for future physicians**, in clinical care, academic medicine and research, the health care system, physician/medical organizations, and policy and government.

An overarching paradigm for these many roles and choices is the “quadruple aim” — transformative change will optimize the performance of the health care system through (1) enhancing patient experience, (2) improving population health, (3) reducing costs and (4) improving the work life of health care providers.(17) In the future, many physicians will be required to balance these four aims. Thus, as **clinical practitioners**, physicians will provide care and make decisions with their patients, taking into account the effects of their clinical decisions on the system as a whole. The ideal solutions are those that **advance outcomes for all patients** while remaining cost-effective.

In many of their roles, physicians can carry forward this vision for the benefit of their patients and colleagues.

Those in leadership roles will function as **managers of change** as the health care system makes profound transitions. Physicians involved in **teaching tomorrow’s physicians and assessing those in practice** can help ensure that physicians are fully prepared for and supported in their roles. As **knowledge translators**, physicians can also **bring evidence to bear** on health care decisions, system-level change, and government policy to support this vision.

A Roadmap for the Role of the Physician

How do we attain the vision of the physician of the future?

To reach the vision for the physician of the future within a decade, physicians, their organizations and the health care system need to seize opportunities that will help physicians best use their knowledge, skills and experience in the interests of advancing patient care and the goals of the health care system (see Action plan). They also need to understand obstacles to this vision and to start the needed foundation-setting work to overcome those obstacles.

This work will entail:

- **Continued dialogue:** Physicians, other health care professionals, health care administrators, as well as the public and policy-makers, must continue to discuss the place of physicians in health care and broader public and population health. This will involve the future roles of the physician outlined in this document, and how these roles can be enabled and supported.
- **Strategic planning:** The goals that form part of the vision as well as the steps to achieve those goals should form an integral part of strategic planning for physician and other medical organizations, hospitals, regional health authorities and governments.
- **Innovative policies and practices:** These will include changes to a wide variety of policies at all levels of government as well as practice environments that support collaboration.
- **Innovative compensation models:** This involves compensation that supports patient-centred care, health care teams, and physician leadership.
- **Advocacy with governments at all levels:** Advocacy on these issues with federal, provincial/territorial and local governments can be coordinated centrally to send out a consistent message.
- **Education, assessment and training:** Physician education, training and assessment are currently evolving to incorporate health promotion and illness prevention, mental health and psychosocial aspects of health, acute and chronic illness, physician leadership, and the physician's role within the health care system. They must also include the knowledge, skills and abilities to use the new disruptive technologies on the

horizon. Translating and incorporating knowledge about physicians' emerging roles must become part of the ongoing professional development and assessment for every physician. Canada's medical education accrediting bodies currently have ambitious projects underway to ensure high performance standards in medical education and throughout physicians' careers.

- **Further research:** Research agendas to support physicians' many roles should include
 - best practices to effect cultural change and educational outcomes;
 - best practices to assess professional change;
 - a wide range of care options and professional roles (including the effects of innovative technology on these roles);
 - collaborative environments; and
 - the impact of patient involvement in care planning and management.

The member organizations of the Canadian Medical Forum are well positioned to provide the needed leadership and expertise to move physicians and the health care system toward the vision.

This roadmap outlines what needs to happen to achieve this vision, first identifying the obstacles to these goals from surveys conducted for the Evolving Role of the Physician project as well as from other sources, and then providing approaches to overcome them.

1. The role of the physician in high-quality patient-centred care

Obstacles

To achieve a renewed commitment to collaborative, comprehensive, patient-centred care, physicians need more time for interaction with patients. The surveys conducted for the Evolving Role of the Physician project found that all groups surveyed — physicians, other health care professionals and the public — agreed that the greatest obstacle to patient-centred care is **time constraints**.

Other obstacles identified also impinge on physicians' time with patients (see Obstacles to patient-centred care).

While not addressed in the survey results, high volumes of work and long shifts can lead to burnout and psychological stress, which are continuing problems among physicians, in Canada and other countries. (18-20) In discussions of the “quadruple aim,” physician well-being is seen as one of the pillars of health care.(17)

Evidence base: Obstacles to patient-centred care

In the Ipsos survey conducted for this project, physicians and other health care professionals identified the following obstacles to patient-centred care (in order by percentage of respondents):

Time constraints	44%
Inability to provide patient-centred care/care provided is episodic	26%
Resource issues, insufficient staff, lack of support	20%
Patient load or volume of patients	17%
Remuneration system, fee-for-service, payment by amount of patients seen	13%
Administrative burden	10%
Unreasonable or unrealistic patient expectations	8%
Insufficient funds or not enough funds available	8%
Inability to meet the number of patient needs	8%

Discussion question:

How can the pressures of insufficient resources, high volumes of patients and administrative tasks be addressed to ensure sufficient time for patient interactions?

