

RECOMMENDATIONS FOR ACTION

Getting the Most out of Health Care Teams.



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Recommendations for Action: Getting the Most out of Health Care Teams

Thy Dinh, Carole Stonebridge, and Louis Thériault

Preface

This compendium report is the last publication of the research series *Improving Primary Health Care Through Collaboration*, which includes: Briefing 1—*Current Knowledge About Interprofessional Teams in Canada* (October 2012); Briefing 2—*Barriers to Successful Interprofessional Teams* (October 2012); and Briefing 3—*Measuring the Missed Opportunity* (May 2013).

This report uses three research approaches to offering recommendations to improve interprofessional primary care in Canada. Nine recommendations for action were developed based on a review of the literature, a survey of primary health care system stakeholders, and key informant interviews. Government decision-makers, primary care organization and team leaders, and care providers can use these recommendations to get the most out of health care teams.

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The findings and conclusions of this report are entirely those of The Conference Board of Canada and do not necessarily reflect the views of the CASHC investors or the external reviewers. Any errors or omissions in fact or interpretation remain the sole responsibility of The Conference Board of Canada.

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Services

EXECUTIVE SUMMARY

Getting the Most out of Health Care Teams: Recommendations for Action

At a Glance

- An interprofessional primary care (IPC) team is a group of professionals from different disciplines who work together to provide health services.
- Optimizing IPC teams can help improve patient outcomes and make the health care system more sustainable.
- To help overcome barriers to IPC, the authors synthesized findings from key informant interviews, a document review, and a stakeholder survey.
- This report provides nine recommendations to help governments, administrators, care providers, and patients optimize IPC.

Canadian governments want to fix the gateway to the health care system—primary health care—and establish a sustainable medical home for Canadians. Achieving these goals would increase the effectiveness and efficiency of the system, and maximize public investments. Over the past decade, there has been increased uptake of the interdisciplinary team model for delivering primary care services. However, so much more could be done. We need to engage all the relevant players, including governments, administrators, providers, and patients.

The main objective of this final report of our research series *Improving Primary Health Care Through Collaboration* is to provide guidance for optimizing interprofessional and collaborative primary care. Specifically, we wanted to answer the following questions: What are some of the ways to improve interprofessional primary care (IPC) in Canada and increase its uptake? What progress has been made with respect to IPC teams over the past seven years, since the end of the Enhancing Interdisciplinary Collaboration in Primary Health Care (EICP) initiative in 2006? What are some "better practice" models for IPC?

An IPC team is a group of professionals from different disciplines—ranging from mental health professionals and dietitians to midwives and audiologists—who work together to provide health services in a community. Some teams have also expanded to include administrative personnel, data analysts, and patient representatives.

IPC teams have been shown to produce multiple benefits, including significant improvements in health and wellness for patients with chronic conditions and risk factors, compared with care provided by a solo care provider. Optimizing IPC teams can help make the health care system more sustainable by reducing the costs of chronic conditions in other

parts of the health care system. Such teams can also expand Canada's labour force by extending Canadians' lives and improving their quality of life.

We argue that IPC teams should become the standard model for primary care, but barriers exist. Individual-level barriers include lack of role clarity and trust, and hierarchical roles and relationships. Practice-level barriers include lack of strong governance and leadership; difficulties in establishing appropriate skill mix and team size; and inadequate tools for communication. System-level barriers include inadequate interprofessional education and training; poor funding models; and lack of appropriate monitoring and evaluation. We need to leverage our understanding of these barriers and use evidence-based solutions to optimize IPC teams in order to improve the effectiveness and efficiency of the health care system.

To help move this agenda forward, we synthesized findings from key informant interviews, a document review, and a stakeholder survey. We also conducted three case studies of well-functioning IPC teams, which we included in this report. Using this information, we developed the following recommendations for optimizing IPC teams in Canada:

- Establish a strong and stable governance and leadership structure that includes a management team with appropriate knowledge and skills to make administrative decisions that improve the cost-effectiveness of the organization.
- Adopt a funding and remuneration structure that supports IPC and delivery of accessible, high-quality, cost-effective, patient-centred care.
- Provide population needs-based services delivered by the right providers, at the right time, in the most cost-effective way.
- Facilitate increased coverage of the population currently without access, as well as improve the timeliness of care in order to optimize effectiveness.
- Establish and implement standardized patient hand-offs, referrals, and care coordination among providers on the team, and across organizations and sectors, to ensure quality and continuity of care.

- Mandate high-quality interprofessional education and training for all health professionals to support the development and mastering of the core competencies of interprofessional collaboration.
- Optimize the use of communications technology, physical space, and other infrastructural supports to facilitate and improve collaboration.
- Engage in regular and consistent monitoring and evaluation of costeffectiveness, provider and organizational provider performance, and use of data linkage and knowledge sharing within and across teams.
- Adopt clear and enforceable accountability processes for the organization, administration, and providers, which are linked to performance.

Making effective changes in the way primary care is delivered requires the active participation of governments at the federal, provincial/territorial, and regional levels, as well as administrators, care providers, and patients. We explore each group's roles and responsibilities in this report.

As we have discussed in the series and in this final report, several important factors contribute to effective IPC teams. They relate to governance, leadership, accountability, skills mix, team member roles and responsibilities, funding, provider education and training, and monitoring and evaluation. We hope that this final report provides some insight into what can be done to optimize IPC teams in Canada for decision-makers, administrators, and service providers.

RÉSUMÉ

Tirer le meilleur parti des équipes de soins de santé : Recommandations pratiques

Aperçu

- Une équipe de soins primaires interprofessionnels (SPI) est un groupe de praticiens de différentes disciplines qui collaborent pour fournir des services de santé.
- L'optimisation des équipes SPI peut aider à améliorer l'état des patients et accroître la viabilité du système de soins de santé.
- Pour aider à surmonter les obstacles à la mise en place et à l'optimisation des équipes SPI, les auteurs ont synthétisé l'information obtenue à partir d'entrevues auprès de personnes-ressources clés, d'une revue de la littérature et d'un sondage auprès des parties intéressées.
- Les auteurs du présent rapport formulent neuf recommandations en vue d'aider les administrations publiques, les administrateurs, les fournisseurs de soins et les patients à optimiser le travail des équipes de SPI.

TIRER LE MEILLEUR PARTI DES ÉQUIPES DE SOINS DE SANTÉ : RECOMMANDATIONS PRATIQUES Recommandations pratiques

Les gouvernements canadiens veulent améliorer la porte d'entrée du système de santé – les soins de santé primaires – et offrir une assistance médicale viable aux Canadiennes et aux Canadiens. L'atteinte de ces objectifs accroîtrait l'efficacité et l'efficience du système, tout en maximisant les investissements publics. Au cours des dix dernières années, l'utilisation du modèle interdisciplinaire s'est accrue dans le cadre de la prestation des soins primaires. Cependant, il reste encore beaucoup à faire et tous les acteurs concernés doivent se mobiliser, notamment les administrations publiques, les administrateurs, les fournisseurs de soins et les patients.

Le présent rapport, le dernier d'une série de recherche intitulée *Improving Primary Health Care Through Collaboration* (Améliorer les soins de santé primaires grâce à la collaboration), vise principalement à tracer la voie vers une utilisation optimale des soins primaires interprofessionnels (SPI). Plus précisément, nous avons cherché à répondre aux questions suivantes : par quels moyens pouvons-nous améliorer le modèle de SPI au Canada et en accroître l'adoption? Quels progrès ont été réalisés par les équipes de SPI au cours des sept dernières années, depuis la fin de l'Initiative pour l'amélioration de la collaboration interdisciplinaire dans les soins de santé primaires (ACIS), en 2006? Pouvons-nous circonscrire quelques-unes des « pratiques exemplaires » de SPI?

Une équipe de soins primaires interprofessionnels comprend des professionnels de différentes disciplines – allant de spécialistes de la santé mentale à des sages-femmes en passant par des diététistes et des audiologistes – qui unissent leurs efforts pour fournir des

services de santé à une collectivité. Certaines équipes ont aussi élargi leur collaboration au personnel administratif, aux analystes de données et aux représentants des patients.

Comparativement aux soins primaires prodigués par un seul fournisseur, les SPI se sont avérés très avantageux, notamment en améliorant sensiblement l'état de santé et le bien-être des patients qui souffrent de maladies chroniques et qui présentent des facteurs de risque. L'optimisation des équipes de SPI peut contribuer à rendre plus viable la prestation des soins de santé en réduisant les coûts des maladies chroniques dans d'autres parties du système de soins de santé. Ces équipes peuvent aussi accroître la population active du Canada en prolongeant la vie des Canadiennes et des Canadiens et en améliorant leur qualité de vie.

Nous soutenons que les équipes de SPI doivent devenir un modèle standard pour les soins primaires, mais selon nous, il reste encore plusieurs obstacles à surmonter pour en arriver là. Au plan individuel, il y a un manque de clarté et de confiance quant aux rôles des divers intervenants et aux relations hiérarchiques qui en découlent. Sur le plan pratique, la gouvernance et l'encadrement ne sont pas assez rigoureux; il est difficile de déterminer la combinaison appropriée de compétences et la taille idéale des équipes; et les outils de communication demeurent inadéquats. Sur le plan systémique, la formation en soins de santé interprofessionnels est inadéquate; les modèles de financement sont insatisfaisants; et les processus de surveillance et d'évaluation sont inappropriés. Nous devons mettre à profit notre compréhension de ces obstacles et utiliser des solutions fondées sur des données probantes pour optimiser les équipes de SPI en vue d'améliorer l'efficacité et l'efficience du système de soins de santé.

Afin de faciliter la réalisation de ce programme, nous avons synthétisé l'information obtenue à l'aide d'entrevues auprès de personnes-ressources clés, d'une revue de la littérature et d'un sondage auprès des parties intéressées. Nous avons aussi mené trois études de cas d'équipes de SPI qui fonctionnent bien et les avons incluses dans le

TIRER LE MEILLEUR PARTI DES ÉQUIPES DE SOINS DE SANTÉ : RECOMMANDATIONS PRATIQUES Recommandations pratiques

présent rapport. À partir de ces renseignements, nous avons élaboré les recommandations suivantes en vue d'optimiser les équipes de SPI au Canada :

- Établir une structure de gouvernance et d'encadrement forte et stable, qui comporte une équipe de gestionnaires ayant les connaissances et les compétences appropriées pour prendre des décisions éclairées, susceptibles d'améliorer le rapport coût-efficacité de l'organisation.
- Adopter une structure de financement et de rémunération qui soutient les équipes de SPI et la prestation de soins accessibles, de grande qualité, efficients et axés sur le patient.
- S'assurer que des services axés sur les besoins de la population sont offerts par les fournisseurs appropriés, en temps opportun et de la manière la plus économique possible.
- Aider à élargir la prestation des soins primaires aux personnes qui n'y ont pas encore accès et améliorer les délais de prestation afin d'optimiser l'efficacité des soins.
- Établir et mettre en œuvre un système standardisé de coordination des transferts, des aiguillages et des soins pour les fournisseurs d'une même équipe, et ceux d'une organisation ou d'un secteur, afin d'assurer la qualité et la continuité des soins.
- Exiger une formation de qualité en soins de santé interprofessionnels pour tous les professionnels de la santé, afin de soutenir le perfectionnement et la maîtrise des compétences essentielles à la collaboration interprofessionnelle.
- Optimiser l'utilisation de la technologie des communications, des locaux et d'autres infrastructures de soutien pour faciliter et améliorer la collaboration.
- Participer à un processus régulier et uniforme de surveillance et d'évaluation du rapport coût-efficacité, du rendement des fournisseurs individuels et organisationnels, ainsi que de l'utilisation du couplage des données et de l'échange des connaissances à l'intérieur des équipes de SPI et entre elles.
- Adopter des méthodes claires et applicables de responsabilisation liées au rendement pour les organisations, l'administration et les fournisseurs.

Résumé | Le Conference Board du Canada

Pour apporter de réels changements à la prestation des soins de santé primaires, il faut la participation active des administrations publiques fédérale, provinciale ou territoriale, et régionale, ainsi que celle des administrateurs, des fournisseurs de soins et des patients. Dans le présent rapport, nous explorons les rôles et les responsabilités de chacun de ces groupes.

Comme nous l'avons mentionné dans l'ensemble de nos études et dans le présent rapport final, plusieurs facteurs importants contribuent à la bonne marche d'une équipe de SPI. Ces facteurs sont liés à la gouvernance, à l'encadrement, à la responsabilisation, à la combinaison des compétences, aux rôles et aux responsabilités des membres de l'équipe, au financement, à la formation des fournisseurs, ainsi qu'à la méthode de surveillance et d'évaluation. Nous espérons que ce rapport final donnera aux décideurs, aux administrateurs et aux fournisseurs de soins quelques idées sur les possibilités d'optimisation des équipes de SPI au Canada.

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CHAPTER 1

Introduction

Chapter Summary

- Canada's aging population and prevalence of chronic conditions are growing.
 Governments have responded to these trends with regulatory changes, new provider types and roles, and additional public funding for services traditionally purchased privately or through insurance.
- Interprofessional primary care (IPC) teams significantly improve the health and wellness of patients with chronic conditions and risk factors; offset costs to other parts of the health care system, such as acute care; and improve labour force participation by extending Canadians' lives and improving their quality of life.
- This report provides recommendations to ensure IPC teams function well and yield the benefits Canadians and their governments expect.

It has been shown that interprofessional primary care teams produce multiple benefits, compared with care provided by a solo care provider.

Canada's aging population and prevalence of chronic conditions are growing.¹ These demographic shifts will continue to define health care services. Over the past decade, we have seen some significant changes in the landscape of and expectations for primary health care, the first and most common point of contact with the health care system, including the evolution of the interdisciplinary team model of primary care services delivery. (See box "What Is an Interprofessional Primary Care Team?")

Governments have responded to these trends by facilitating more efficient and effective ways for primary health care providers and organizations to operate. Regulatory changes, new provider types and roles, and additional public funding for services traditionally purchased privately or through insurance have opened the door to new ways to improve service access and quality of care in existing and new organizations. Governments undoubtedly hope that these changes will also give them a greater return on their investment in primary health care.

Interprofessional primary care (IPC) teams have been shown to produce multiple benefits, including significant improvements in health and wellness for patients with chronic conditions and risk factors, compared with care provided by a solo care provider.² IPC teams have also been found to offset the costs to other parts of the health care system, such as acute care, and to improve labour force participation by extending Canadians' lives and improving their quality of life.³

- 1 The Conference Board of Canada, Health Matters.
- 2 Dinh and Bounajm, Improving Primary Health Care Through Collaboration. Briefing 3.
- 3 Ibid.

What Is an Interprofessional Primary Care Team?

We describe an IPC team as a group of professionals from different disciplines who work together and communicate under an arrangement⁴ to provide health services to a patient population in the community. IPC teams have expanded to include a large number and variety of different types of health professionals and administrative personnel. Health professionals include mental health counsellors and psychologists, social workers, dietitians, pharmacists, physiotherapists, chiropractors, occupational therapists, speech-language pathologists and audiologists, midwives, physician assistants, registered nurses, licensed practical nurses, nurse practitioners, and physicians. Some teams have also expanded to include other people, such as an executive director, administrative staff, managers, data analysts, and patient representatives.

To improve the effectiveness and efficiency of the health care system and maximize their public investments, Canadian governments are looking to expand the use of interprofessional, collaborative teams to deliver high-quality primary health care services. These teams should provide the appropriate⁵ services to meet the needs of the population; improve access to under-served people; employ the right type and number of service providers and administrative personnel to deliver appropriate and timely services; optimize communication and collaboration among team members and with other segments of the health care system; use resources efficiently to support and remunerate the IPC team while staying within the organization's budget; and have strong governance and leadership to ensure quality of care, effectiveness, efficiency, and accountability.

- 4 We focus primarily on IPC teams that operate under a formal interprofessional collaborative arrangement. We acknowledge that many health professionals work within informal collaborative arrangements.
- 5 "Appropriateness" refers to the selection of services and service providers that best address population needs.

The three briefings^{6,7,8} of our research series *Improving Primary Health Care Through Collaboration* have found the following:

- IPC teams can improve health outcomes and access for patients with chronic and complex conditions.
- Across Canada, significant differences exist in IPC team model structure, function, funding, governance, effectiveness, and maturity.
- The degree and quality of collaboration is mixed, and the extent to which team members work to full scope of practice is inconsistent across provinces and territories.
- Optimizing IPC teams can help mitigate the economic burden of chronic conditions and improve the sustainability of the health care system.
- It has been estimated that increasing access to IPC teams for Canadians with Type 2 diabetes and depression could annually reduce Type 2 diabetes complications by 15 per cent, expand depression patients' labour force activity by about 52,000 person-years, and save the health care system almost \$3 billion in direct and indirect costs.
- Barriers to the optimization of IPC practice exist at the individual, practice, and systems levels.
- Individual-level barriers include lack of role clarity and trust, and hierarchical roles and relationships.
- Practice-level barriers include lack of strong governance and leadership; difficulties in establishing appropriate skills mix and team size; and inadequate tools for communication.
- System-level barriers include inadequate interprofessional education and training, poor funding models, and a lack of appropriate monitoring and evaluation.
- Gaps remain in the ability to leverage knowledge of these barriers and potential solutions in order to optimize IPC teams in Canada.
- 6 Dinh, Improving Primary Health Care Through Collaboration. Briefing 1.
- 7 Dinh, Improving Primary Health Care Through Collaboration. Briefing 2.
- 8 Dinh and Bounajm, Improving Primary Health Care Through Collaboration. Briefing 3.

Chapter 1 | The Conference Board of Canada

This final report in the series builds on these findings. Specifically, it provides recommendations to ensure current and future IPC teams function well, and yield the benefits Canadians and their governments expect. We based the insights in this report on a literature review, as well as a survey of and interviews with key stakeholders in the primary health care system.

The key audiences for this report include administrators and policy-makers in federal, provincial/territorial, and regional governments, as well as service providers working on IPC teams. The client population (patients) can also benefit from this research, as it supports their use of interdisciplinary, collaborative teams to more efficiently and effectively manage their health.

CHAPTER 2

Methodology

Chapter Summary

- The authors hoped to identify persisting barriers to IPC and potential solutions.
- They conducted a four-week online survey in April 2013 of people working in the primary health care system; three case studies of well-functioning IPC teams; a review of documents that could provide evidentiary support for innovative and effective approaches to IPC; and telephone interviews with IPC experts and health care providers in a range of professions.
- The information collected related to the factors that contribute to the design of a well-functioning and effective IPC team, including governance and leadership; funding and remuneration; population access to care; health human resources management; policies and agreements around practice, roles, responsibilities, and competencies; interprofessional education and training; infrastructure; monitoring and evaluation; and accountability.

The main objective of this final report is to provide guidance on how to optimize¹ interprofessional and collaborative primary care by addressing the current barriers to their optimization.² Specifically, we wanted to answer the following questions:

- What are some of the ways to improve and increase uptake of IPC in Canada?
- What progress has been made with respect to IPC teams over the past seven years, since the end of the Enhancing Interdisciplinary Collaboration in Primary Health Care (EICP) initiative in 2006?
- What are some "better practice" models of IPC?

Our recommendations for optimizing IPC teams in Canada are based on our synthesis of findings from key informant interviews, a document review, and a stakeholder survey. We also conducted three case studies of well-functioning IPC teams.

Key Informant Interviews

We conducted several telephone interviews with representatives of organizations that participated on the Steering Committee of the EICP initiative from 2004 to 2006 and with other people who could provide representative insights about their profession. The federal government funded the EICP initiative through the Primary Health Care Transition Fund, which was a key investment in fostering the progress we continue to see in terms of IPC teams. EICP member organizations included the Canadian Psychological Association, Canadian Nurses Association, Canadian Medical Association, Canadian Physiotherapy Association,

- 1 We use the term "optimize" to mean increase or improve the value, quality, and uptake or implementation of IPC.
- Optimization is the "act, process, or methodology of making something (as a design, system, or decision) as fully perfect, functional, or effective as possible." www.merriam-webster.com/dictionary/optimization.

Canadian Association of Occupational Therapists, Canadian Association of Social Workers, Canadian Pharmacists Association, College of Family Physicians Canada, Dietitians of Canada, and Canadian Association of Speech-Language Pathologists and Audiologists.

The objective of the informant interviews was to elicit expert opinion on the progress made over the past seven years in terms of interprofessional collaboration in primary care. (See box "Key Informant Interviews: What Progress Have We Made Since the EICP Initiative?") The interviews also aimed to identify the persisting barriers to IPC and the potential solutions that could help us develop recommendations to optimize IPC. Insights from these interviews will be referenced as "informant interview" in the footnotes.

We also conducted telephone and face-to-face interviews with individuals who have applied knowledge of innovative primary health care teams in Canada and the U.S. We used the findings from these interviews when describing innovation models for IPC.

Key Informant Interviews: What Progress Have We Made Since the EICP Initiative?

- The conditions for IPC are more favourable; there is greater receptivity to team care among service providers and professional bodies.
- Governments continue to drive IPC. For example, the Council of the Federation
 Health Care Innovation Working Group continues to make team-based care
 a priority.
- Although progress on IPC has increased over time, at present it is stagnating, and there is still a lot more progress to be made.
- There is a current focus on Triple Aim.3
- The Institute for Healthcare Improvement Triple Aim Initiative has the following dimensions: improving the patient experience of care; improving the health of populations; and reducing the per capita cost of health care. See www.ihi.org/offerings/Initiatives/TripleAim/Pages/default.aspx.

- Several professional bodies continue to be interested in interprofessional collaboration. They have updated policy statements, and developed tools and training resources for their members.
- University training programs for health care professionals have increased their focus on IPC.
- Funding for and focus on the medical and physician-led model of primary care practice reinforce the status quo and continue to be a barrier to optimizing IPC.
- There continues to be a lack of engagement in health care system discussions and negotiations with other professional groups beyond physicians and nurses.

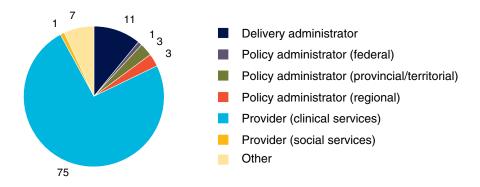
Document Review

We identified documents that could provide evidentiary support for innovative and effective approaches to interprofessional collaboration in primary care. These documents included published reports from the EICP initiative, the Canadian Interprofessional Health Collaborative (CIHC), and the Health Council of Canada (HCC). We also included research articles from peer-reviewed journals.

The Interprofessional Primary Care Stakeholder Survey

We conducted a four-week online survey in April 2013 to collect opinions from people working in the primary health care system, including administrators and health and social services providers. We received 162 responses to this survey, mainly from clinical health services providers. (See Chart 1.) Of clinical health providers, 23 per cent were psychologists, 22 per cent were nurses, 19 per cent were midwives, and 3 per cent were family physicians. Over 6 per cent of respondents had five or more years of work experience in the primary health care system. Insights from this survey are referenced as "IPC Stakeholder Survey" in the footnotes. The results of this survey are included in Appendix A.

Chart 1
Survey Respondents' Professional Role Within the Canadian Primary Health Care System (per cent; n = 162)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Case Studies

Through our document review and stakeholder survey, we identified three case studies that we thought demonstrated many of the traits of a high-functioning and effective IPC team: the Family First Family Health Team and Health Centre in Orleans, Ontario; the Slave Lake Family Care Clinic in Slave Lake, Alberta; and Clinica Family Health Services in Denver, Colorado. Although each practice model has certain shortcomings, each shows innovation in governance, leadership, supportive infrastructure, accessibility, and team collaboration and multidisciplinarity. We highlight how the case studies demonstrate innovation in each of these areas in text boxes throughout this report. In addition, we provide summary and detailed descriptions of these three models in Chapter 4 and Appendix B.

Information Synthesis

The information extracted from the interviews, stakeholder survey, and document review relates to the factors that we think contribute to the design of a well-functioning and effective IPC team. These

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factors include governance and leadership; funding and remuneration; population access to care; health human resources management; policies and agreements around practice, roles, responsibilities, and competencies; interprofessional education and training; infrastructure; monitoring and evaluation; and accountability.

CHAPTER 3

Recommendations to Support and Improve Interprofessional Collaboration in Primary Care Teams

Chapter Summary

- This chapter provides nine recommendations to support and improve IPC teams. Each recommendation includes illustrative examples from the three case studies.
- Barriers to implementing IPC exist at the individual, practice and system levels.
 These barriers include inappropriate governance and leadership structures, non-competitive pay, and difficulties in developing interprofessional curricula.
- Respondents and informants identified interprofessional education and training as a critical component of successful IPC teams.
- This education and training should focus on six core competencies: interprofessional communication, client-centred care, role clarification, team functioning, collaborative leadership, and interprofessional conflict resolution.
- Respondents and informants also mentioned regular team meetings, solid monitoring and evaluation, and clear and enforceable accountability processes as elements of strong IPC teams.

The literature supports the use of comprehensive IPC teams whose members come from multiple disciplines beyond the physician and nursing professions. The evidence is particularly strong for the use of these IPC teams to prevent and manage complex and chronic conditions.¹ In the third briefing of the research series *Improving Primary Health Care Through Collaboration*, we estimated that improving access to effective IPC teams could lead to significant health and economic benefits.²

The following nine recommendations for action are informed by our research findings and grounded in the principles of better performance, better health outcomes, and cost-effectiveness, which are fundamental elements of a sustainable health system. We have examined the way in which the current primary health care system functions, and identified innovations within the system and in comparable settings that could improve effectiveness and efficiency.

Recommendation 1

Establish a strong and stable governance and leadership structure that includes a management team with appropriate knowledge and skills to make administrative decisions that improve the cost-effectiveness of the organization.

- 1 Dinh and Bounajm. Improving Primary Health Care Through Collaboration. Briefing 3.
- 2 Ibid.

An important observation from our research is that the success and sustainability of IPC teams hinge on a strong governance and leadership structure.³ Approximately 30 per cent of IPC Stakeholder Survey respondents identified lack of strong governance and leadership as a significant barrier to interprofessional collaboration in primary care (see Appendix A). Respondents also said an appropriate and effective governance and leadership structure would address practice-level barriers. (See Chart 2.) In a high-functioning IPC team, management ensures administrative operations and decisions, and service delivery, are grounded in a vision and mission of efficient, effective, interdisciplinary, collaborative care to improve the health and wellness of the patient population.

Chart 2
Identified Solutions to Practice-Level Barriers to Interprofessional Collaboration in Primary Care
(number of responses)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

3 IPC Stakeholder Survey; informant interview.

An administrator or administrative team independent of the provider team should be responsible for identifying population needs, planning health services and programs, budgeting, and human resources management.⁴ This operational structure reduces the potential for conflicts of interest that are likely to arise in teams where providers—usually physicians also have administrative powers, including the ability to determine or influence the employment of other team members.⁵ This also affects perceived hierarchies in the team, which has been identified as one of the most important barriers to effective interprofessional collaboration.⁶ Successful models of interdisciplinary collaborative care clearly separate administrative and patient service provision. Examples include Ontario community health centres and Alberta family care clinics. These IPC models often have a CEO, executive director, and/or manager with extensive management and leadership experience and skills, and physicians are service provider employees of the team and organization (see innovative models 2 and 3).

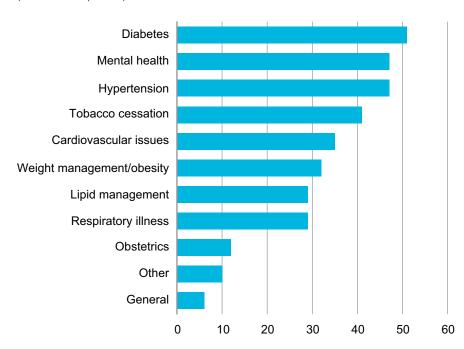
One of the most important roles of the administrator or administrative team is to ensure that the overall organization is effective and efficient.

One of the most important roles of the administrator or administrative team is to ensure that the overall organization is effective and efficient, which requires knowledge, skills, and experience in business management. The administrator can choose team members and determine team roles based on predominant service delivery needs, and can also set budgets and make financial decisions for the IPC team.⁸ The administrator or administrative team, in consultation with providers, should be responsible for developing and implementing policies, protocols, and agreements that clearly define team member roles, responsibilities, required competencies, and accountability related to collaborative services delivery.

- 4 IPC Stakeholder Survey.
- 5 Ibid.
- 6 Ibid.
- 7 Ibid.
- 8 Informant interview.

In the IPC Stakeholder Survey, only 45 per cent of respondents said care providers on their team or in their organization were practising under collaborative practice agreements and 48 per cent said providers were practising under collaborative practice protocols. 9 Collaborative practice protocols were most commonly used for chronic disease prevention and management, and mental health services. (See Chart 3.)

Chart 3
Existing Collaborative Practice Protocols by Health Program (number of responses)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

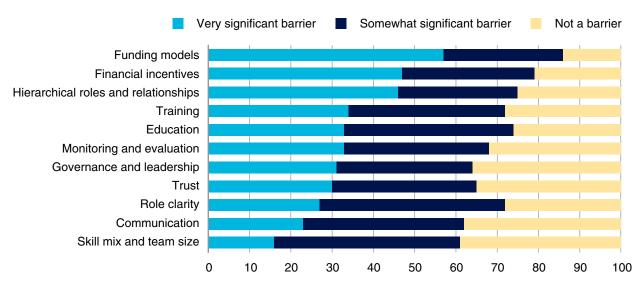
9 Practice agreements are formal policies that govern the general practice of a team or organization. Collaborative practice protocols are specific guidelines governing the ways individuals or groups of professionals on the team work together to provide specific patient health services or programs.

Recommendation 2

Adopt a funding and remuneration structure that supports IPC and delivery of accessible, high-quality, cost-effective, patient-centred care.

IPC Stakeholder Survey respondents identified funding models and financial incentives as the most significant barriers to interdisciplinary, collaborative primary care practice. (See Chart 4.) Remuneration (the manner in which and amount that providers are paid) in a fee-for-service model may not be as conducive to interprofessional collaboration in primary care as remuneration in alternative funding models. When primary care services are funded through one provider—in most cases, a physician—through a fee-for-service, capitation, or even blended payment structure, there may be limited financial incentives to share service provision or decision-making with other team members.

Chart 4
Reviewed Barriers to Effective Interdisciplinary Collaboration in Primary Care Practice (per cent)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Recruiting and retaining providers is a challenge for community health centres and other models of care delivery where the pay may be noncompetitive.

Remuneration has a significant impact on the recruitment and retention of skilled service providers in an environment where there is high mobility, high demand, and limited supply. 10 In some IPC team models. health human resources recruitment and retention is a challenge due to variability in pay within and across professions and settings. A clear example is in community health centres that commonly hire care providers as salaried employees. In a "market" where physicians can make significantly more as fee-for-service providers in private family practices than they can in community health centres, and where nurses' salaries are higher in hospitals than they are in primary care clinics or centres, recruiting and retaining providers is a significant challenge for community health centres and other models of care delivery where the pay may be non-competitive. For example, in a post-interview to the IPC Stakeholder Survey, a licensed practical nurse noted the marked contrast between hourly wages for her position in a family practice and in a hospital, but added that her desire to work in primary care outweighed the pay difference.

Remuneration of all care providers, not just physicians, should be standardized across settings and specialities.¹¹ When payment systems for physicians differ from those for other health professionals, that usually prohibits both collaborative care and cost-effective care delivery. Recognizing that inconsistent and non-competitive provider pay is an issue in IPC teams, the Association of Ontario Health Centres, Association of Family Health Teams of Ontario, and Nurse Practitioners' Association of Ontario are working together to establish a provincial compensation structure for primary care organizations based on these principles.¹²

In the IPC Stakeholder Survey and informant interviews, several people mentioned that the benefits of high-functioning and well-funded IPC teams can be a draw for both administrators and health and social

- 10 IPC Stakeholder Survey; informant interview.
- 11 Ibid.
- 12 Adrianna Tetley (Association of Ontario Health Centres), personal communication, July 5, 2013.

service providers, despite the fact that their colleagues working in other public and private sector settings earn more money. Specifically, employment on a high-functioning IPC team can offer benefits, including opportunities for team members to practise to their full scope, improved work-life balance, and overall job satisfaction (Appendix A). On an IPC team, service providers can focus on service provision and care planning rather than administrative work. When teams are optimized in terms of skill mix and size, IPC teams can offer work-life balance by reducing excessive work burden on any one type of health service provider. Service providers working in a high-functioning IPC team environment often have higher work satisfaction than those working in other primary care settings or on less effective IPC teams.