Overcoming obstacles

From the surveys conducted for this project, participants suggested various ways of addressing **time constraints**. Many mentioned **growth in physician resources**. While the proportion of physicians per capita has increased in recent years,

it is still low by comparison with other countries in the industrialized world (see Physician resources); a steady proportion (about half) of physicians are in family practice.

Evidence base: Physician resources

There are more physicians per population than ever before in Canada, according to a 2014 report by the Canadian Institute for Health Information.(1) The rate had dipped in the 1990s, held steady in the 2000s, and increased considerably from 2007 to 2014. About half of those physicians are in family practice, a proportion that has wavered only slightly since the 1970s.

While this sounds like good news for better physician coverage of patient populations, Canada’s proportion of physicians per capita is still below the average for the Organisation for Economic Cooperation and Development (OECD) countries (2.5 physicians per 1000 population in 2012 versus 3.2 per 1000 OECD average), and well below rates in many European countries. In fact, Canada ranks 27th out of 34 OECD countries on this measure.(5)

Survey results for this project showed that shortages of physician resources are still a concern and have a serious effect on time available for high-quality patient interactions.

As well, survey responses focused on expanding the capacity of busy medical practices through **increasing staff** and **collaborating with other physicians and other health care professionals**.

Administrative and technical staff could help alleviate the burden of non-medical tasks. True collaboration among physicians could provide mutual support and sharing of information and expertise. The explosion of medical information and knowledge in recent years has made it difficult to remain current – especially for broad-based generalists such as family physicians and

internists. An emerging view is that it is unrealistic to expect individual generalists to have broad knowledge in all

Evidence base: How physicians can contribute to overcoming obstacles

Surveys of physicians and other health care professionals conducted by Ipsos for this project showed that working collaboratively in teams was the top-ranked way to overcome obstacles to patient-centred care. But none of the suggested ways to overcome obstacles had significant agreement among respondents (in order by percentage of respondents).

Work in teams, work more collaboratively	16%
Utilize resources effectively	14%
Patient-centred care, or provide care dedicated to patients	12%
Education of patients on limits of resources etc.	10%
Advocacy for health care system and primary care	8%
Advocacy for physicians and health care staff	8%
Work longer hours and increase accessibility for patients	8%

domains.

As well, survey responses raised collaboration with other health care professionals in **inter-professional, multi-disciplinary care teams**, especially for the growing burden of complex health problems that involve care across the continuum (acute care, hospital, long-term care) and longitudinally over time (chronic diseases). Collaboration with other physicians and health care professionals would also help manage **higher volumes**

of patients with the same level of physician resources. However, there is a danger that team-based care could be used as a rationale to displace physicians from key clinical roles or to lower physician-patient ratios. This must be guarded against.

Patient's role in the care team

When physicians surveyed were asked about the patient's role in the health care team, the main role identified was as the **communicator of their health state and problems**. In contrast, patients surveyed believed that their role should be central to the care team. Studies have shown that patients who can take on this role see themselves as active participants in their own care. They then make informed decisions to prevent illness or manage chronic illness: adopting healthy lifestyles, adhering to medication or other therapy, avoiding unhealthy behaviours, and seeking medical attention when warranted. Thus, patients' involvement must go beyond the communicator role, to being a **participant in their own medical decision-making, treatment planning and health management**.

"Most care providers don't understand what patient-centred care really entails. Opinions are easier to give than discussing choices. Patients themselves don't understand what can be, accept status quo, and often don't reveal the challenges they face."
— *Nurse respondent*

"It seems that there is a big discrepancy between what physicians, patients and other health care professionals think is or should be involved in their care. I think that effective education and communication are critical to bringing these groups together."
— *Medical student respondent*

"To be focused on primary prevention as an educator of patients and advocate for healthier living. I see the physician still as the expert in diagnosis and hopefully the role can still be maintained."
— *Family physician respondent*

"The patient is the centre of the team. We should be engaged and involved so that we can strive for a healthy life and practice prevention instead of reacting to problems."
— *patient respondent*

"A patient should be the most important member of the team. A patient should be kept in the loop and be able to understand everything that is happening."
— *patient respondent*

Patient-centred care means that patients are not only the focus of health care but also part of the team. As such, they share accountability for the outcomes with their health care providers, and must understand the resource and system-level implications of their decisions.

Other health care professionals surveyed viewed physicians as unable or unwilling to involve patients in their own health care or as part of a

health care team. Other health care professionals were more likely than physicians to identify as an obstacle physicians' inability to provide patient-centred care, to meet the number of patient demands, and to properly communicate or give full explanation (diagnoses, etc.) to the patient.

Discussion questions:

How can physicians foster patient involvement in planning and managing their own care? How can they help patients understand their accountability for making decisions that affect aspects of the health care system such as resource usage?

How can patient-centred care be taught and modelled more effectively in medical education and in physicians' careers so that it becomes integral to their practice?