Case Studies: Governance and Funding

Family First Health Centre (FFHC) and Family First Family Health Team (FFFHT), Orleans, Ontario

The FFHC and FFFHT are two differently governed and funded organizational models that deliver care services to the same population. The FFHC physicians' conduct is governed by their professional body, while the FFFHT's governance structure includes a board of four FFHC physicians. The board and the executive director (ED) meet regularly to discuss important issues for the FFFHT. The ED reports to the board. The FFFHT is considered a well-functioning family health team because of a very strong ED and lead physician who share the same vision for interdisciplinary, collaborative practice and who have an effective and respectful working relationship.

13 IPC Stakeholder Survey; informant interview.

The FFHC is a private physician practice. It is funded privately by physicians remunerated directly by MOHLTC as a family health organization (FHO) via a blended capitation payment model.¹⁴ The FFHC is privately funded by the practice physicians' gross revenues, which cover the physicians' pay, a significant proportion of overhead costs, and the salaries of administrative staff and registered practical nurses. The MOHLTC funds the FFFHT as a family health team. The funding covers a proportion of overhead costs, most of the ED's salary, and the salaries of the interdisciplinary health providers. The physicians provide a salary supplement to the ED.

Slave Lake Family Care Clinic (SLFCC), Slave Lake, Alberta

The SLFCC is accountable to and funded by both Alberta Health Services (AHS) and Alberta Health, the provincial ministry that sets policy, legislation, and standards for the health system. AHS sets the budgets of the SLFCC and oversees its human resources management. The SLFCC's accountability framework outlines strict evaluation criteria, including many process indicators for which the data come mostly from electronic medical records. Examples of quality metrics include same-day access, available time slots, and number of attached and unattached patients. A steering committee guides the SLFCC's operations. It includes two physicians, one nurse practitioner, two AHS representatives, and one medical liaison who works with AHS. In addition, an advisory committee of community members provides a voice for community concerns.

Blended capitation is a system of fixed payment per rostered patient, based on a defined basket of primary care services provided based on the age and sex of each patient. Fees-for-service are paid for other services. Monthly comprehensive care capitation payments are paid to physicians for all enrolled patients, and other fees and bonuses, premiums, and special payments are paid for services including chronic disease management, preventive care, prenatal care, home visits, hospital visits, obstetrical care, and palliative care.

Administrators of IPC teams often struggle to define the appropriate mix of providers to meet service requirements within budget constraints.

Alberta Health transfers fee-for-service payments to the SLFCC to cover contract payment to physicians, who receive a salary from the SLFCC. All other employee salaries and other SLFCC costs are covered by AHS funding. Physicians are not employees of the SLFCC, as they are under negotiated contracts and, as such, are required to pay some overhead costs.

Clinica Family Health Services, Denver, Colorado

Clinica is a private, publicly funded, non-profit corporation governed by a board of directors of volunteers. The organization's bylaws require clinic patients to comprise over half of the board's members. The CEO, who is hired by the board, is responsible for all other human resources decisions. The board reviews and approves the annual budget, and develops and approves the organization's policies and strategic plan. Leadership has been identified as a major driver in the success of the organization and is based on the Institute for Healthcare Improvement's Model for Improvement and "The Big 6." The latter focuses on improving patient-centred, population-based management through continuity, access, an improved care delivery model, improved office efficiency, improved infrastructure design, and patient activation¹⁵ and self-management.

Clinica is financed through payments from federal health insurance (Medicaid), grants under section 330 of the *Public Health Service Act*, funds raised from local foundations and benefactors, sliding-scale payments collected from uninsured patients, and funds from Colorado tobacco taxes. Like other community health centres in the U.S., Clinica faces financial challenges. Its annual budget is about \$30 million.

All staff members are salaried employees of the centre. Due to difficulties in recruiting highly skilled providers, half of Clinica's providers are employed part-time. The CEO tries to keep all staff salaries close to the local market wage, but they tend to be slightly below it. The CEO is

^{15 &}quot;Patient activation" is a person's willingness and ability to manage his or her own health, influenced by the person's skills and knowledge.

not the highest paid staff member. A pay-for-performance system was in place from 2003 to 2007. The centre held some of its revenues in a pool to provide bonuses to the health care teams (pods), as opposed to providers that achieved high performance.

Recommendation 3

Provide population needs-based services delivered by the right providers, at the right time, in the most cost-effective way.

Care services within an IPC should include active support for self-care; primary and secondary prevention; management of ambulatory care sensitive conditions;¹⁶ care for both physical and mental health requirements; coordination of care and navigational support throughout the health care and social services system; medication management; and other services deemed necessary to support and promote better health among patients.¹⁷

Administrators of IPC teams often struggle to define the appropriate mix of providers to meet service requirements within budget constraints. ¹⁸ Knowledge and understanding of providers' scopes of practice and competencies, and evidence of effectiveness and cost-effectiveness, are important in determining the appropriate provider mix, roles, and responsibilities for the team. The Government of Manitoba's Primary Care Interprofessional Team Toolkit helps clinics in the province's Physician Integrated Networks (PIN) decide which providers to include on the IPC team. ¹⁹ The Toolkit summarizes the scopes of practice of a variety of non-physician health professionals who could work on an IPC

- 17 American Academy of Family Physicians and others, Joint Principles.
- 18 Dinh, Improving Primary Health Care Through Collaboration. Briefing 2.
- 19 Government of Manitoba, Primary Care Interprofessional Team Toolkit.

¹⁶ An "ambulatory care sensitive condition" is a condition that is presented in the acute care system (secondary health care or hospital) due to lack of appropriate and timely care within the primary (ambulatory) care system.

As IPC teams develop, it may be possible to provide guidance on IPC team panel size and team make-up that takes into consideration population counts and needs.

team, including chiropractor, clinical assistant and/or physician assistant, counsellor, dietitian, kinesiologist, occupational therapist, midwife, pharmacist, physiotherapist, psychologist, licensed practical nurse, nurse practitioner, licensed practical psychiatric nurse, social worker, and speech-language pathologist and audiologist.

Provincial and territorial governments have traditionally used physician panel size²⁰ to determine the ratio of family physicians to patients. This approach to determining health human resources needs is not applicable to an IPC team because it does not take into consideration other health professionals, scopes of practice, or patient population heterogeneity in terms of health needs and resource use. Our research was unable to identify many approaches to determining IPC panel size. One study from Australia by Segal and others²¹ estimated that a primary care team of 22.1 full-time-equivalent (FTE) positions would be required to provide appropriate services to 1,000 patients with diabetes. The study also identified the number of required positions according to competencies, including 3.5 FTE positions per 1,000 patients to address psychosocial issues, 3.3 FTE positions per 1,000 patients to provide dietary advice. 3.2 FTE positions per 1,000 patients to provide home nursing, and 2.8 FTE positions per 1,000 patients to provide diabetes education. The study concluded that primary care services planning should employ a needs-driven approach that includes identifying the required competencies to deliver appropriate, high-quality, effective services. Our informant interviewees also noted that types of services, team mix, and team size must be adjusted according to population needs. As IPC teams further develop, it may be possible to provide guidance on IPC team panel size and team make-up that takes into consideration not only population counts but also population needs.

^{20 &}quot;Physician panel size" refers to the physician-to-patient ratio and is often reported as the number of patients per physician.

²¹ Segal and others, Regional Primary Care Team to Deliver Best-Practice Diabetes Care.

Recommendation 4

Facilitate increased coverage of the population currently without access, as well as improve the timeliness of care in order to optimize effectiveness.

Some IPC team models have provided limited access to services because of narrow patient eligibility criteria, limited hours of operation, provider shortages, or other inefficiencies in administration and/or care delivery. ²² One of the barriers to IPC team access is the process of patient rostering. ²³ For most primary care teams in Canada, a patient cannot receive care from an IPC unless he or she is rostered to a physician and, in some cases, to the practice or team. The Integrated Health Networks (IHNs) in British Columbia have been effective in managing chronic conditions, reducing emergency room visits, and meeting self-management goals. However, they have not been quite as successful in increasing access to care, due to rostering rules, as well as very strict patient registration eligibility criteria. ²⁴

In Ontario, community health centres (CHCs) do not limit access via rostering but still only cover 4 per cent of the eligible population. Ontario CHCs have been effective in reducing emergency room visits, and they are particularly successful in caring for members of vulnerable populations, who are often those with the most complex health conditions, and who are more likely to experience social and mental health issues. Despite excellent care, access remains an issue, partly due to inadequate resources. In one of our interviews, an informant

- 22 Dinh, Improving Primary Health Care Through Collaboration. Briefing 1.
- 23 "Rostering" or "registering" is the process of assigning patients to a family physician or practice, often through a formal agreement or contract between patients and their family physician. It helps the government or the practice monitor patient care. See College of Family Physicians Toolkit Glossary, http://toolkit.cfpc.ca/en/glossary.php.
- 24 B.C. IHNs limit access to services to individuals aged 40 and older with two or more chronic conditions—such as diabetes, kidney disease, heart disease, lung disease, or depression—and people 19 or older with hepatitis C plus one other chronic condition.
- 25 Dinh, Improving Primary Health Care Through Collaboration. Briefing 1.
- 26 Glazier, Zagorski, and Rayner. Comparison of Primary Care Models in Ontario.

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Despite the excellent care delivered by community health centres, access remains an issue partly due to inadequate resources.

said efforts to expand access to patients are hindered by lack of funds, space, and human resources to extend hours of operation and to make care accessible to more people.²⁷

One of the concerns regarding patient-to-physician rostering is that should the patient's physician decide to leave an IPC team, that patient may lose access to the IPC team services. ²⁸ In two of the well-functioning IPC models highlighted in this report (models 2 and 3 in Appendix B), patients see a usual care provider while still being rostered to the team, which ensures they do not lose access to services should any care provider leave the team.

Case Studies: Health Services and Accessibility

Family First Health Centre (FFHC) and Family First Family Health Team (FFFHT), Orleans, Ontario

The business case presented to the MOHLTC included information on the demographics of the area, the incidence of diseases, and population need, such as requirements for chronic disease prevention and care. Based on population need and the presented business case, the MOHLTC determined how much funding to give the FFFHT, and how many and which types of IHPs it would cover. The FFFHT serves a population made up predominately of middle-class families and professionals. Based on the population needs that the leadership team identified, the FFFHT decided to provide health programs that would focus on, among other things, diabetes management, obesity and weight management, elder care, preventive care, pediatric obesity, mental health, and, eventually, respiratory illnesses. There are 12 physicians who are responsible for most primary health services, including diagnosis, treatment, prescribing, and preventive care. There is a part-time psychologist, two social workers (one full time,

²⁷ Informant interview.

²⁸ Ibid.

one part time), a full-time dietitian, three licensed practical nurses (two full time, one part time), one part-time respiratory therapist, a pediatric nurse practitioner, and one part-time pharmacist.

The FFHC/FFFHT offers after-hours care and appointments for urgent care or short follow-up visits with 24-hour advance booking. There are no walk-in appointments. The FFFHT is located within a Real Canadian Superstore—a Loblaw Inc. hypermarket, which is a blended grocery and department store. This type of location offers several benefits, including convenience, free parking, and a large clinic space. Although patients are rostered to a specific physician, if a physician leaves the FFHC, his or her patients may elect to roster with another physician and continue to have access to the FFFHT, provided there is space on another physician's roster.

Slave Lake Family Care Clinic (SLFCC), Slave Lake, Alberta

The SLFCC serves the Slave Lake community, a small community with a large Aboriginal population. The health care needs of the population include the care and management of chronic conditions, such as obesity, diabetes, and mental health issues. The SLFCC currently has seven physicians (a mix of full and part time) who do not have administrative responsibilities. Rather, they play a clinical role on the interdisciplinary team, along with other providers, including six full-time nurse practitioners, licensed practical nurses (chronic disease and mental health), a part-time pharmacist, a full-time dietitian, two full-time physiotherapists, a full-time Aboriginal liaison, and a full-time social worker.

Patients are not rostered to any provider on the team. Any patient may seek care from the SLFCC. On the first visit, an EMR is created for them to facilitate continuity of care. Generally, about 5 per cent of the patients who visit the SLFCC were previously unattached to a physician. The SLFCC is currently housed in one site. The Aboriginal liaison, pharmacist, and physiotherapists are not co-located. Although co-location appears to support a more cohesive team, limited space and

To optimize continuity and access to care, Clinica patients are attached to a primary care provider, as well as to a care team.

parking availability are issues. The clinic has the flexibility to offer sameday care because each provider deliberately keeps some open spaces on his or her schedule every day. Currently, the centre's receptionist books appointments; however, the SLFCC would like to eventually offer online booking.

Clinica Family Health Services, Denver, Colorado

The centre has four clinic sites in different counties of the region. It mainly provides health services to a low-income population. Although the patient clientele is different from that in most Canadian communities, the centre is similar to a Canadian community health centre in that it serves a predominately underserved, low socioeconomic, high-needs population.

Health care teams (pods) deliver care for chronic conditions and preventive services. Other innovations include behavioural health; an anticoagulation service run by a nurse and pharmacist; a NextGen EMR system; outreach to patients overdue for chronic and preventive services; improved coordination with specialty care, hospitals, and other parts of the health care system; and case managers who help patients self-manage chronic conditions. There are currently are 46 medical health providers, 13 social services providers, 4 dental health providers, and 2 pharmacists. Other services include well-child checks and immunizations; medication reconciliation; and behavioural change counselling and mental health services provided by a licensed clinical social worker, psychologist, or licensed professional counsellor. A psychiatrist visits twice a month and sees three new patients and does follow-up for four patients, in addition to consulting with providers and behavioural health professionals.

To optimize continuity and access to care, Clinica patients are attached to a primary care provider (PCP), who is a physician, nurse practitioner, or physician assistant, as well as to a care team (pod), which is assigned a colour to help patients remember their pod. A call centre located at one of the sites, which serves all four sites, is used to schedule and guide patient visits. Call-centre agents first try to offer appointments with the

patient's PCP. If that PCP is unavailable, they offer same-day or next-day appointments with another provider in the patient's pod. This approach to appointment scheduling prioritizes continuity of care over access, while allowing patients to choose a provider other than their PCP if their PCP is not available. Within reasonable limits, providers are expected to give their patients priority in their schedules over other providers' patients.

Recommendation 5

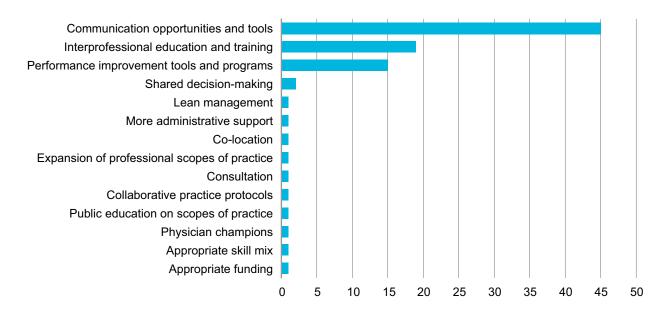
Establish and implement standardized patient hand-offs, referrals, and care coordination among providers on the team, and across organizations and sectors, to ensure quality and continuity of care.

When asked about solutions to individual-level barriers to optimizing IPC teams, survey respondents most frequently mentioned optimized communications opportunities and tools. (See Chart 5.) The way in which care providers communicate with others on the team or across different organizations—including the way they hand off patient care—affects patients' experience and outcomes. ^{29,30,31} One of the current weaknesses of the system is the way in which care is coordinated within and across the different segments of the health care system, such as primary care, acute care, specialty care, home and community care, and rehabilitation. ^{32,33} The term "warm hand-off" is frequently used in the U.S. to describe direct referral and introduction of the patient to other IPC team members, or other providers or organizations outside the team. The warm hand-off can be done physically during a face-to-face appointment or through telecommunications. In addition, continuity

- 29 Arora and Johnson, "A Model for Building a Standardized Hand-off Protocol."
- 30 Pincavage and others, "What Do Patients Think About Year-End Resident Continuity Clinic Handoffs?"
- 31 Koenig and others, "Passing the Baton."
- 32 IPC Stakeholder Survey; informant interview.
- 33 Astles and others, Paving the Road to Higher Performance.

Chart 5
Identified Solutions to Individual-Level Barriers to Interprofessional Collaboration in Primary Care

(number of responses)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

of care is contingent upon inter-provider and inter-organizational communication. Research shows that warm hand-offs can improve patient satisfaction and compliance.³⁴

Standardized hand-off protocols have been frequently discussed in the U.S. as a means to improve patient safety. They were the subject of a Joint Commission on Accreditation of Health Care Organizations National Patient Safety Goal in 2006.³⁵ In Canada, hand-offs or information transfers are reflected in the standards, as well as in a Patient Safety Goal or Required Organizational Practice (ROP), in the Accreditation Canada accreditation program. The ROP outlines a goal in effective information transfer among service providers at transition

³⁴ Arora and Johnson, "A Model for Building a Standardized Hand-off Protocol."

³⁵ Ibid.

points to "improve the effectiveness and coordination of communication among care and service providers and with the recipients of care and service across the continuum." It includes guidelines for effective communication and transfer of information within the organization, as well as among staff members, care providers, clients and their families, and external services.

A common approach to quality improvement is through accreditation, viewed worldwide as an external peer review process aimed at validating the achievement of health care standards.³⁷ Accreditation Canada released a primary care accreditation program in 2010, with significant uptake to date among its existing clients offering primary care services within a larger organization, including community health centres and hospitals, but slow uptake among stand-alone primary care organizations.³⁸ The Accreditation Canada standards go beyond team communication and client hand-offs to include content related to leadership, patient-centred care, patient safety, and ongoing quality improvement.³⁹ When adopting this accreditation program, or any other mechanism for quality improvement, organizations must customize the mechanism to their goals and objectives to maximize the expected benefits.

Recommendation 6

Mandate high-quality interprofessional education and training for all health professionals to support the development and mastering of the core competencies of interprofessional collaboration.

- 36 Accreditation Canada, 2013 Required Organizational Practices.
- 37 Nicklin, The Value and Impact of Health Care Accreditation.
- 38 Ibid.
- 39 Mitchell, Nicklin, and MacDonald, "The Determinants of Quality Healthcare."

The IPC Stakeholder Survey identified interprofessional education and training, both in pre-licensure and post-licensure, as a solution to individual-, practice-, and systems-level barriers to interprofessional collaboration in primary care. 40 Support and opportunities for interprofessional education and training with multidisciplinary participation was the most frequently suggested solution to systems-level barriers to IPC (23 per cent). (See Chart 6.)

Chart 6
Identified Solutions to Systems-Level Barriers to Interprofessional Collaboration in Primary Care



(number of responses)
Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

40 IPC Stakeholder Survey.

The accreditation of educational and training programs for health and social service providers who are employed in interprofessional collaborative care settings would require universities and colleges to adopt curricula and evaluation measures that ensure graduates successfully acquire core competencies in interprofessional collaborative practice.41 The Canadian Interprofessional Health Collaboration (CIHC) has produced one example of a core competency framework. (See box "Core Competencies of Interprofessional Collaboration.") Accreditation of Interprofessional Health Education (AIPHE) was a Health Canada-funded initiative between 2007 and 2010 that aimed to facilitate collaboration among eight organizations that accredit pre-licensure education for physical therapy, occupational therapy, pharmacy, social work, nursing, and medicine.⁴² (Notably missing is mental health.) The AIPHE Principles and Implementation Guide was developed and implemented during this initiative. However, since 2010 it has been unclear whether a common approach to interprofessional education accreditation standards and a sharing of lessons learned across disciplines—both commitments of the AIPHE initiative—have been or are being realized.

Core Competencies for Interprofessional Collaboration

The following is a list of the six competency domains within a framework developed by the CIHC, which aims to facilitate learning and application of competencies among learners and practitioners:

- interprofessional communication—the ability to communicate with other professions in a collaborative, responsive, and respectful manner;
- client-centred care (where "client" also includes the client's family and community)—the ability to search for, integrate, and value clients' input and engagement in care/services decision-making and implementation;
- role clarification—the ability to understand one's own role and the roles
 of others, and to use this knowledge to establish and achieve client
 populations' goals;
- 41 IPC Stakeholder Survey.
- 42 CIHC, Welcome to the Accreditation of Interprofessional Health Education (AIPHE) Website.

- team functioning—the ability to understand the principles of teamwork and group dynamics in order to be effective in the practice of interprofessional collaboration;
- collaborative leadership—the ability to understand and apply principles of leadership to be effective in the practice of interprofessional collaboration;
- interprofessional conflict resolution—the ability to actively engage with others (such as team members and clients) to positively and constructively address conflicts.

Source: CIHC, A National Interprofessional Competency Framework.

One of the challenges identified in our informant interviews is that health professional programs often fall under different academic faculties, which can create difficulties in developing interprofessional curricula and scheduling interprofessional courses. An example of a well-established and highly functioning interprofessional education program is the Program for Interprofessional Practice, Education and Research (PIPER) at McMaster University in the Faculty of Health Sciences, which is the first faculty in Canada to include programs in medicine, nursing occupational therapy, physiotherapy, midwifery, and physician assistant education under the same umbrella.43 The program's overall goal is to support a culture of interprofessional education and collaboration across the faculty. Its primary activities include working with education programs to develop and implement integrated interprofessional educational events and activities, including experiences in clinical practice settings. Like high-functioning IPC teams, PIPER is guided by a multidisciplinary/multi-faculty advisory group.⁴⁴

Education and training programs should include opportunities for students and trainees to focus their learning and experience on their preferred practice setting.⁴⁵ For example, survey respondents noted

⁴³ For information on PIPER, see www.stlhe.ca/wp-content/uploads/2012/10/2012-ABA-Paper-Final.pdf.

⁴⁴ Ibid.

⁴⁵ IPC Stakeholder Survey; informant interview.

There is a need for more training opportunities for new graduates in well-established and highly functioning IPC teams. that some of the current interprofessional education programs focus on collaborative practice in hospitals. We found that some of the recently graduated health professionals who had received interprofessional education felt unprepared for collaborative practice specific to the primary health care setting or felt it was difficult to find practical placements in primary health care.

There is a need for more training opportunities for new graduates in well-established and highly functioning IPC teams that can better reinforce their interprofessional education through practice. As IPC teams further progress, it is expected that these opportunities will increase over time. Innovative approaches to interprofessional student practice education experiences include student Olympics or games organized by academic institutions in various regions. An example is the Academic Health Council (AHC) Champlain Region Interprofessional Student Games. This event, now in its fourth year, aims to provide students from local colleges, and the faculties of medicine and health sciences at the University of Ottawa, with the opportunity to develop and apply interprofessional skills by working with other students from different disciplines.

Many of the non-physician informants noted in their interviews that their professions had training—such as the ADAPT online training program for pharmacists—that was built on a core of teamwork, as well as approaches to continual education to develop and improve IPC competencies. Physician training in IPC, on the other hand, is more complicated, as physicians are often required not only to practise in a team but also to determine when a patient can benefit from other team members. Physicians noted that different health providers often have overlapping skills, and it is difficult to decide who can or should do what. Interprofessional education and training for clinical leads

⁴⁶ Academic Health Council, Champlain Region, A One-Stop Shop.

⁴⁷ For information on ADAPT, see www.pharmacists.ca/index.cfm/education-practice-resources/professional-development/adapt/.

should help students acquire the knowledge and skills required to decide not only the type of care the patient should receive but also who on the team can provide it.

Recommendation 7

Optimize the use of communications technology, physical space, and other infrastructural supports to facilitate and improve collaboration.

An example of information technology used to facilitate communication among team members is the electronic medical record (EMR). EMRs (sometimes referred to as electronic health records or EHRs), in addition to being used to track patient health data and to report on quality and patient outcomes, are sometimes used for communication among multiple health providers with access.⁴⁸ Teams spread across multiple sites often use EMRs; however, informants reported that this type of communication does not necessarily support or optimize collaboration.

Many of the survey and interview respondents said scheduled team meetings resulted in better and more consistent communication and collaboration among team members. These meetings provide an opportunity to discuss program delivery, care planning, care coordination, and any other patient care issues the team needs to address. Survey respondents identified education rounds, weekly or monthly staff meetings, "huddles," advanced use of technologies, and co-location of team members as solutions to individual and practice-level barriers to effective interprofessional collaboration. (See charts 2 and 5.) Huddles are informal team meetings, often unscheduled, that occur as needed to solve a problem relatively quickly. The U.S. Department of Veterans Affairs, as part of its education on patient-aligned care teams, promotes the use of huddles for interprofessional

48 IPC Stakeholder Survey.

Co-location improves communication among team members and benefits patients, who can receive care in a "onestop shop."

communication, collaboration, and training.⁴⁹ Training is reinforced using clinic huddles that involve an interprofessional faculty member as a facilitator; trainees from different disciplines, such as medicine, psychiatry, psychology, podiatry, pharmacy, social work, and dietetics; and health care providers. After presenting case studies of complex medical issues and discussing them with interprofessional faculty members, trainees are evaluated and provided with feedback on team cohesiveness. Huddles in training and in practice are essential to removing hierarchies in the team, as well as creating trust and respect among team members.⁵⁰

Design can also play a role in IPC. In Weyburn, Saskatchewan, a primary health care centre was redesigned to promote collaboration. The redesign process used a lean⁵¹ approach and included input from health care providers and patients.⁵² The goals of the redesign were to remove inefficiencies, optimize space, focus on patient safety, create a healing environment, optimize service patterns, help providers spend more time with patients, and reduce energy use.

Our research also showed that co-location improves communication among team members and benefits patients, who can receive care in a "one-stop shop." The Family First Family Health Team/Family First Health Centre in Orleans, Ontario, uses an innovative design that allows for greater communication and collaboration, as well as co-location of all its team members, and the exclusive use of open and common spaces. A more detailed description of this IPC team is included in the next section, which focuses on innovative models of IPC. Support from administrative, clinical, and program leads in creating an infrastructure that promotes and sustains active communication is critical.

- 49 Schwartz, "Training Nurse Practitioners and Physicians."
- 50 Ibid.
- 51 In simple terms, "lean" describes a process whereby greater value is generated with fewer resources or with greater operational efficiency. Lean Enterprise Institute, *What Is Lean?*
- 52 Sun Country News, Planning the New Primary Health Centre.

Case Studies: Infrastructure

Family First Health Centre (FFHC) and Family First Family Health Team (FFFHT), Orleans, Ontario

All FFHC/FFFHT health providers are located at one site. Co-location facilitates collaboration among team members and convenience for patients. The FFHC worked with Primacy Management Inc. to establish its practice within its retail space. The FFHC, Primacy Management Inc., and Loblaw Inc. worked together to design the physical space and facilities of the Primacy Clinic, which both the FFHC and FFFHT use. The innovative design includes common areas for team members, including physicians. Instead of dedicated offices, health providers have hallway computer workstations or shared offices (mental health team). Common examination rooms are used for patient consultations. There is a common eating area where informal meetings often take place. The way in which the physical space is set up allows for more efficient use of space, and facilitates communication and collaboration.

Slave Lake Family Care Clinic (SLFCC), Slave Lake, Alberta

Almost all SLFCC staff members are co-located in an older medical clinic, but some are located in the local hospital. Co-location was identified as an important factor in creating a more solid team; however, the current space is limited. The hospital space will be renovated soon to accommodate the full IPC team and to include an on-site lab. Sufficient parking spaces remain an issue for the SLFCC.

Team members communicate mainly by using EMRs. Formal team meetings to discuss care planning and processes take place every week or two. Schedules for the meetings are posted, and case studies or case management examples are often presented. The meetings are a big shift for the providers, and the process is improving over time. There are high hopes for the provincial family care clinic (FCC) model, as the province adds more FCC sites and enhances their potential to collaborate with Primary Care Networks. Although progress has been made, it will

At the Slave Lake Family Care Clinic, having at least one champion provider on the team helps the team progress and become more effective. take more time for the team to evolve. Informants noted that having at least one champion provider on the team helps the team progress and become more effective.

Clinica Family Health Services, Denver, Colorado

The co-located pods (health teams) are the hubs in which all clinical activity takes place. There are several pods at each of the four sites, with 13 pods in total. "Pod" refers to both the physical location and the organization of staff and patients. The physical space is a central open space surrounded by patient exam rooms. All pod employees are co-located, which facilitates communication and collaboration. Each pod has three full-time-equivalent providers, three medical assistants, one behavioural professional, one case coordinator, one medical records person, and front desk personnel. Each pod engages in a 20-minute huddle in the morning and in the afternoon to discuss patient scheduling and consults for the day.

Two pod members—a medical assistant and the licensed practical nurse—have leadership roles. The medical assistant has a half-time clinical role and a half-time team manager role, which involves handling training, supervising other medical assistants, handling timesheets, and conducting performance reviews. The licensed practical nurse is also the flow coordinator, who ensures appointments occur on time.

Each pod member except front desk employees carries a laptop with access to EMRs, used to document patient visits in real time. Each provider has three exam rooms where pre-visits, visits, immunizations, lab work, behavioural health consults, and goal setting with the case manager occur. Two pods share a procedure room for obstetric ultrasounds and other invasive procedures. For all procedures, providers follow clinical protocols designed to ensure standardized care processes throughout the centre.

Recommendation 8

Engage in regular and consistent monitoring and evaluation of costeffectiveness, provider and organizational provider performance, and use of data linkage and knowledge sharing within and across teams.

More than 67 per cent of IPC Stakeholder Survey respondents identified monitoring and evaluation of individual and team performance as a somewhat or very significant barrier to effective practice of IPC. (See Chart 4.) Of respondents who offered solutions to practice-level barriers, 11 per cent suggested performance monitoring tools or quality improvement plans as possible solutions. Of respondents who offered solutions to system-level barriers, 16 per cent suggested evaluation and monitoring through, for example, the optimization of EMRs, performance indicators, and chart audits. (See Chart 6.)

It is important that performance expectations reflect the time that teams require to change, develop, adapt, and mature.⁵³ New IPC teams, or established IPC teams dealing with substantial changes, need time to progress through preliminary stages focused on building teams and trust; understanding scopes of practice, roles, and responsibilities; fostering communication; and learning how to work together, a process that includes developing shared care protocols. Based on our interviews, teams can take anywhere from one to three years to become fully functional, depending on the readiness of the team and the level of governance, leadership, and infrastructural support.

A recent OECD report on health information infrastructure showed Canada to be lagging behind other OECD countries not only in the use of EMRs, but also in record linkage across the health care system.⁵⁴ Record linkage is critical to the system's ability to determine resource use and the impact of investments in one sector of the health care system on other parts of the system. For example, if we wanted to

- 53 IPC Stakeholder Survey.
- 54 OECD, Strengthening Health Information Infrastructure.

know whether changes to the primary health care system were translating into better health outcomes and reduced acute care costs over time, we could look at linked health insurance numbers. France links primary care data to in-patient hospitalization and health survey data, and Portugal links primary care data to prescription drug data. In addition, concerns persist regarding the consistency of EMR data inputting and reporting in Canada, as well as data quality. These concerns relate to outdated systems in hospitals and primary care settings that do not meet current standards.⁵⁵

Recommendation 9

Adopt clear and enforceable accountability processes for the organization, administration, and providers, which are linked to performance.

In some IPC team models, clinical or service providers are accountable to a clinic or program manager, who is accountable to the CEO or executive director, who is accountable to a governing board, which is accountable to the regional health authority or provincial/territorial ministry or department of health, which is ultimately accountable to the public.⁵⁶

Accountability measures are effective when they promote a business environment that encourages efficiency, effectiveness, and quality through ongoing individual and team goal- and objective-setting and performance appraisal, which should be linked to SMART indicators.^{57,58,59} Good performance management, outlined within an accountability policy or agreement, can help managers and funders

- 55 OECD, Strengthening Health Information Infrastructure.
- 56 Informant interview.
- 57 Johnston, Dahrouge, and Hogg, "Gauging to Gain."
- 58 Arah and others, "Conceptual Frameworks for Health Systems Performance."
- 59 SMART stands for specific; measureable; achievable or attainable; results-oriented, realistic or relevant; and time-bound.

improve effectiveness by aligning individuals' and teams' activities to the organization's objectives; clarifying individual and team roles, responsibilities, and expectations; and documenting individual and team performance to support funding, remuneration, and development plans. About 9 per cent of respondents in the IPC Stakeholder Survey believed IPC could be improved with alternative models of funding, such as performance-based funding. (See Chart 6.) Although these basic principles of human resources management are widely applied in high-functioning organizations, they are seldom applied in the primary health care system. (See box "Traits of a High-Functioning Interprofessional Primary Care Team.")