Continuity of care and trust relationship

Trust, based on a shared understanding of physical and emotional suffering, has historically been at the heart of the patient–physician relationship. Not surprisingly, survey results from members of the public emphasized the **patient–physician relationship based on trust**. Responses made it clear that patients want a continuing relationship with their physician (see Evidence base: How patients see physicians' role).

Discussion question:

How can this view of the patient–physician relationship be reconciled with multi-disciplinary health care teams, especially as team care becomes more prevalent as the model for primary care delivery?

The current trend toward health care teams and away from traditional solo practice is expected to accelerate across all health care settings, as a result of several coinciding trends:

- rapid increase in medical knowledge that is difficult for a solo practitioner to incorporate into practice,
- research findings that team approaches result in improved care,
- efforts to improve continuity of care and communication,
- approaches to make more effective use of skills of physicians and other health care professionals, and
- expanding scope of practice in other health care professions.

Evidence base: How patients see physicians' role

Patients responding to the survey saw the physician of the future as having several roles:

- 46% said physicians should focus on patients rather than on the health care system,
- 35% felt that physicians should remain personally responsible for explaining diagnoses and treatment plans,
- 21% saw physicians as advisors who help patients make decisions about their care,
- 19% believe physicians should maintain a strong interpersonal relationship with the patient (throughout recall appointments),
- 18% see physicians as their advocates within the health care system.

In their comments, patients said they prefer not to see another physician or care provider who is unfamiliar with their history.

Physicians must be proactive in defining their roles in these teams to ensure optimal care for patients. This requires a cultural change, from having expertise in all domains of care to having a broad vision and general knowledge while drawing on the expertise and competencies of others. It also requires a willingness to allow other physicians and health care professionals to participate and to use their full range of knowledge and skills. To achieve a culture shift toward team-based care, one of the key elements is inter-professional education, to develop competencies to work effectively in inter-professional collaborative teams.⁽²¹⁾ These competencies must also be maintained and assessed throughout physicians' careers.

The College of Family Physicians of Canada has described a proposed vision for the organization of community based care in family practice, the Patient Medical Home (PMH). In it, the family physician is the most responsible provider to a defined population of patients, working collaboratively, in an integrated manner, with other health care providers to provide team-based, patient-centered care. The introduction of PMH-like structures across Canada has demonstrated that, while the implementation may be costly and a novel mode of practice takes some getting used to – it demonstrates benefits. Improved continuity of care leads to reduced use of emergency rooms and hospitalization and a team-based approach ensures convenient access to a professional who can connect to the patient's most responsible provider. A focus on the patient-centred approach yields an emphasis on preventative care and better adherence to treatment plans.

The updated version of the Patient Medical Home vision emphasizes the need for appropriate support, infrastructure and staff in order to provide care that is accessible, continuous, comprehensive, patient-centred, and responsive to the needs of the local community.

There is often a perception that health care teams are limited to urban settings with sufficient population density to support a critical mass of health care professionals. However, this is changing. The 2013 National Physician Survey showed that, even in many rural settings, there are now few solo physician practices. The majority of physicians everywhere are organized in group arrangements, at least for on-call and after-hours care. Even in remote communities, with increasing application of telemedicine and “virtual” health care, such professionals may form part of geographically distributed health care teams that can support them from a distance.

Discussion questions:

How can continuity of care and the primacy of the patient–physician relationship based on trust be maintained in inter-professional, multi-disciplinary teams?

Does the “most responsible provider” role, which underpins the Patient Medical Home vision put forward by the College of Family Physicians of Canada, balance the patient–physician relationship with team-based care?

How can practices, policies and systems foster and sustain the patient–physician relationship while broadening the circle of care?

What structural, process and cultural issues need to be addressed to support evolution toward inter-professional team-based care?

What are the best roles for physicians within the team?

How will physicians be assessed and their performance measured when they work in inter-professional teams?

Are there times and places when team-based care is not possible or not the best approach to high-quality patient care?

The national standard that provides the foundation for medical education and practice in Canada, CanMEDS, is updated regularly to reflect evolving practice roles. Does CanMEDS fully capture the emerging roles of physicians in team-based care and patient-centred care?

Patient advocate and educator

In settings involving health care teams and integrated care, physicians are increasingly called upon to help patients make sense of the medical information they are given during their care as well as what they read in publications and on websites. This may involve discussions of the credibility of information and its application to individual patient situations.

While patients should be involved in planning and managing their treatment, physicians' medical knowledge will always be important in guiding and educating patients to understand disease impacts, outcomes, options, benefits and risks. Physicians also guide their patients through the health care system and the continuum of care. In health care teams, some of this patient education may be taken on by other health care professionals on the team. As well, physicians and their colleagues may help patients understand the health care system and issues at the system level, such as the limits to resources and the roles of the team members. In a patient-centred model, patients should be seen as sharing accountability for medical decision-making. Efforts such as Choosing Wisely Canada provide information for patients, emphasizing why tests and treatments should be limited to those that are evidence-based and appropriate, in order to avoid unnecessary harms and patient anxiety, as well as to use resources responsibly.