Accountability agreements between IPC teams and their governing bodies are necessary in ensuring that they function effectively and efficiently. For example, each Ontario community health centre has an accountability agreement with its respective Local Health Integration Network (LHIN).

The Ontario Ministry of Health and Long-Term Care (MOHLTC) has a funding agreement, compliant with transfer payment accountability guidelines of the Ontario government, with each Ontario FHT. The funding agreements include a Service Plan, developed annually by each FHT, that outlines FHT service priorities as defined by the primary health care needs of their patients. Although there is flexibility in the programs and services provided by each FHT, the MOHLTC expects priority focus to be given to areas such as access, collaboration with other health, quality, accountability, and others. The MOHLTC evaluates each FHT's compliance to their respective Service Plan each quarter and their achievements through annual reports submitted by each FHT to the MOHLTC. The MOHLTC reinforces compliance with the terms and conditions outlined in the funding agreement. The most severe mechanism is termination, which the ministry has exercised in the past.

⁶⁰ Informant interview.

⁶¹ Spenceley, Andres, Lapins, and others, "Accountability by Design."

The other mechanisms to reinforce compliance include reduced funding and payments, prohibition from filling vacant positions, and ineligibility for new resources.⁶²

Traits of a High-Functioning Interprofessional Primary Care Team

Based on our review of the literature, a survey of stakeholders, and key informant interviews, as discussed in Chapter 2, we believe the following are traits of a high-functioning IPC team:

- strong governance and leadership at the administrative and service provision levels;
- appropriate funding, remuneration, and financial incentives;
- provision of and equitable access to appropriate health and social services;
- recruitment and retention of highly skilled personnel who work to their full scopes of practice;
- existence of and adherence to practice policies and agreements that pertain
 to scopes of practice, team member roles and responsibilities, shared care
 and decision-making, and communication within the team and across health
 sectors, including coordination and continuity of care;
- interprofessional education and training for service providers (formative and continuous);
- supportive infrastructure, including co-location, open design of physical space, opportunities for team communication, and appropriate use of information technology;
- appropriate, standardized, and consistent monitoring and evaluation of individual and team performance and of patient outcomes, including SMART accountability measures that are linked to performance.

⁶² E-mail exchange with Phil Graham, Manager, Family Health Teams and Related Programs. February 7, 2014.

CHAPTER 4

Case Studies of High-Functioning IPC Team Models

Chapter Summary

- Three primary health care organizations were identified as being good practice models of IPC: the Family First Family Health Team and Health Centre in Orleans, Ontario; the Slave Lake Family Care Clinic in Slave Lake, Alberta; and Clinica Family Health Services in Denver, Colorado.
- The authors conducted focused interviews with administrators of these three organizations.
- Each model has its own strengths and challenges, as well as similarities and differences related to interprofessional collaboration, accessibility, and comprehensiveness of services.

The majority of respondents to the IPC Stakeholder Survey agreed or strongly agreed that interdisciplinary collaborative practice improves primary care (95 per cent), that barriers to IPC remain (77 per cent), and that these barriers can be overcome (77 per cent). Several current models demonstrate some of the traits of high-functioning IPC teams.

We conducted focused interviews with administrators of the Family First Family Health Team and Health Centre in Orleans, Ontario; the Slave Lake Family Care Clinic in Slave Lake, Alberta; and Clinica Family Health Services in Denver, Colorado. These primary health care organizations were identified as being good practice models of IPC. The Family First Family Health Team and Health Centre, and the Slave Lake Family Care Clinic are both relatively new organizations, while Clinica has been operating for more than a decade.

Each model has its own strengths and challenges, as well as similarities and differences related to interprofessional collaboration, accessibility, and comprehensiveness of services. In Table 1, we highlight the components of each model that we consider key attributes of an effective and efficient IPC team that could be implemented across Canadian communities, as well as the strengths and challenges of each. A detailed description of each model is included in Appendix B.

Although the case study organizations may be considered highfunctioning, we are unable to assess the cost-effectiveness of these models of care, due to a lack of evaluation data. To determine the costeffectiveness of these teams, we would need to compare the cost of delivering care against the health and economic benefits.

Table 1
Characteristics of IPC Team Case Study Models

Characteristic	Family First Family Health Team (FFFHT) and Family First Health Centre (FFHC) (Orleans, Ontario)	Slave Lake Family Care Clinic (SLFCC) (Slave Lake, Alberta)	Clinica Family Health Services (CFHS) (Denver, Colorado)
Annual budget	 \$4.8 million combined Family Health Team approximately \$1.2 million in 2013–14 Physician gross revenue approximately \$3.6 million* 	• Unknown	Approximately \$30 million
Number of patients/ annual visits	Approximately 12,000 patients (increasing)	Approximately 13,000 patients (increasing)	 Approximately 43,000 patients Medical visits: 147,000 Dental visits: 14,000 Behavioural/mental health visits: 18,000 Care management/self-management visits: 24,000
Patient population profile	 High proportion of middle-class patients and young families Six per cent of patients with diagnosed diabetes High prevalence of overweight children and childhood obesity 	 High prevalence of obesity High proportion of First Nations patients High proportion of patients who have low socio-economic status High prevalence of chronic disease 	 High proportion of low-income patients and patients in poverty High proportion of Spanish-speaking patients High prevalence of chronic conditions High prevalence of prenatal and maternal care needs
Governance	Ontario Ministry of Health and Long-Term Care (funding) Board of founding physicians (operations) Executive director (operations) Mix of private and public funding Not-for-profit corporation	 Alberta Health Services Alberta Health Steering committee Publicly funded Not-for-profit centre 	 Board of directors (50 per cent made up of patients) Chief executive officer Mix of private and public funding Not-for-profit centre
	 FFHC Professional association (governs physicians' individual conduct) Physician owners (funding) Ontario Ministry of Health and Long-Term Care (physician remuneration) Private, for-profit organization 		

(continued...)

Table 1
Characteristics of IPC Team Case Study Models (cont'd)

Characteristic	Family First Family Health Team (FFFHT) and Family First Health Centre (FFHC) (Orleans, Ontario)	Slave Lake Family Care Clinic (SLFCC) (Slave Lake, Alberta)	Clinica Family Health Services (CFHS) (Denver, Colorado)
Management	 One executive director One clinical lead physician One clinic manager 	Steering committee Manager	 Chief executive officer Vice-president of clinical services (MD) Vice-president of oral health (DD/MPH) Chief financial officer (MBA) Vice-president, strategic support Vice-president, operations Vice-president, human resources Clinical leaders on each pod (medical assistants, licensed practical nurses)
Care/service providers	 Physicians (FFHC) Registered practical nurses (FFHC) Elder care nurse (FFFHT) Pediatric nurse practitioner (FFFHT) Psychologist (FFFHT) Social worker (FFFHT) Dietitian (FFFHT) Pharmacist (FFFHT) Respiratory therapist (FFFHT) 	 Physicians Nurse practitioners Licensed practical nurses Mental health and wellness therapists Pharmacist Dietitian Physiotherapists Aboriginal liaison Social worker 	 Each pod includes the following: medical providers (physician, nurse practitioner, physician assistant) licensed practical nurses medical assistants behavioural health professional care managers dental hygienist
Services and programs	 Standard family medicine services Diabetes management Obesity and weight management Elder care Preventive health care Mental health care Urgent care (within 24 hours) 	 Standard family medicine services Chronic disease education and management Mental health care 	 Standard family medicine services Smoking cessation services Obstetrics and gynecology Prenatal and maternal care Chronic disease management Mental health care Dental health care
Facilities	 One location in a retail store of approximately 1,500 square metres (16,000 square feet) 	One location in an older medical clinic with some staff located at the hospital due to insufficient space in the current location	 Four sites in four communities Pods (health care teams) are co-located in one location

(continued...)

Table 1
Characteristics of IPC Team Case Study Models (cont'd)

Characteristic	Family First Family Health Team (FFFHT) and Family First Health Centre (FFHC) (Orleans, Ontario)	Slave Lake Family Care Clinic (SLFCC) (Slave Lake, Alberta)	Clinica Family Health Services (CFHS) (Denver, Colorado)
Accessibility	 Patients must be rostered to an FFFHT physician Some same-day appointments available Open Monday to Thursday, 8:00 a.m. to 8:00 p.m.; Friday, 8:00 a.m. to 4:00 p.m.; Saturday and Sunday, 8:00 a.m. to 2:00 p.m. 	 No rostering/formal attachment is needed to be eligible for services Walk-in clinic hours after 5:00 p.m. and on weekends Some same-day appointment times available 	 Patients are assigned to a provider and a pod Open Monday, 8:00 a.m. to 6:00 p.m.; Tuesday to Thursday, 8:00 a.m. to 8:00 p.m.; and Friday, 8:00 a.m. to 5:00 p.m.
Monitoring and evaluation	 Electronic medical record system Diabetes management report card 	Electronic medical record systemQuality metrics	Electronic medical record system Dashboard (performance metrics)
Examples of effectiveness	 Improvements in diabetes management Increase in access 	 Reduction in emergency room visits (20 per cent) Increase in same-day access 	 Improvements in patient goal-setting and hypertension management Reduction in emergency room visits, high-cost imaging, and potentially preventable readmissions
Strengths	 Strong leadership team Clear policies around delivery of care, provider multidisciplinarity, and expanded provider roles and responsibilities High accessibility Supportive infrastructure, including type and use of electronic health record system, co-location, and open-concept facilities 	 Governance model Interdisciplinary team and expanded scopes of practice Accessibility Use of an electronic medical record system Approach to monitoring, evaluation, and accountability 	 Governance and leadership model Accountability structure Extensive use of monitoring and evaluation Optimization of IPC team members' scopes of practice through care protocols Clarity of IPC team members' roles and responsibilities
Challenges	 Physician-only board of directors Restrictive funding and remuneration model Unclear accountability structure 	 Infrastructural constraints Time needed for providers to learn and practise in a collaborative team environment (new model) Non-volume pay for physicians (paid per hour) 	Some limits to accessibility in terms of after-hours and weekend care, funding sustainability, and multidisciplinarity on the team—there is a lack of different types of health providers, given the needs of the population

^{*}Note that a proportion of physician gross revenue is reallocated to cover other health centre expenses, including salaries for non-family health team staff (including administrative and clinical staff), as well as a proportion of overhead that is not covered by family health team funding.

Source: The Conference Board of Canada

CHAPTER 5

Conclusion: Improving Care Delivery While Reining in Costs

Chapter Summary

- If IPC teams are to become the standard model, decision-makers at all levels must ensure that programs and services meet population needs.
- The federal government needs to create a forum to help provinces and territories share knowledge, evidence, and best practices. Provincial and territorial governments, and regional health administrators need to mandate a governance and leadership structure that is accountable for results within all primary health care delivery organizations.
- Service providers and team leaders need to practise and encourage interprofessional collaboration within the team and with other organizations by communicating openly and following collaborative protocols.
- Patients should demand greater access to interprofessional, collaborative health teams, and be open to receiving care from and to consulting with different service providers.
- Transformative change can only succeed by taking an approach that engages all stakeholders within the system.

Our research shows that many IPC teams offer focused programming for high-needs patients, including those with diabetes, obesity, mental health issues and addictions, hypertension, and high cholesterol, as well as smokers. Many of the programs provide patients with support and resources to empower them to manage their own health, making them members of the IPC team. Despite the fact that many IPC teams offer a variety of programs, the IPC Stakeholder Survey showed that publicly funded models often do not adequately meet population health needs, such as needs for mental health counselling and physiotherapy services. If IPC teams are to become the standard model, decision-makers at all levels—including health care providers, community boards, regional health authorities, and provincial and territorial health ministries and departments—must ensure that programs and services meet population needs. These decision-makers must also ensure that adequate resources—such as financial resources, human resources, and facilities—are available to deliver these programs and services.

Resource constraints may be attributable to a variety of issues, some of which are common across IPC teams, such as the way in which payments traditionally flow in the primary health care system. Although primary health care delivery has expanded the use and scopes of practice of non-physician health professionals, and population health trends require a mix of health professionals, funding still flows through physicians via a fee-for-service, capitation, or blended model of pay in

many settings. As we mentioned previously, funding and remuneration are key drivers in the effectiveness, efficiency, and sustainability of the system. Paying all IPC providers a salary may help rein in costs, but salaries that are not competitive with those in other health sectors or settings make it difficult to recruit and retain highly skilled providers, as is often seen in the community health centre model.

The Role of the Federal, Provincial, and Territorial Governments

Although the Council of the Federation has recently taken a more proactive role in sharing knowledge and best practices among provinces and territories, with limited federal government involvement, the federal government still has an important role to play and responsibility for strengthening primary health care for all Canadians. The federal government's last major investment in primary health care was the Primary Health Care Transition Fund, which supported various initiatives between 2000 and 2006. Its objectives included increasing access to primary health care organizations; increasing health promotion, prevention, and chronic disease management; expanding 24/7 access to essential services; establishing multidisciplinary teams; and facilitating coordination with other health services. It is unclear how far we have come since the end of these initiatives, and there are surely lessons to be learned and shared.

Our review of models of IPC teams in Canada shows a substantial variation in the way in which teams are formed, funded, governed, and led, and in how, to whom, and by whom services are provided.¹ The federal government needs to become actively involved in transforming the primary health care system by, at a minimum, creating a forum for discussion, and facilitating collaboration across provinces and territories to share knowledge, evidence, and best practices. The federal government could continue to support the progress made by Primary Health Care Transition Fund initiatives by providing funding

1 Dinh, Improving Primary Health Care Through Collaboration. Briefing 1.

Primary care accreditation programs are an effective way to validate the achievement of health care standards through external peer review.

to provincial and territorial (PT) ministries and departments of health, and regional health authorities and administrators, to scale up cost-effective models of care and service delivery.

PT governments are responsible for the financing, funding, and administration of most primary care services in Canada. These governments are often the most influential actors in each of the recommendations presented in this report. We have seen some significant shifts toward greater and stronger primary health care governance in some provinces that we hope will continue. There is an opportunity to improve the funding and remuneration of teams, as well as to strengthen the consistency and quality of interprofessional education and training, monitoring and evaluation, and accountability.

A common approach to quality improvement is accreditation, such as Accreditation Canada's primary care accreditation program, viewed worldwide as an effective way to validate the achievement of health care standards in health care organizations through external peer review.² In addition to standards for team communication and client hand-offs, Accreditation Canada's program includes standards for leadership, patient-centred care, patient safety, and a quality framework.³ Further, legislation pertaining to quality improvement could be better applied and reinforced within and across primary health care systems. For example, *Ontario's Excellent Care For All Act* was enacted in 2010 to clarify responsibility for quality of care across all health care organizations in the province.⁴

PT governments and regional health administrators need to fully get behind primary health care services delivered by interprofessional teams. These teams, and the services and programs they deliver, must be defined by the health and social needs of the population they serve. To do this, governments need to foster collaborative team care through a funding structure that supports the full scope of practice for all service

- 2 Nicklin, The Value and Impact of Health Care Accreditation.
- 3 Mitchell, Nicklin, and MacDonald, "The Determinants of Quality Healthcare."
- 4 Ontario Ministry of Health and Long-Term Care, About the Excellent Care for All Act.

Provincial and territorial governments need to fully get behind primary health care services delivered by interprofessional teams.

providers; rewards team effectiveness and efficiency; and reinforces organizational accountability in relation to appropriate access, delivery of population needs-based services, better health outcomes, and cost-effectiveness. Further, even if funding structures do not encourage collaborative practice, they should not deter it. This means service providers and team leaders should be appropriately compensated for time spent on strategic planning and engagement in collaborative practice and communication.

PT governments and regional health administrators need to mandate a governance and leadership structure that is accountable for results within all primary health care delivery organizations. They must hire administrators and managers for each organization with the appropriate skills, experience, and leadership qualities to work effectively with service providers to manage operations, including human resources, strategic planning, contract negotiations, budgets, programs and services, and performance monitoring and evaluation. In addition, representation of all key stakeholders—including physicians, non-physicians, and patients (as advisors or even decision-makers)—within the organization's governance structure is likely to strengthen the likelihood of success.

PT governments and regional health administrators need to mandate and support appropriate and consistent evaluation and monitoring of primary care performance linked to quality of care, access, and better health outcomes for patients, so that organizations have the knowledge required to make improvements to provide value for money. Support may include providing decision analytic services at the provincial or regional level, or providing financial support to hire analysts for in-house monitoring and evaluation. These data need to be consistently measured and reported across primary health care organizations so that performance may be benchmarked across organizations.