Physicians also see themselves as primary patient advocates vis-à-vis the health care system, ensuring that individual patients receive services they need and that patients as a group are taken into account in planning health care services. This role becomes more important in complex health care systems that are difficult for patients and their caregivers to navigate.

Physicians need support to take on these roles in patient education and advocacy. Compensation models that provide sufficient time and compensation are needed for physicians to provide timely and comprehensive patient education, and effective intervention on behalf of patients.

Discussion question:

How can physicians be supported to take on roles as patient navigators, advocates and educators?

Preventive care and health promotion

Preventive care, in the context of physician care, and health promotion, in the larger community, were also identified as key roles for physicians in patient-centred care.

Survey respondents said that physicians should provide patients with a holistic and comprehensive view of health options, and that physicians should play a primary role in preventive care. Yet primary prevention strategies are still lacking, as are compensation models that support preventive care.

Health promotion at the community and regional levels serves a similar purpose: preventing illness through modifying the social determinants that lead to poor health. Physicians have a primary role in this arena as well.

There are several potential avenues for health promotion:

- Involvement in local public health initiatives
- Advocacy of strategic health care planning, such as long-term care strategies for seniors and strategies for other at-risk populations (low-income, refugee, homeless, etc.)
- Attention to health effects of policies and practices at all levels of civic administration and government

Physicians may become involved in health promotion as concerned professionals, as collaborators with health authorities and governments, or as community advocates for health and safety measures.

Discussion questions:

How can physicians' roles in primary prevention be supported? How does their role in health care teams best help provide preventive care?

How can physicians be supported to become involved in health promotion? How does their role in health care teams best help provide health promotion?

Enabling systems

In Canada's health care system, some systems are fundamental in setting the parameters for physician practice. These systems can have profound effects on health care and physician effectiveness — supporting or inhibiting practices. This report discusses two of these systems: technology and compensation models.

Technology

In the next decade, technology will drive the expectations of patients and society, empower patients, and change the way care is delivered, ultimately necessitating changes to compensation models. It is therefore critical that

physicians be technology-savvy, to keep pace with advances in medical, communications and information technology (IT). As standards are established in medical IT and systems become interoperable, physicians will be able to share data more widely and communicate more rapidly. Disruptive technologies (artificial intelligence with *deep learning*, 3D printing, advances in medical imaging, new therapies) are quickly revolutionizing many aspects of medicine. Technologies may displace traditional specialties; artificial intelligence may perform basic radiologic and pathologic analyses much more quickly and accurately than humans.(22) Such technologies must be harnessed to improve patient outcomes and make practice more efficient, while avoiding potential problems with their implementation and use. Beyond their role as users, physicians also need to have input into the design of IT and medical technology to ensure that they meet the needs of the health care system, physicians and ultimately patients.

Technology should be adopted only if it improves the quality of health care, as measured by quality criteria such as those of The Institute of Medicine: safe, effective, patient-centred, timely, efficient and equitable.(14)

Furthermore, technology should be readily usable by the intended users; technology that is difficult to use may be jettisoned or may add to administrative burden. In this regard, users should be meaningfully involved in the design and testing of technology to ensure it meets their needs. Physicians with an interest or aptitude in technology should be encouraged to become involved in medical technology and IT design. As well, in a patient-centred paradigm, patients should be considered as potential users for technology that affects them. For example, primary care practices can enable patient modules so that patients can have access to their own electronic medical records.

Technology should also be designed to protect patient privacy. Health care data are now being captured at an unprecedented rate, and must be managed to protect privacy while ensuring that patients and physicians benefit from the insights the data offer. Methods have been developed to incorporate privacy into IT design without affecting other functions or usability.

Finally, all technology should be rigorously evaluated to ensure it is a positive addition to the modern medical armamentarium and is not causing deleterious effects on care or physician burden.

The use of health care data will also affect the physician of the future. The current IT infrastructure is generating reams of data in electronic medical/health records, and an increasing volume of these data are available to physicians, researchers and administrators. The surveys conducted for this project found that physicians believe these data could have a positive impact on health care, but few feel equipped to use the data. There is also uncertainty about how the data will be used for physician accountability or to inform health care improvements. At the same time, many recent research projects using health care data have had important and surprising results that will affect health care in Canada. Physicians should be involved in developing policies for the use of these data, to ensure that they are used appropriately and for patient benefit. Many physicians will become involved in data-based research. Some physicians with interests and skills in this area are working as data scientists and bioinformatics experts, and they are a resource in the use of data to add value to health care. Additional analytical and technical supports are needed to help physicians access and understand the growing abundance of data.

Discussion questions:

Technology use

What training is needed at all stages of medical education and physicians' careers to help them incorporate technology into their practice to improve the efficiency and quality of care?

How can technology be introduced successfully in medical practice and in health care institutions and organizations to enhance care?

How can physicians become more involved in designing and directing technological development?

Data use

How can physicians become more involved in the discussions of how to best use clinical and administrative data for (1) performance management and (2) quality improvement?

How can physicians be supported to use data from electronic medical records and other sources to improve their quality of care?

Fee-for-service declining but still predominant

Payments for health care under the long-dominant remuneration model — fee-for-service — have declined in the 21st century, but have held steady as a percentage of payments in recent years, according to data from the Canadian Institute of Health Information (CIHI).(2)

Payment has shifted toward alternative compensation plans such as salary and capitation (per patient). In the 1999–2000 fiscal year, alternative payments totalled \$1.0 billion (10.6% of clinical payments), according to CIHI. By fiscal year 2014–2015, alternative payments had reached almost \$7.1 billion (28.4% of clinical payments). However, the percentage of payments that are fee-for-service has hovered at 71%–73% from 2008–2009 to 2014–2015.

Compensation models

Survey respondents, including physicians, saw fee-for-service compensation systems — still the dominant compensation model across Canada — as providing an incentive for high-turnover care and a disincentive to spend time with patients. Physicians surveyed said this has a strongly negative effect on care. As well, most current compensation models fail to support preventive care, multi-disciplinary team care, patient-centred care, or physician leadership.

Compensation models for health care in Canada are changing (see Fee-for-service declining but still predominant). The last 15 years have seen a shift to other compensation models, although this trend appears to have stabilized since 2008–2009. Recent health services research has shown little or no clear effect of compensation models on indicators of patient-centred care,(22, 24) but more research is needed. One of the main issues is that compensation models lack incentives for safe, effective and appropriate care. The Advisory Panel on Healthcare Innovation pointed out that there are few innovative compensation models in Canada, and that spending is not tied to outcomes. “This continued weak integration of budgets and accountability may well be the ‘fatal flaw’ in Canadian healthcare.”(4) By contrast, compensation models such as the one adopted by Kaiser Permanente in the United States link compensation to long-term outcomes of care rather than episodic encounters.

Therefore, this report calls for compensation models that reward sufficient time spent with patients, continuity of care, preventive care and team-based approaches . Many jurisdictions currently have incentives for group practices, but this needs to be expanded to provide support for teams combining physicians and other health care professionals with complementary skills to expand the scope of practice.

Most models provide no compensation for leadership activities, which physicians must carry out essentially as volunteers. An exception is academic medicine, in which physicians’ academic salaries can provide “protected time” for leadership, research and publication. Compensation models need to support such non-clinical activities for non-academic physicians as well.

In this context, compensation models need to change, to support physicians’ varied roles while ensuring high-quality care and access to care, and keeping health care costs sustainable. This report does not advocate any specific compensation model, as the choice of model must be appropriate to the care setting. But fee-for-service will play a less significant role in the future. Physicians also need to be supported during transitions in compensation models, to limit any disruption to care.

Physicians’ organizations are uniquely placed to advocate for alternative compensation models and to work with policy-makers to put these models in place. Physicians also emphasize that governments must commit to implementing new compensation models across Canada and across levels of care.

Discussion question:

What are the knowledge gaps to be addressed to understand incentives in compensation models?

Which compensation models should be recommended in which care settings, and why?

2. The role of the physician in the health care system

Why is it important for physicians to take on roles vis-à-vis the health care system?

The health care system needs fundamental change, agreed all respondents to surveys conducted for this project — physicians, other health care professionals and the public (see Need for health care reform). Physicians stated in the surveys that they are uniquely placed to contribute leadership in health care reform, as they understand that system-level design and change need to be focused on improving both patient care and the system as a whole.

In fact, physicians wish to gain greater input into the health care system as it undergoes significant reform, to ensure

that the outcome is safe, high-quality, effective and productive health care. Physicians need to be involved at all levels and in all settings within the system, including direct clinical care (including patient medical homes and other care team models), hospitals, health authorities, policy-making and research organizations, and agencies and departments of municipal, provincial and federal governments.

This role vis-à-vis the health care system ties in to the leadership roles sought by physicians. By taking on leadership activities beyond clinical care, physicians can apply their clinical expertise to the larger population. Thus, leadership should be seen as an adjunct to or extension of patient care, rather than as an alternative to it.

Although physicians already occupy some leadership roles throughout the system today, the goal is to create a future culture in which leadership roles are a natural option open to physicians in their professional careers.