PT governments and regional health administrators need to identify appropriate team leadership and interprofessional collaboration skills, and provide opportunities for service providers to develop these skills through education and training. This requires the involvement of academic institutions and training programs to ensure curricula are aligned with these objectives.

The Role of IPC Administrative Leaders

Managing staff, making operational decisions for the team or organization, and making resource-allocation decisions that balance cost-efficiency with effectiveness remain significant challenges for IPC leaders. Our conversations with several executive directors and CEOs of primary care organizations in the U.S. and Canada highlighted the need for these individuals to have strong leadership and entrepreneurship skills. Our recommendations noted the need for highly skilled, experienced, and innovative leaders and managers of primary care organizations who are empowered to make difficult decisions that support and improve interprofessional primary care within the limits of budgetary and resource constraints. These leaders need to believe in and uphold the interdisciplinary model of care, and work to ensure their organization is focused on improving access, quality and continuity of care, efficiency, and patient outcomes and experience.

Leaders of primary health care delivery organizations—including CEOs, executive directors, and managers—need to establish services and programs aligned with the population's current and future health and social needs. To do so, they need information on population demographics, including age and sex profiles; socio-economic characteristics; disease risk factors, such as health behaviours and lifestyle; and health care services utilization. Once services and programs are identified, and administrators and budgets established, administrators need to hire the appropriate type and number of service providers.

To optimize collaboration within the interprofessional team, as well as continuity of care, administrators need to establish and reinforce the use of evidence-based protocols and tools for collaboration and communication. Such protocols relate, for example, to information

Patients must realize the value of team-based care, and be open to receiving care from and to consulting with different service providers.

technology use; regular team meetings or huddles; and patient handoffs between service providers, and between health and social services organizations. Protocols and/or agreements should also detail the roles and responsibilities of all providers, and how they should work together to provide programs and services.

The Role of Providers and Patients

Over the years, many health services providers and patients have accepted and embraced interprofessional collaboration in primary care. However, some health professionals and patients are still reluctant to increase the engagement of different health professionals in primary care. Reluctance among patients may stem from a lack of knowledge, understanding, and experience of who can best help them. Service providers need to work and communicate with each other. Service providers and team leaders need to practise and encourage interprofessional collaboration within the team and with other organizations by communicating openly and following collaborative protocols. Team leaders should provide opportunities for each profession to understand others' scopes of practice, which will enable more effective and efficient collaboration. Providers need to continue to focus on providing better access to the best care for their patients within a collaborative environment that includes patients and other service providers.

As IPC teams have evolved, the role of the patient has grown. Many IPC teams provide services and resources to help patients manage their conditions, as well as make behaviour and lifestyle changes that can prevent and mitigate health problems. Patients play a critical role on the team and, as such, are asked to play an active role in their health and wellness, both in and outside of the primary health care setting. Patients must realize the value of team-based care in not only providing greater access to high-quality services but also in empowering patients to effectively manage their own health. To this end, patients should demand greater access to interprofessional, collaborative health teams, and be open to receiving care from and to consulting with

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different service providers. Both providers and patients need to feel comfortable with the team and have faith that truly collaborative care in an environment that helps all team members practise to their full scope will translate into better quality of care, better access, and improved patient satisfaction and health outcomes.

IPC Teams Will Continue to Evolve

No doubt, we will continue to see significant changes to the way primary health care and community services are integrated, governed, and operationalized. Further, we expect to see a greater need to include members of some of the smaller health professions on IPC teams, as they seek to match skills and competencies to population health needs within the primary health care sector. As we have discussed in this briefing series, several important factors contribute to effective IPC teams. They relate to governance, leadership, accountability, skill mix, team member roles and responsibilities, funding, provider education and training, and monitoring and evaluation. We hope that this final report provides some insight into what can be done to optimize IPC teams in Canada for decision-makers, administrators, and service providers. Transformative change can only succeed by taking an approach that engages all stakeholders within the system.

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APPENDIX A

Optimizing Interprofessional Primary Care Teams Stakeholder Survey Results

An IPC team is defined as a group of professionals from various disciplines who communicate and work together in a formal arrangement to provide health services, resources, and advice to a patient population within a primary care setting. Through a review of the literature, we identified the following barriers to effective interdisciplinary and collaborative practice in primary care.

Individual-level barriers

- · Lack of role clarity and trust
- · Hierarchical roles and relationships

Practice-level barriers

- · Lack of strong governance and leadership
- · Difficulties in establishing appropriate skill mix and team size
- Inadequate tools for communication

System-level barriers

• Inadequate education and training in interprofessional practice

- · Suboptimal funding models or financial incentives
- · Lack of appropriate monitoring and evaluation

Between April 2 and April 29, 2013, we e-mailed an electronic survey to Canadian stakeholders in the primary health care system, using a distribution list of more than 530 contacts. This survey aimed to help The Conference Board of Canada develop recommendations to optimize interprofessional primary care (IPC) teams in Canada as part of the research report series *Improving Primary Health Care Through Collaboration*. This survey was closed on May 6, 2013, and had 162 respondents.

This appendix summarizes the results of this survey, organized by survey question.

Survey Questions

1. Professional Role Within the Canadian Primary Health Care System

Respondents were asked to select the category of their professional role in the Canadian primary health care system. Most of the 162 responses to the survey came from clinical care providers (74 per cent). Care delivery administrators provided 10 per cent of the responses. Administrators working in policy settings relevant to the primary care system contributed almost 7 per cent of the responses. (See Table 1.)

In general, service providers and administrators at the delivery level provided more complete answers to detailed questions about collaborative practice barriers and solutions than administrators at the policy level did.

Table 1
Respondents' Self-Reported Professional Role Within the Canadian Primary Health Care System

Professional role	Number of respondents	Percentage
Delivery administrator	17	10
Policy administrator (federal)	1	1
Policy administrator (provincial/territorial)	5	3
Policy administrator (regional)	5	3
Provider (clinical services)	120	74
Provider (social services)	2	1
Other	12	7
Total	162	100

Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

2. Professional Title or Position

Respondents were asked to identify their professional title or position. There were a total of 159 open responses to this optional survey question. We received a significant number of responses from

Table 2
Respondents' Professional Title or Position

Professional role	Number of respondents	Percentage
Psychologist	36	23
Midwife	31	19
Registered nurse	17	11
Other manager or director	10	6
No response	10	6

(continued...)

Table 2
Respondents Represent a Range of Disciplines (cont'd)

Professional role	Number of respondents	Percentage
CEO, CMO, executive director, or director	11	7
Other nurse	11	7
Nurse practitioner	6	4
Family physician	5	3
Consultant	4	3
Academia	3	2
Care coordinator	2	1
Clinic or practice administrator or director	3	2
Dental professional	2	1
Nurse lead	2	1
Pharmacist	2	1
Dietitian	1	1
Mental health counsellor	1	1
Other clinician	Ī	1
Social worker	1	1
Total	159	100

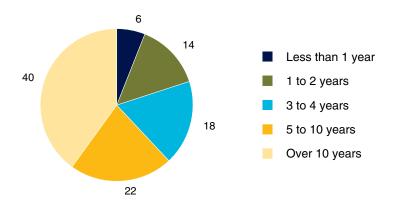
Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

psychologists, midwives, nurses, and practice managers/administrators. Only a handful of physicians and other care providers responded to the survey. (See Table 2.)

3. Length of Time in Professional Role or Position

At the time of the survey, the majority of respondents had worked in their current position for at least 5 years, and 40 per cent of all respondents had worked in their current position for over 10 years. In general, the insights from this survey come from many years of experience in the primary health care system. (See Chart 1.)

Chart 1
Respondents' Self-Reported Length of Time Spent in Their Current Professional Role or Position
(per cent; n = 162)

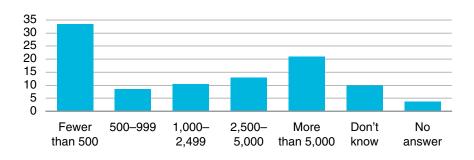


Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

4. Number of Patients Served

When asked the number of unique patients receiving primary health care services from their team or organization, one-third of respondents selected "less than 500." The next most common response was "greater than 5,000" (21 per cent). (See Chart 2.)

Chart 2
Number of Unique Patients Receiving Primary Health Care Services from the Organization/Practice/Team
(number of respondents; n = 162)



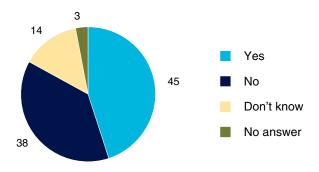
Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

5. Collaborative Practice Agreements

When asked whether care providers were practising under collaborative practice agreements, 45 per cent of respondents said "yes" and 38 per cent said "no." (See Chart 3.)

Chart 3

Care Providers Practicing Under Collaborative Practice Agreements (per cent; n = 162)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

6. Collaborative Practice Protocols

When asked whether care providers were practising under collaborative practice protocols, 48 per cent of respondents said "yes" and 37 per cent said "no." (See Table 3.) Among those who said "yes," the most common protocols related to the prevention and/or management of diabetes, mental health issues, hypertension, smoking, cardiovascular problems, obesity, lipid-related issues, respiratory illness, and obstetrical issues. (See Table 4.)

Table 3

Care Providers Practicing Under Collaborative Protocols

Response	Number	Percentage
Yes	78	48
No	60	37
Don't know	19	12
No answer	5	3
Total	162	100

Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Table 4
Care Providers Practicing Under Collaborative Protocols by Disease/Program Area

Disease or program area	Number	Percentage
Diabetes	51	15
Mental health	47	14
Hypertension	47	14
Tobacco cessation	41	12
Cardiovascular issues	35	10
Weight management and obesity	32	9
Lipid management	29	9
Respiratory illness	29	9
Obstetrics	12	4
Other*	10	3
General	6	2
Total	339	100

^{*&}quot;Other" includes chiropody, chronic pain management, chronic wound management, family planning and reproduction, oral health, and other specialties.

Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

7. Types of Professionals Engaged in Collaborative Practice

When asked which types of professionals were working with each other in collaborative practice, the most commonly identified were physicians, nurses, social workers, dietitians or nutritionists, nurse practitioners, psychologists or mental health counsellors, and pharmacists. (See Table 5.)

Table 5
Types of Professionals Working Together in Collaborative Primary Health Care Practice

Profession	Number	Percentage
Physician	109	16
Nurse (other)	101	14
Social worker	74	11
Dietitian/nutritionist	74	11
Nurse practitioner	66	9
Psychologist/mental health counsellor	61	9
Pharmacist	53	8
Occupational therapist	31	4
Physiotherapist	27	4
Midwife	26	4
Speech therapist	18	3
Physician assistant	17	2
Chiropractor	12	2
Kinesiologist	11	2
Other: Chiropodist	3	0
Other: Naturopath	3	0
Other: Dental professional	2	0
Other: Respiratory therapist	2	0
Other: Lactation specialist	2	0

(continued...)

Table 5

Types of Professionals Working Together in Collaborative Primary Health Care Practice (cont'd)

Profession	Number	Percentage
Other: Licensed practical nurse	1	0
Other: X-ray technician	1	0
Other: Lab technician	1	0
Other: Medical resident	1	0
Other: Optometrist	1	0
Other: Child/youth worker	1	0
Other: Health promotion	1	0

Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

8. Opinions on Interdisciplinary, Collaborative Practice

When asked their opinions regarding interdisciplinary, collaborative practice, most respondents agreed or strongly agreed with (See Chart 4) the following statements:

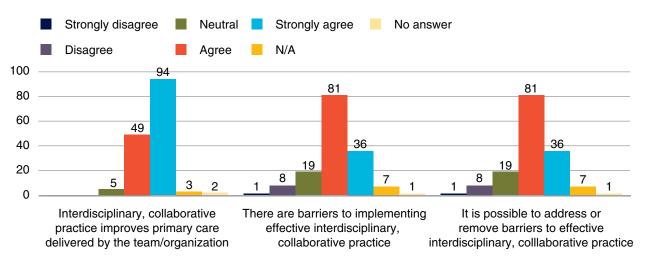
- Interdisciplinary, collaborative practice improves primary health care.
- There are barriers to implementing effective interdisciplinary, collaborative practice.
- It is possible to address or remove these barriers.

9. Rating the Barriers to Effective Interprofessional Collaboration

When asked to rate the significance of each of the identified barriers to interprofessional collaboration in primary health care in their own team or organization, respondents mainly identified the following barriers as "very significant":

- · hierarchical roles and relationships within the team
- · funding models
- · financial incentives

Chart 4
Opinions on Interdisciplinary Collaboration in Primary Care (number of responses; n = 153)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Factors that most respondents identified as "somewhat significant barriers" included a lack of:

- · role clarity
- trust
- · skill mix and team size
- · communication tools
- · education and training
- · monitoring and evaluation

In general, responses were mixed regarding the significance of the identified barriers to collaboration. Often, ratings of "very significant," "somewhat significant," and "not significant" were evenly split for certain barriers. Interestingly, although few respondents identified governance and leadership as a very significant barrier to collaboration, in subsequent survey responses, many respondents said enhancing governance and leadership would be an important way to improve effectiveness. (See Table 6.)

Table 6
Perceived Barriers to Effective Interdisciplinary Collaborative
Primary Care Practice

(number of responses; multiple responses permitted)

	Very significant barrier	Somewhat significant barrier	Not a barrier
Funding models	90	46	21
Hierarchical roles and relationships	74	47	39
Financial incentives	74	51	32
Training	54	60	43
Education	53	65	41
Monitoring and evaluation	52	54	50
Governance and leadership	49	52	58
Trust	48	56	55
Role clarity	43	73	44
Communication	37	62	60
Skill mix and team size	26	72	61

Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

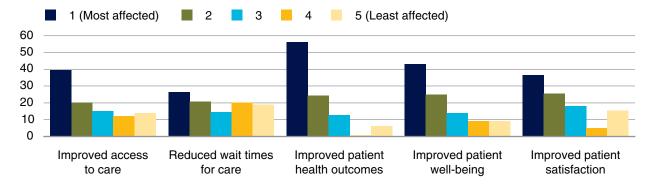
10. Patient Benefits of Interdisciplinary, Collaborative Practice

When asked to rank a list of benefits to patients of addressing or removing barriers to interdisciplinary, collaborative practice in primary care, respondents were most likely to highly rank improved access to care, reduced wait times for care, and improved patient health outcomes, well-being, and satisfaction. (See Chart 5.)

When asked to suggest other benefits to patients of removing barriers to interdisciplinary and collaborative primary care, respondents mentioned the benefits listed in Table 7.

Chart 5
Ranking of Patient Benefits Most/Least Affected by Removing Barriers to Interdisciplinary and Collaborative Primary Care

(percentage)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Table 7
Other Patient Benefits as a Result of Removing Barriers to Interdisciplinary and Collaborative Primary Care

Other benefit	Percentage
Better patient health knowledge, understanding, empowerment ,and self-care	16
Access to necessary services	14
Better use or distribution of services (resource utilization) and of appropriate providers to supply appropriate services to meet patient needs	11
Better continuity and coordination of care	8
Better health outcomes and/or quality of life (at the same or lower cost)	7
Patient trust in care providers, care teams and/or the health care system	4
Improved quality of care	2
Reduction in adverse events	2
Better productivity	2
Better support for caregivers	1

Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

11. Solutions

Solutions to Address or Remove Barriers to Interdisciplinary, Collaborative Primary Care Practice

When asked to provide examples of solutions that their team or organization has planned or already implemented to address or remove individual-, practice-, and system-level barriers, the most frequent responses included the following, as shown in Table 8:

- communication opportunities and use of communications tools (individual, practice, system);
- interprofessional education and training (individual, practice, system);
- performance improvement tools and programs (individual, practice);
- a strong/appropriate governance and leadership structure (practice, system);
- EMR use and optimization (practice, system);
- alternative funding models (system).

Table 8
Solutions to Address or Remove Barriers to Interdisciplinary,
Collaborative Primary Care Practice

Type of barrier	Solution	Number of responses	Percentage
Individual-level	Appropriate funding	1	1
	Appropriate skill mix	1	1
	Physician champions	1	1
	Public education on scopes of practice	1	1
	Collaborative practice protocols	1	1
	Consultation	1	1
	Expansion of professional scopes of practice	1	1
	Co-location	1	1
	Increased administrative support	1	1
	Lean management	1	1
	Shared decision-making	2	2

(continued...)