Vision: physician's role in the health care system

- Physicians occupy leadership, governance and advocacy roles throughout the system. This role must be supported by all aspects of the physician ecosystem — from education through professional development and payment systems.
- Physicians are involved in all aspects of the health care system.
- This will entail significant investment in education and training to prepare physicians to lead in the new health care environment.
- Physicians will be among those providing leadership and input in reform of the health care system.
- Changes to the health care system and physician roles must support high-quality care — care that is safe, effective, patient-centred, timely, efficient and equitable.

Need for health care reform

“Canadian health care continues to be an underachiever. The Commonwealth Fund ranks its system 10th among those of 11 prosperous countries, and in the bottom 3 on measures of safety, quality, access, and efficiency. There is a chasm between the widely shared ambitions articulated in major reviews of the system and performance on the ground.”—Steven Lewis(3)
“Health care remains disjointed, with poor coordination and alignment within and across the various professions, acute and chronic care institutions and community care.” —*Advisory Panel on Healthcare Innovation, 2016*(4)
“The constancy of focus on doctors, drugs and hospitals speaks to the stasis in the system. If anything, it’s in a state of arrested development.”—*Dr. David Naylor, chair of the Advisory Panel on Healthcare Innovation*(7)

Obstacles

Evidence base: Barriers to physicians participating in health care system design and change

Surveys of physicians and other health care professionals conducted by Ipsos for this project found the following barriers to involvement in the health care system (in order by percentage of respondents):

Time constraints	34%
Government and political considerations*	18%
Remuneration model, lack of compensation, or fee-for-service structure	15%
Lack of money/funding	15%
Inadequate training	12%
Workload, inability to add other duties	12%
Lack of interest	8%
Lack of knowledge	8%
Lack of participation in planning and decision-making roles	8%

* Includes system-level barriers such as

- administration and government bureaucracy,
- health care professionals' lack of understanding/knowledge about system-level or government operations,
- concerns about government representatives attempting to achieve health system design without consulting with physicians about the strategic or tactical implications,
- physicians' lack of power within the political system and to affect system-level change,
- short-term/shifting government priorities as new governments are elected,
- government not listening to physicians,
- provincial disparities in health care systems

Physicians responding to the survey said several factors hindered them from participating in health care leadership roles (see Barriers to physicians participating in health care system design and change).

Physicians who want to become more involved in leadership in the health care system have difficulty gaining access to leadership opportunities within the system. Some of the issues for physicians include understanding complex government policy decision-making and engaging in an opaque, closed process. Other physicians indicated difficulty in understanding the roles, responsibilities and accountability within health care administration and governments. There was a sense that system-level change is out of physicians' reach, and that meaningful opportunities for physician input and involvement are lacking. Inadequate training in relevant leadership, policy and managerial skills came up in several responses. A recent report has criticized the current ways that physicians are prepared and supported for leadership roles as "disorganized, episodic and limited in scope, if they exist at all."⁽⁶⁾ With the time constraints in their professional schedules as well as making time for personal commitments

to achieve work/life balance, many respondents felt that they lacked the time to get involved in leadership roles.

Discussion questions:

Given the challenges of keeping up with medical knowledge, time constraints, and restricted leadership opportunities, how do we have a constructive conversation with the profession and current leaders in the health care system about physician involvement in system leadership?

Should preparation for leadership role be an expectation for all physicians or only for those who express an interest? Should there be core expectations for all physicians and options or advanced preparation for those interested?

Overcoming obstacles: Creating the right conditions

It is difficult for physicians to take on greater roles in the health care system if conditions are not supportive. A culture that values and encourages leadership roles is fundamental to nurturing the next generation of physician-leaders who will help the health care system move forward.

Barriers to involvement in system leadership must be eliminated at all stages of physicians' careers, from education and training through to their full practice career, in all care settings and regardless of clinical area of activity.

Many respondents said leadership skills should be offered as an integral, mandatory part of medical education and training. This view has been advanced in earlier reports and recommendations,(25, 26) but there is concern that these have not been acted upon, and that a culture that values and provides encouragement, time and compensation for leadership activities is still lacking.(6) Part of this education and training should involve an understanding of the health care system that practising physicians will work within. Those with an interest or aptitude for leadership should be identified early in their careers so that they can broaden their knowledge and skills.

Evidence base: Solutions to eliminate barriers to involvement in the health care system

When asked what physicians need to break down barriers to engagement in the health care system, physicians and other health care professionals responding to the surveys mentioned the following:

Knowledge, training and educational opportunities	20%
Collaboration and sharing	13%
Funding (greater funding, incentives, etc.)	12%
Remuneration or compensation for non-clinical activities	10%
Engagement in different fields, levels and processes	8%
Opportunities to communicate and voice opinions	7%

In education and training stages, leadership activities need to be valued, from allowing students and trainees to allocate time to leadership work to demonstrating how leadership improves career success and broadens career

Leadership roles

In this roadmap, “leadership” is meant broadly to take in a wide variety of potential roles (see What is leadership?). In all of these roles, physicians must make evidence-based decisions for the wise stewardship of the health care system, in the public interest. Such roles include:

- Health care management
- Voluntary roles in medical organizations and associations
- Governance positions in organizations and government
- Advocacy roles vis-à-vis governments
- Public service leaders in the health care system
- Expert consultants to health care organizations and governments
- Members of legislatures
- Political leaders, Cabinet ministers

What is leadership?

The physician’s leadership role will typically look more like an orchestra conductor or sports coach than like a traditional business manager, as a physician-leader guides and directs teams of autonomous health care professionals.

Leadership is one of the physician competencies in the *CanMEDS 2015 Physician Competency Framework*, where it is defined as follows:

“Physicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.”

This role emphasizes *shared* decision-making, *collaborative* leadership and membership in *teams*. Leaders may hold traditional management positions, get involved in medical organizations and associations, hold governance positions in organizations and governments, advocate to governments, or work behind the scenes to influence the health care system, among their many potential roles.

choices. Student and resident organizations are already an excellent training ground for future leaders. Many medical regulatory authorities and physician associations also involve students and residents, not only to ensure input from the next generation of physicians but also to expose the physicians-in-training to a broad range of skills and experiences. These opportunities need to involve meaningful contributions, to provide relevant input from the student or trainee perspective into policies that affect physicians-in-training. These early-career leadership opportunities also need to be expanded in order to mold the next generation of physician-leaders.

Once in practice, physicians may choose to engage in leadership at different points of their career, and opportunities for skill attainment and for leadership roles must be available at any time. Continuing training in leadership skills and in public policy should be acknowledged and rewarded through continuing professional development credits, and funding should be made available as it is for other educational pursuits and continuing medical education. Some accredited programs exist, and these need to be expanded.

In survey responses, physicians said that lack of incentives,

funding and compensation for non-clinical activities impede them from getting involved in health care system

design. As well, a recent report finds that physician leaders must devote many hours of uncompensated time to leadership activities and that many receive no compensation or only a stipend for leadership tasks.(6) The current lack of remuneration for non-clinical work is thus a factor inhibiting physicians' ability to move into leadership positions, either alongside their clinical responsibilities or as a full-time option during their careers.

While some opportunities currently exist, there need to be more avenues and formal opportunities for physician leadership. Medical expertise and knowledge should be a valued input for policy-making at all levels. All government bodies and provider organizations in the health care system should engage physicians — either through organizations representing them or as individuals — as stakeholders, advisors, and expert consultants. Physicians and other health care professionals should also be well-represented on the staff of health care authorities and policy-making bodies. Physicians should be free and encouraged to express their evidence-based perspectives on health care policy, as experts providing external input or as staff of policy-making organizations. As well, these organizations should not restrict physicians to scientific advisory roles but rather welcome them as public-service leaders with unique, valued expertise.

Discussion questions:

How can physicians gain input to and influence within health care and policy-making organizations?

What conditions are needed to have more physicians take on leadership roles within health care and policy-making organizations? Which factors are impeding this?

What types of roles in the health care system should be considered high-priority targets for greater physician involvement?

Which education and professional development models can be used to prepare physicians for leadership roles, and how can these models be used at different stages of the physician lifecycle?

How can compensation models help increase the involvement of physicians in the health care system?

Action plan

The physician's role in patient-centred care will evolve, so that in **10 years**:

- Patients will have a central role in the care team, planning and managing their own care, and sharing accountability for care.
- Physicians will continue to be their patients' advocate, educator, knowledge translator and system navigator.
- Health care teams providing comprehensive, patient-centred care will become the norm, especially in primary care.
- Physicians will work collaboratively in inter-professional and multi-disciplinary teams, in which they take on leadership roles as coordinators of care or expert consultants.
- Physicians will maintain the direct patient relationship based on trust with team care, as the "most responsible providers" within the team.
- Patient-centred care will focus increasingly on prevention and health-maintenance behaviour.
- Physicians will have the skills to provide clinical leadership in the health care system.
- Physicians will work in constructive, positive environments in which they feel valued and in which they can maintain their own health and work/life balance.
- Physicians' roles will be supported by new compensation models that support patient-centred care, multi-disciplinary team-based care, preventive care, leadership activities and roles. These models may differ depending on the care setting, but fee-for-service will play a less significant role. Governments will commit to models that ensure high-quality care and access to care while remaining sustainable in terms of cost.

These new roles must be incorporated in medical school curricula and residency training, as well as assessment examinations for licentiate and certification. Continuing medical education and assessment must help physicians adapt flexibly to new roles and changes to existing roles. A body of evidence needs to be developed on best practices for these roles, and compensation models must provide incentives and compensation for the roles.