Table 8
Solutions to Address or Remove Barriers to Interdisciplinary,
Collaborative Primary Care Practice (cont'd)

Type of barrier	Solution	Number of responses	Percentage
Individual-level	Performance improvement tools and programs	15	16
	Interprofessional education and training	19	21
	Communication opportunities and tools	45	49
Practice-level	Quality improvement plans	1	1
	Targets for staffing ratios and panel sizes	1	1
	Teams based on programs (health issues)	1	1
	Decreased involvement of non-medical government officials	1	1
	Team-building exercises and tools	1	1
	Appropriate funding and financial incentives	1	1
	Monitoring and evaluation (standards and integration)	2	3
	Description of team member roles and protocols	2	3
	Co-location	2	3
	Mediation and conflict resolution	2	3
	Formalized flow and organization charts	4	6
	Advanced communications technology	4	6
	EMR use and optimization	5	7
	Performance improvement tools	6	8
	Interprofessional education and training	8	11
	Appropriate governance and leadership structure	15	21
	Regular team meetings that include leaders	16	22
System-level	Communication with health system partners (i.e. hospitals)	1	2
	Tools to support shared decision-making	1	2
	Designation of primary care as the coordinating centre for all health services	1	2
	Suspension of new billing codes for solo family physicians	1	2
	Greater support to help solo physician practices integrate into IPC teams	1	2

(continued...)

Table 8
Solutions to Address or Remove Barriers to Interdisciplinary,
Collaborative Primary Care Practice (cont'd)

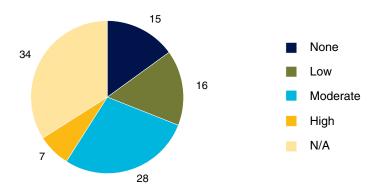
Type of barrier	Solution	Number of responses	Percentage
System-level	Expansion of services by increasing the use of interns and students	1	2
	Team meetings and team-building opportunities	2	3
	Expansion of scopes of practice to address population health needs	2	3
	Sharing of learnings and best practices across models and jurisdictions	2	3
	Governance and leadership	3	5
	Appropriate funding to support and expand current IPC teams	4	6
	Opportunities to communicate and work together across all levels	5	8
	Alternative funding models	6	9
	Monitoring and evaluation	10	15
	Advocacy and lobbying (scopes of practice, funding)	11	17
	IPC education and training	15	23

Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Level of Confidence That Solutions Are Working or Will Work

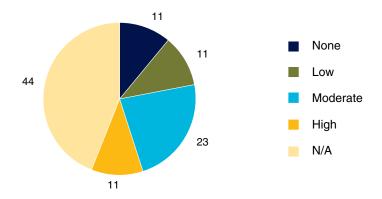
When asked what kind of evidence the team or organization has to show to prove that the solutions are working, most respondents noted that they had little or no hard evidence of impact. If there was evidence, it was mostly anecdotal observations of improvements. Similarly, respondents generally had little confidence that the solutions have or would work. (See charts 6, 7, and 8.)

Chart 6
Level of Confidence that Solutions Are/Will be Effective: Individual-Level Barriers
(per cent)



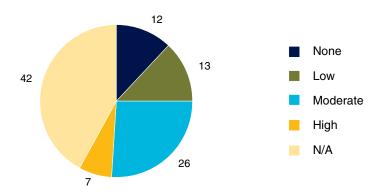
Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Chart 7
Level of Confidence that Solutions Are/Will be Effective:
Practice-Level Barriers
(per cent)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Chart 8
Level of Confidence that Solutions Are/Will be Effective:
System-Level Barriers
(per cent)



Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

Evidence of the Impact of Solutions

When asked an open-ended question about the types of evidence available to show the impact of solutions in their team or organization, respondents provided the examples listed in Table 9.

Table 9

Type of Evidence of Impact of Solutions to Improve Interdisciplinary
Collaboration in Primary Care

Evidence of impact	Number of responses
Anecdotal evidence or feedback showing improved job satisfaction, staff self-esteem, confidence, trust, role clarity, collaboration, engagement, or role optimization	29
Better patient satisfaction (anecdotal and survey evidence)	12
No evidence yet	12
Evidence from the published literature, international best practices, evidence-based best practices, or effectiveness in other settings	10
Staff surveys showing improvements in satisfaction, operations, etc.	8
Increased patient referrals to other professionals	7
	(continued)

Table 9

Type of Evidence of Impact of Solutions to Improve Interdisciplinary
Collaboration in Primary Care (cont'd)

Evidence of impact	Number of responses
Consensus or agreements on protocols, guidelines, roles, or conflict resolution	4
Decreased number of incidents, adverse events, or complaints	4
Increased uptake of regular, more engaging, or more active meetings and educational events	4
Anecdotal or personal experience (general)	3
Increase in third next available (TNA) appointments or decreased wait times	3
Increase in the number of attached patients	2
Increased funding for additional staff members to support the team	2
Increase in IPC education and training opportunities for students and residents	2
Increased number of teams vs. solo practices	2

Source: IPC Stakeholder Survey, The Conference Board of Canada, 2013.

12. Selected Quotes From Respondents

"Teamwork has to be embedded in the organization, with strong organizational leadership to guide it, and there need to be standardized tools, education, and evaluation across the whole organization [with] which to monitor and assess how the team is doing and to set goals for how the team wants to improve."

"Collaborative practice only works when there is trust between all members... There still is a lot of arrogance and prejudice in all walks of health care professionals. After having said that, patients receive gold-star care when it works."

"Fee schedules are the biggest barriers with nurse-physician mix."

"From my experience, it seems the nurses and allied health workers are the most ready and willing to make changes, but physicians rarely engage in IPC improvement activities..."

"I feel that one of the strongest barriers that interdisciplinary health providers have in primary care is physician buy-in."

"Without provincial-level human resources plans and infrastructure, interprofessional initiatives encounter major road blocks, even with the best intentions and good interprofessional education in place."

"The capacity for electronic communication between providers is minimal. Example: Perhaps a dozen different computer programs operating in various physician offices and none of them interact."

"I work in a family health team, but the roles of team members were never defined to begin with, and team members struggle with program development issues because of lack of leadership in using team collaboration effectively for the patient's benefit..."

"[There is a] lack of understanding of how to effectively use nursing staff to the full scope of practice. Scopes are not understood by leadership (doctors), and nurses with a higher level of education are not valued and utilized effectively. We practise like the Marcus Welby days. There is no understanding of what a learning organization is, best practices around transformational leadership, or the importance of including nurses in the clinical decision-making. A population-based approach or an understanding of the social determinants of health are minimal and are not considered when planning care. The vision of the organization is weak and the strategic plan is on paper only. The care is driven by doctor incentives for prevention and not a wellness approach."

"Comprehensive, multidisciplinary health care does not exist in Ontario, thanks to an inadequate and fragmented funding system that is physician-based and requires alternative funding for all non-medical direct interventions. There are no incentives for the various disciplines to work together, since there are no structures to allow for that. The system is broken and fragmented, with incalculable waste of very limited funding resources."

"I think most providers see the value of interdisciplinary working teams. However, institutions do not provide the resources or the system set-up to allow people to work together, discuss together, and problem-solve together. The system is too hell bent on churning out more and more patients and be damned to the quality of care or the needs of the patients (and the providers)."

"[There is a] need to address issues in the North regarding distance, funding, funding patients to travel, and funding providers to travel."

"The medical legal challenges are usually overstated and based on a legal metaphor (captain of the ship) that is completely outdated. You did not have it listed as a barrier, but it comes up frequently and it is mentioned in the reference Conference Board document."

"How do individual psychologists in a psychology private practice get involved in an interprofessional primary care team without compromising the effectiveness and independence of psychology [in relation] to a symptom-relief, medication-driven, medical model? Our approach is to de-emphasize the medical model, not operate within one. The risk is that our involvement in your system is a step backward, not a step forward. "

"The only way you can 'optimize' interprofessional primary care teams is to properly fund them..."

"A particular challenge faced by smaller FHTs [family health teams] is [that] the number of part-time positions increases the turnover of employees as they leave to find full-time employment elsewhere...

Another challenge with retention of employees in FHTs is lack of competitive salary; [it is] hard to entice great team members to come at significant reductions in salary levels. Another challenge in a teaching environment is that the future generation of students is mentored by current interdisciplinary health providers and, depending on the current office interprofessional environment and the value they see in other team members, the problems are perpetuating in the next generation of practitioners. There is a need [for] more formalized plans

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RECOMMENDATIONS FOR ACTION
Getting the Most out of Health Care Teams

for interprofessional interactions at the student/learner levels. Often, the term 'interprofessional' is misunderstood as 'multi-professional.' We're all in the same place, but not working as a team."

APPENDIX B

High-Functioning Interprofessional Primary Care Team Case Studies

The main report presented case study details grouped by recommendation. This appendix repeats much of that information, but expands on it and groups it by organization.

Family First Health Centre (FFHC) and Family First Family Health Team (FFFHT) (Orleans, Ontario)

The Family First Health Centre (FFHC) and Family First Family Health Team (FFFHT) provide primary care services to a patient population in a suburban area of Ottawa. Although the FFHC and FFFHT occupy the same physical space and work together to serve the same patient population, they are funded and operate under different governing models. The FFHC is a private, for-profit physician practice operating since 2005, while the FFFHT is a physician-led, not-for-profit corporation operating since 2011. The FFHC and FFFHT complement each other, and both have a mandate to provide primary health care services to the same patient population.

Governance and Leadership

The FFHC physicians' conduct is governed by their professional body, while the FFFHT's governance structure includes a board of four FFHC physicians. The board and the executive director (ED) meet regularly to discuss important issues for the FFFHT. The FFFHT hopes to expand its governance to include an advisory committee consisting of an independent (non-employee) interdisciplinary health professional (IHP) and a community representative, who could offer different perspectives on challenges and decisions the governing board is addressing. The FFFHT has had the same ED and clinical physician lead since the beginning.

The ED reports to the board of directors, which is made up of four FFHC physicians. The ED attends board meetings to provide information but is not officially a board director. In developing the FFFHT, the ED and the lead physician wrote a five-year business case for the FFFHT and submitted this plan to the Ontario Ministry of Health and Long-Term Care (MOHLTC) for funding to hire other IHPs. Once the FFFHT was established, the ED and the lead physician developed documentation on the vision, mission, and policies of the FFFHT. The vision and mission of the FFFHT included a collaborative and interdisciplinary approach to primary care and to provider and patient responsibilities.

The FFFHT is considered a well-functioning family health team because it has a very strong ED and lead physician who share the same vision for interdisciplinary, collaborative practice, and who have an effective and respectful working relationship. The lead physician firmly believes in and practises collaboration and innovation, and the ED has skills and experience in management, communication, and information technology. The ED makes strategic investment decisions, such as the choice to buy thin client solution software for computer workstations that anyone on the team can access. The ED developed a manual for board and team members that includes the FFFHT's mission, vision, values, strategic objectives, and five-year plan, which is used to evaluate the FFFHT's performance.

Population Needs

The business case presented to the MOHLTC included information on the demographics of the area, the incidence of diseases, and population needs, such as requirements for chronic disease prevention and care. Based on population needs, the MOHLTC determined how much funding it would give the FFFHT, and how many and which types of IHPs it would cover. Mainly, the FFFHT's client population is made up of middle-class families and professionals. The leadership team identified chronic care management services that would be required, including a diabetes care program, as well as prevention services to address childhood obesity in the community.

Providers, Services, and Programs

The FFFHT is relatively small compared to some other family health teams in Ontario. Based on the population needs that the leadership team identified, the FFFHT decided to provide health programs that would focus on, among other things, diabetes management, obesity and weight management, elder care, preventive care, pediatric obesity, mental health, and, eventually, respiratory illnesses. There are 12 physicians who are responsible for most primary health services, including diagnosis, treatment, prescribing, and preventive care. There is a part-time psychologist, two social workers (one full time, one part time), a full-time dietitian, three licensed practical nurses (two full time, one part time), one part-time respiratory therapist, a pediatric nurse practitioner, and one part-time pharmacist. The pediatric nurse practitioner does most of the well-baby visits and sees child patients in their odd birth years (at ages 1, 3, 5, and so on). We did not determine how the FFFHT decided on the appropriate skill mix and size of the team.

Accessibility

The FFHC/FFFHT offers after-hours care, and appointments for urgent care or short follow-up visits with 24-hour advance booking. There are no walk-in appointments. The FFFHT is located within a Real Canadian Superstore—a Loblaw Inc. hypermarket, which is a blended grocery and

department store. This type of location offers several benefits, including convenience, free parking, and a large clinic space. Although patients are rostered to a specific physician, if a physician leaves the FFHC, his or her patients may elect to roster with another physician and continue to have access to the FFFHT, provided there is space on another physician's roster.

Infrastructure

All FFHC/FFFHT health providers are located at one site. Co-location facilitates collaboration among team members and convenience for patients. The FFHC worked with Primacy Management Inc. to establish its practice within its retail space. The FFHC, Primacy Management Inc., and Loblaw Inc. worked together to design the physical space and facilities of the Primacy Clinic, which both the FFHC and FFFHT use. The innovative design includes common areas for team members, including physicians. Instead of dedicated offices, health providers have hallway computer workstations or shared offices (mental health team). Common examination rooms are used for patient consultations. There is a common eating area where informal meetings often take place. The way in which the physical space is set up allows for more efficient use of space, and facilitates communication and collaboration.

Evaluation

An ED network within the Champlain Local Health Integration Network (LHIN) meets four times a year to share best practices and exchange policies for performance improvement. There are also networks for various professions, such as dietitians and social workers. This approach to knowledge-sharing allows FFFHT team members to learn from their peers, and bring lessons and best practices back to the broader team. The FFFHT also regularly monitors physician performance in terms of their patients' clinical outcomes. For example, it regularly produces a diabetes management report card that includes the proportion of patients who have been screened or tested for fasting blood glucose, glycated hemoglobin, blood cholesterol, and blood pressure, as well as the

proportion of patients who have reached targets for glycaemia control. Six per cent of the FFFHT's enrolled patients have been diagnosed with diabetes.

Funding

The FFHC, founded in 2005, is a private physician practice. It is funded privately by physicians remunerated directly by MOHLTC as a family health organization (FHO) via a blended capitation payment model.¹ The FFHC is privately funded by the practice physicians' gross revenues, which cover the physicians' pay, a significant proportion of overhead costs (such as 70 per cent of physical office space), and the salaries of administrative staff and registered practical nurses. The MOHLTC funds the FFFHT as a family health team. The funding covers a proportion of overhead costs, most of the ED's salary, and the salaries of the IHPs. The physicians provide a salary supplement to the ED.

Slave Lake Family Care Clinic (Slave Lake, Alberta)

The Slave Lake Family Care Clinic (SLFCC) is one of three new family care clinic (FCC) sites. It was launched in Alberta in April 2012. The SLFCC is a young organization that is still evolving into a fully functioning IPC team. On average, the SLFCC handles from 990 to 1,200 patient visits a week.

Blended capitation is a system of fixed payment per rostered patient, based on a defined basket of primary care services provided based on the age and sex of each patient. Fees-for-service are paid for other services. Monthly comprehensive care capitation payments are paid to physicians for all enrolled patients, and other fees and bonuses, premiums, and special payments are paid for services that include chronic disease management, preventive care, prenatal care, home visits, hospital visits, obstetrical care, and palliative care.

Governance and Leadership

The SLFCC is accountable to and funded by both Alberta Health Services (AHS), which is the provincial health care delivery system; and Alberta Health, which is the provincial ministry that sets policy, legislation, and standards for the health system. AHS sets the budgets of the SLFCC, and hires and fires employees. The SLFCC's accountability framework outlines strict evaluation criteria, including many process indicators for which data come mostly from electronic medical records (EMRs). Examples of quality metrics include same-day access, available time slots, and number of attached and unattached patients. Some health quality metrics are extracted from return-visit and quality-of-life survey responses. Alberta Health and AHS also look at emergency department visits and acute care admissions.

A steering committee guides the SLFCC's operations. It includes two physicians, one nurse practitioner, two AHS representatives, and one medical liaison who works with AHS. The committee meetings include the SLFCC manager and may include other people to answer questions from the committee. In addition, an advisory committee of community members provides a voice for community concerns.

Population Needs

The SLFCC serves the Slave Lake community, a small community with a large Aboriginal population. The health care needs of the population include the care and management of chronic conditions, such as obesity, diabetes, and mental health issues.

Providers, Services, and Programs

The SLFCC currently has seven physicians (a mix of full and part time) who do not have administrative responsibilities. Rather, they play a clinical role on the interdisciplinary team, along with other providers, including six full-time nurse practitioners, licensed practical nurses (chronic disease and mental health), a part-time pharmacist, a full-time dietitian, two full-time physiotherapists, a full-time Aboriginal liaison, and a full-time social worker. It was not clear how provider mix was

determined for the SLFCC, but it appears to meet the needs of the population served. This new governance and operational model is a paradigm shift for many of the providers on the team, especially the physicians. Providers will need time to become fully comfortable with a care delivery model where the physician is not always the clinical lead. This reflects the experience of all IPC teams across Canada.

Accessibility

Patients are not rostered to any provider on the team. Any patient may seek care from the SLFCC. On the first visit, an EMR is created for them to facilitate continuity of care. Generally, about 5 per cent of the patients who visit the SLFCC were previously unattached to a physician. The SLFCC is currently housed in one site. The Aboriginal liaison, pharmacist, and physiotherapists are not co-located. Although co-location appears to support a more cohesive team, limited space and parking availability are issues. Same-day care is available but patients might not see their provider of choice. Anyone may also access care in the evenings and on weekends on a walk-in basis. There are limited walk-in hours during the day. The clinic has the flexibility to offer same-day care because each provider deliberately keeps some open spaces on his or her schedule every day. Currently, the centre's receptionist books appointments; however, the SLFCC would like to eventually offer online booking.

The clinic has the flexibility to offer same-day care because each provider deliberately keeps some open spaces on his or her schedule every day.

Infrastructure

Almost all SLFCC staff members are co-located in an older medical clinic, but some are located in the local hospital. Co-location was identified as an important factor in creating a more solid team; however, the current space is limited. The hospital space will be renovated soon to accommodate the full IPC team and include an on-site lab. Sufficient parking spaces remain an issue for the SLFCC.

Team members communicate mainly by using EMRs. Formal team meetings to discuss care planning and processes take place every week or two. Schedules for the meetings are posted, and case studies or case management examples are often presented. The meetings are a big shift for the providers, and the process is improving over time. There are high hopes for the provincial family care clinic (FCC) model, as the province adds more FCC sites and enhances their potential to collaborate with Primary Care Networks. Although progress has been made, it will take more time for the team to evolve. Informants noted that having at least one champion provider on the team helps the team progress and become more effective.

Evaluation

All Alberta FCCs must comply with strict monitoring and evaluation standards linked to performance accountability. The AHS and Alberta Health require them to use data from EMRs to report on same-day access, available time slots, and number of previously unattached patients. FCCs must also provide health outcomes data via return-visit and quality-of-life surveys. They must also report on the number of emergency department visits and acute care admissions. Currently, no patient clinical outcomes are measured. Alberta Health provides support, such as standardized questions and tools, to help the SLFCC develop semi-annual evaluation reports.

Funding

Alberta Health transfers fee-for-service payments to the SLFCC to cover contract payment to physicians, who receive a salary from the SLFCC. All other employee salaries and other SLFCC costs are covered by AHS funding. Physicians are not employees of the SLFCC, as they are under negotiated contracts and, as such, are required to pay some overhead costs.

Clinica Family Health Services (Denver, Colorado)

Clinica Family Health Services is a non-profit, federally funded health centre that serves the area northwest of Denver, Colorado.

Governance and Leadership

Clinica is a private, publicly funded, non-profit corporation governed by a board of directors of volunteers (there are currently 13). The organization's bylaws require clinic patients to comprise over half of the board's members. The CEO, who is hired by the board, is responsible for all other human resources decisions. The board reviews and approves the annual budget, and develops and approves the organization's policies and strategic plan. Leadership has been identified as a major driver in the success of the organization and is based on the Institute for Healthcare Improvement's Model for Improvement and "The Big 6." The latter focuses on improving patient-centred, population-based management through continuity, access, an improved care delivery model, improved office efficiency, improved infrastructure design, and patient activation² and self-management.

Population Needs

The centre has four clinic sites in different counties of the region. It mainly provides health services to a low-income population—98 per cent of its patients have household incomes significantly below the federal poverty line. The patient population is representative of the communities in the area that the centre serves. Annually, the centre sees approximately 40,000 patients and records 170,000 visits. Half of the patients are uninsured and 40 per cent are on Medicaid (the federal health insurance program). The majority of patients are Latino and speak only Spanish. Although the patient clientele is different from that in most

^{2 &}quot;Patient activation" is a person's willingness and ability to manage his or her own health, influenced by the person's skills and knowledge.

Canadian communities, the centre is similar to a Canadian community health centre in that it serves a predominately underserved, low socioeconomic, high-needs population.

Providers, Services, and Programs

Co-located health care teams (pods) deliver care for chronic conditions and preventive services. Other innovations include behavioural health; an anticoagulation service run by a nurse and pharmacist; a NextGen EMR system; outreach to patients overdue for chronic and preventive services; improved coordination with specialty care, hospitals, and other parts of the health care system; and case managers who help patients self-manage chronic conditions. There are currently 46 medical health providers, 13 social services providers, 4 dental health providers, 2 pharmacists, and a total staff of 320.

In terms of roles and responsibilities, all team members are expected to work to their full scope. Medical assistants bring patients into the exam rooms, check vital signs, take detailed histories using EMRs, do well-child checks, and provide immunizations, among other services. As their responsibilities do not allow time for medication reconciliation or behaviour change counselling, the case manager usually carries out these functions. Licensed practical nurses resolve everyday issues that require assessment and decision-making; handle simple clinical issues that can be dealt with through protocols, and through physician-written and -approved standing orders; and coordinate pod flow. Physicianapproved standing orders for licensed practical nurses include the management of specified acute-care issues. Case managers—also called health coaches or navigators—meet with patients to help them manage their chronic conditions. A licensed clinical social worker, psychologist, or licensed professional counsellor provides behavioural health and mental health services. A psychiatrist visits twice a month and sees three new patients and does follow-up for four patients, in addition to consulting with providers and behavioural health professionals.

Accessibility

To optimize continuity and access to care, Clinica patients are attached to a primary care provider (PCP), who is a physician, nurse practitioner, or physician assistant, as well as to a care team (pod), which is assigned a colour to help patients remember their pod. A call centre located at one of the sites, which serves all four sites, is used to schedule and guide patient visits. Call-centre agents first try to offer appointments with the patient's PCP. If that PCP is unavailable, they offer same-day or next-day appointments with another provider in the patient's pod. This approach to appointment scheduling prioritizes continuity of care over access, while allowing patients to choose a provider other than their PCP if their PCP is not available. Within reasonable limits, providers are expected to give their patients priority in their schedules over other providers' patients.

Third next available appointment (TNA) is an access metric that measures the time it takes to access a service at the time an appointment is made (same- or next-day appointment). TNA is measured by site, pod, and provider. Clinica has determined that setting appointments two weeks in advance results in the lowest rate of missed appointments (8 per cent). Provider schedules are filled with appointments from 8:00 a.m. to 10:00 a.m. to allow more time for sameday and next-day appointments. TNA averages from two to six days, with longer TNA during certain times of year (e.g., flu season, late-summer back-to-school physicals). Clinica can predict demand for appointments based on data about previous visits made by various strata of the patient population, such as infants, young women, and elderly people. Clinica offers some after-hours care but does not offer weekend appointments.

Infrastructure

Pods are the hubs in which all clinical activity takes place. There are several pods at each of the four sites, with 13 pods in total. "Pod" refers to both the physical location and the organization of staff and patients. The physical space is a central open space surrounded by patient exam rooms. All pod employees are co-located, which facilitates communication and collaboration. Each pod has three

full-time-equivalent providers, three medical assistants, one behavioural professional, one case coordinator, one medical records person, and front desk personnel. Each pod engages in a 20-minute huddle in the morning and in the afternoon to discuss patient scheduling and consults for the day.

Two pod members—a medical assistant and the licensed practical nurse—have leadership roles. The medical assistant has a half-time clinical role and a half-time team manager role, which involves handling training, supervising other medical assistants, handling timesheets, and conducting performance reviews. The licensed practical nurse is also the flow coordinator, who ensures appointments occur on time.

Each pod member except front desk employees carries a laptop with access to EMRs, used to document patient visits in real time. Each provider has three exam rooms where pre-visits, visits, immunizations, lab work, behavioural health consults, and goal setting with the case manager occur. Two pods share a procedure room for obstetric ultrasounds and other invasive procedures. For all procedures, providers follow clinical protocols designed to ensure standardized care processes throughout the centre.

Evaluation

Clinica regularly collects, generates, and evaluates performance data to identify areas where individuals and the pods can improve. Statistics generated through a program called Dashboard are posted on a wall in each pod. These performance metrics include continuity of care, documentation of smoking status, percentage of smokers receiving counselling, and process and outcome measures for diabetes, hypertension, prenatal care, and other health issues. These "data boards" are updated every two weeks. Employees discuss areas for improvement during the twice-daily huddles. Clinica's performance evaluations have shown consistent improvement in all metrics over the past six years.

Continuity of care has been identified as an important objective for Clinica because of its link to improving care, reducing costs, increasing patient and provider satisfaction, and reducing unnecessary care. Continuity of care is measured in terms of the percentage of all primary care visits that patients make to their assigned PCP or pod.

Funding

Clinica is financed through payments from federal health insurance (Medicaid), grants under section 330 of the *Public Health Service Act*, funds raised from local foundations and benefactors, sliding-scale payments collected from uninsured patients, and funds from Colorado tobacco taxes. Like other community health centres in the U.S., Clinica faces financial challenges. Its annual budget is about \$30 million.

All staff members are salaried employees of the centre. Due to difficulties in recruiting highly skilled providers, half of Clinica's providers are employed part-time. The CEO tries to keep all staff salaries close to the local market wage, but they tend to be slightly below it. The CEO is not the highest paid staff member. A pay-for-performance system was in place from 2003 to 2007. The centre held some of its revenues in a pool to provide bonuses to the pods, as opposed to providers who achieved high performance.

APPENDIX C

Bibliography

Academic Health Council, Champlain Region. *A One-Stop Shop.* www.ahc-cas.ca/?page_id=37.

Accreditation Canada. 2013 Required Organizational Practices
Handbook. Ottawa: Accreditation Canada, 2013. www.accreditation.ca/
sites/default/files/rop-handbook-en.pdf (accessed September 23, 2013).

American Academy of Family Physicians, American Academy of Paediatrics, American College of Physicians, and American Osteopathic Association. *Joint Principles of the Patient Centered Medical Home*. March 2007. www.acponline.org/running_practice/delivery_and_payment_models/pcmh/demonstrations/jointprinc_05_17.pdf.

Arah, O.A., N.S. Klazinga, D.M. Delnoij, A.H. ten Asbroek, and T. Custers. "Conceptual Frameworks for Health Systems Performance: A Quest for Effectiveness, Quality, and Improvement." *International Journal for Quality in Health Care* 15, no. 5 (October 2003): 377–98. Review. *Erratum in International Journal for Quality in Health Care* 16, no. 2 (April 2004): 189.

Arora, V., and J. Johnson. "A Model for Building a Standardized Hand-off Protocol." *The Joint Commission Journal on Quality and Patient Safety* 32, no. 11 (November 2006): 646–55.

Astles, P., T. Foster, J. Lye, and G. Prada. *Paving the Road to Higher Performance: Benchmarking Provincial Health Systems*. Ottawa: The Conference Board of Canada, 2013.

Canadian Interprofessional Health Collaborative (CIHC). A National Interprofessional Competency Framework. Vancouver: CIHC, February 2010.

—. Welcome to the Accreditation of Interprofessional Health Education (AIPHE) Website. www.cihc.ca/aiphe (accessed September 23, 2013).

College of Family Physicians of Canada. *Primary Care Toolkit for Family Physicians: Glossary*. http://toolkit.cfpc.ca/en/glossary.php (accessed September 9, 2013).

Dinh, T. Improving Primary Health Care Through Collaboration. Briefing 1: Current Knowledge About Interprofessional Teams in Canada. Ottawa: The Conference Board of Canada, 2012.

Dinh, T. Improving Primary Health Care Through Collaboration.

Briefing 2: Barriers to Successful Interprofessional Teams. Ottawa:
The Conference Board of Canada, 2012.

Dinh, T., and F. Bounajm. *Improving Primary Health Care Through Collaboration. Briefing 3: Measuring the Missed Opportunity.* Ottawa: The Conference Board of Canada, 2013.

Glazier, R.H., B.M. Zagorski, and J. Rayner. *Comparison of Primary Care Models in Ontario by Demographics, Case Mix and Emergency Department Use, 2008/09 to 2009/10*. Toronto: Institute of Clinical and Evaluative Sciences, March 2012. www.ices.on.ca/file/ICES_Primary %20Care%20Models%20English.pdf.

Government of Manitoba. *Primary Care Interprofessional Team Toolkit*. October 2012. www.gov.mb.ca/health/primarycare/pin/docs/pinit.pdf.

Institute for Healthcare Improvement. *The IHI Triple Aim*. www.ihi.org/offerings/Initiatives/TripleAim/Pages/default.aspx (accessed September 10, 2013).

Johnston, S., S. Dahrouge, and W. Hogg. "Gauging to Gain: Primary Care Performance Measurement." *Canadian Family Physician* 54, no. 9 (September 2008): 1215–17.

Koenig, C.J., S. Maguen, A. Daley, G. Cohen, and K.H. Seal. "Passing the Baton: A Grounded Practical Theory of Handoff Communication Between Multidisciplinary Providers in Two Department of Veterans Affairs Outpatient Settings." *The Journal of General Internal Medicine* 28, no. 1 (January 2013): 41–50.

Lean Enterprise Institute. What Is Lean? www.lean.org/WhatsLean/.

Mitchell, J.I., W. Nicklin, and B. MacDonald. "The Determinants of Quality Healthcare: Implications for Canadian Health Leaders." Healthcare Management Forum 25, no. 3 (Autumn 2012): 138–41.

Nicklin, Wendy. *The Value and Impact of Health Care Accreditation:* A Literature Review. Ottawa: Accreditation Canada, 2012. www.accreditation.ca/sites/default/files/value-and-impact-en.pdf (September 23, 2013).

Ontario Ministry of Health and Long-Term Care. *About the Excellent Care for All Act.* http://health.gov.on.ca/en/pro/programs/ecfa/legislation/act.aspx (accessed September 23, 2013).

Organisation for Economic Co-operation and Development (OECD). Strengthening Health Information Infrastructure for Health Care Quality Governance: Good Practices, New Opportunities and Data Privacy Protection Challenges. OECD, May 2013. www.oecd.org/els/health-systems/strengtheninghealthinformationinfrastructure.htm (accessed July 29, 2013).

Pincavage, A.T., W.W. Lee, K.J. Beiting, and V.M. Arora. "What Do Patients Think About Year-End Resident Continuity Clinic Handoffs? A Qualitative Study." *The Journal of General Internal Medicine* 28, no. 8 (August 2013): 999–1007.

Schwartz, Andrew. "Training Nurse Practitioners and Physicians for the Next Generation of Primary Care." *Science of Caring* (January 2013). http://scienceofcaring.ucsf.edu/future-nursing/training-nurse-practitioners-and-physicians-next-generation-primary-care.

Segal, L., M.J. Leach, E. May, and C. Turnbull. "Regional Primary Care Team to Deliver Best Practice Diabetes Care: A Needs-Driven Health Workforce Model Reflecting a Biopsychosocial Construct of Health." *Diabetes Care* 36, no. 7 (July 2013): 1898–1907.

Spenceley, S., C. Andres, J. Lapins, and others. "Accountability by Design: Moving Primary Care Reform Ahead in Alberta." The School of Public Policy Research Papers, University of Calgary 6, no. 28 (September 2013). http://policyschool.ucalgary.ca/sites/default/files/research/s-spenceley-care-reform.pdf.

Sun Country News. *Planning the New Primary Health Centre*. July 2, 2013. http://suncountryblog.com/2013/07/02/planning-the-new-primary-health-centre/.

The Conference Board of Canada. *Health Matters: An Economic Perspective*. Ottawa: The Conference Board of Canada, 2013.

University of Ottawa, Faculty of Health Sciences. Academic Health Council—Champlain Region: A One-Stop Shop for Interprofessional Resources and Activities. www.health.uottawa.ca/academic_health_council.htm (accessed July 16, 2013).

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