The role of the physician in the health care system will evolve so that, **within 10 years**:

- Physicians will occupy leadership, governance and advocacy roles throughout the system
- Physicians will be involved in all levels and aspects of the health care system
- Physicians will provide leadership and input in reform of the health care system
- Leadership skills will form a mandatory part of medical education, and leadership training will be more readily available to practising physicians

To reach these goals, the following processes must be examined and updated to incorporate needed knowledge and skills and/or to foster opportunities:

- i. Medical education and residency training
 - a. Include patients' role in planning and managing their own care in education and training (CFMS, FMEQ, AFMC, MCC, Royal College, CFPC)
 - b. Include inter-professional education to develop competencies to work effectively in inter-professional collaborative teams (CFPC, Royal College, CFMS, FMEQ, AFMC, MCC)
 - c. Include medical, communications and information technologies, and evaluation and implementation of disruptive technologies (CFPC, Royal College, CFMS, FMEQ, AFMC, MCC)
 - d. Engage students and trainees meaningfully in implementation of curricula change, to ensure that such change benefits the next generation of physicians (CFMS, FMEQ, RDoC)
 - e. Institute education, training and assessment in an agreed set of core leadership skills based on the CanMEDS standard (CFMS, FMEQ, AFMC, CFPC, Royal College, MCC)
 - f. Include objectives about the health care system and finding leadership opportunities within it in education and training (CFMS, FMEQ, AFMC, CFPC, Royal College, MCC)
 - g. Create an educational and training culture that encourages and allows time for leadership activities (CFMS, FMEQ, RDoC, AFMC, CFPC, Royal College)
 - h. As part of a transformative modernization of postgraduate and residency training ("competence by design", Triple C Curriculum), ensure that training prepares physicians for all CanMEDS roles, especially leadership (CFPC, Royal College, MCC)

- i. Review the CanMEDS standards to ensure they guide preparation of physicians for multiple and changing roles envisaged in this roadmap (CFPC, Royal College, MCC)
- ii. Physician assessment
 - a. Incorporate the competencies identified in the vision into standards for specific and practice assessments (CFPC, Royal College, MCC)
 - b. Develop standards for assessment of inter-professional learning (MCC, CFPC, Royal College)
- iii. Continuing professional development
 - a. Through new programs to maintain physician performance throughout their lifecycle, ensure that physicians can fulfil future roles and can be adaptable and agile when these roles change, improving their accountability to patients and to society (CFPC, Royal College, MCC, SRPC)
 - b. Patient-centered care and team-based care become part of the practicing family physician profession profile as is the case for current residency training. (All CMF organizations)
 - c. Provide a broad offering of leadership training throughout the physician lifecycle, so that physicians can take on leadership activities and roles at any time in their career (CMA, HealthCareCAN, AFMC, Royal College, CFPC)
 - d. Provide continuing professional development in medical, communications and information technology, and evaluation and implementation of disruptive technologies (CFPC, Royal College, MCC, HealthCareCAN, AFMC)
- iv. Career path and care environments
 - a. Promote “patient’s medical home” model, including physician as the “most responsible provider,” as one model for team-based primary care (CFPC, AFMC, Royal College)
 - b. Develop a standard of practice for the physician’s role in team-based care (FMRAC)
 - c. Emphasize physician wellness and self-care within positive, constructive working environments (FMRAC, CFPC, Royal College, HealthCareCAN, CMPA, CMA)

- d. Establish guidelines to ensure that physicians interact positively and professionally to advance high-quality professional life and patient care (CMA, SRPC)
- e. Establish a framework for physician accountability in the health care system (CMA)
- v. Knowledge base/best practices
 - a. Establish knowledge base on compensation models in the health care system (CMA, HealthCareCAN, CFPC, Royal College)
 - b. Establish knowledge base and standards in practice quality improvement (PQI) to advance aspects of physician roles and team-based care (FMRAC, HealthCareCAN, CFPC, Royal College, MCC, CMPA)
 - c. Establish best practices in incorporating technology in practice for the benefit of patients and effectiveness of physicians (FMRAC, CFPC, Royal College, HealthCareCAN, CMPA)
 - d. Incorporate roles of the physician in risk mitigation and practice improvement programs as well as in the CMPA Good Practices Guide (CMPA, FMRAC, CFPC, Royal College, CMA)
 - e. Within health care organizations (health authorities, hospitals, others), ensure physician engagement is integral to the governance of the organization; for example, by including physician engagement in model bylaws (HealthCareCAN, CMPA, CMA)
 - f. Conduct research and establish best practices on performance and outcomes measurement, in particular in team-based care, to improve accountability (MCC, CFPC, Royal College, CMPA)
 - g. Establish best practices for assessment of inter-professional learning (MCC, CFPC, Royal College, AFMC)
- vi. Advocacy within health care system
 - a. Advocate for physicians' influence, empowerment and voice within the health care system (CMA, CFPC, Royal College)
 - b. Incorporate any relevant aspects of the vision into future revisions of the CMA Code of Ethics and the CMA Policy on Medical Professionalism (CMA)

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