Rapid Review

Primary care governance and financing: Models and approaches

Prepared for the Institute of Health Economics

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About

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Contents

List of Abbreviations

ACCHS	Aboriginal Community Controlled Health Care Services (Australia)
APP	Alternate payment plan
BC	British Columbia
BMA	British Medical Association
CDM	Chronic Disease Management
CFA	Crown Funding Agreement (New Zealand)
CFPT	Collaborative Family Practice Team (Nova Scotia
CHC	Community health centre
CQC	Care Quality Commission (England)
DHB	District Health Boards (New Zealand)
DHSC	Department of Health and Social Care (England/Scotland)
ED	Emergency department
EMR	Electronic medical record
FPSC	Family Practice Services Committee (British Columbia)
FHT	Family health team
FFS	Fee-for-service
GP	General practitioner
GPSC	General Practice Services Committee (British Columbia)
HCH	Health Care Homes (New Zealand)
KP	Kaiser Permanente (US)
MBS	Medicare Benefits Scheme (Australia)
MN	Manitoba
nGMS	New General Medical Services (Scotland)
NGO	Non-governmental organization
NHS	National Health Service
NPLC	Nurse Practitioner-Led Clinic
NP	Nurse practitioner
OECD	Organisation for Economic Co-operation and Development
P4P	Pay-for-performance
PCN	Primary Care Network
PSP	Performance Sharing Plan (US)
PHO	Primary Health Organization
PIP	Practice Incentives Program
QOF	Quality and Outcomes Framework (England)
RACGP	Royal Australian College of General Practitioners
RDMA	Royal Dutch Medical Association
SHI	Social Health Insurance (Netherlands)
SIP	Service Incentive Payment (Australia)
SLM	System Level Measures (New Zealand)
SWPE	Standardized Whole Patient Equivalents
UK	United Kingdom
US	United States
WIP	Workforce Incentive Program

Executive Summary

Internationally and across Canada, governments have explored varied approaches to reforming the governance and financing of primary care with the aim of improving access, efficiency, effectiveness, and patient experiences in the health system. This rapid review presents an overview of primary care models and reforms in 11 jurisdictions, with a focus on governance and financing, across a selection of Canadian provinces where there has been some progress toward primary care reform, and comparatively with England, Scotland, the Netherlands, the United States (Kaiser Permanente), Australia, and New Zealand.

Findings from the reviewed literature and discussions with local experts reveal wide support among general practitioners (GPs) for primary care reform initiatives that support voluntary collaborations, interprofessional teams, and blended funding models that use capitation often alongside blended fee-for-service [FFS] and/or targeted incentives. However, there is limited evidence of the effectiveness of these reform efforts, so more research is needed to understand how, and in what ways, these initiatives have met their stated goals. While there is some emerging evidence on how to overcome barriers to reform, further research could examine particularly the development of primary care models that balance cost-containment and accountability while allowing GPs to maintain their autonomy.

Based on our literature review and discussions with local experts, we present six policy considerations for governments in Canada to keep in mind when moving forward with primary care reform in their jurisdictions:

1. Target funding to support and expand existing GP/primary care teams and providers.
2. Governance and funding arrangements should work to optimize a balance of virtual and in-person care.
3. New contractual models for reimbursement can be instrumental in practice change but may be most beneficial if change is made incrementally and collaboratively.
4. Governance mechanisms to plan, hold providers accountable, monitor performance, and support quality improvement can be strengthened while still maintaining clinical/provider independence.
5. Targeted incentives can draw providers to political and clinical priorities, but policymakers should be aware of limitations to their use.
6. Collaboration with GPs and other primary care providers are central to the implementation of integrated care initiatives.

Introduction & Background

Governments across Canada and internationally have implemented varied approaches to reforming primary care systems to improve health system access, efficiency, effectiveness, and patient experience. These include a shift from solo practitioner to team-based models of care, targeted incentives to improve access or chronic disease management, and efforts to strengthen integration between primary care and other parts of the system. Primary care is central to the health system and primary care professionals often a patient's first point of contact, tasked with providing responsive, on-going, continuous care, including referrals to other, more specialized providers, diagnostic testing, and access to prescription drug therapies (Peckham, Ho, et al., 2018). In this report, we define primary care as the day-to-day healthcare provided by a physician or other qualified healthcare provider (Peckham, Ho, et al., 2018).

Over the past two decades there have been a range of policy innovations within Canada targeting primary care (McKay et al., 2022; Peckham, Ho, et al., 2018; Peckham, Kreindler, et al., 2018). Financial incentives, such as value-based payments, have been implemented to various degrees across Canada and internationally (Kringos et al., 2015; Mattison & Wilson, 2017). These reforms are aligned with findings from the Organisation for Economic Co-operation and Development's (OECD) key report about primary care that emphasize the importance of new models of care (e.g., team-based or integrated care), the need for economic incentives to promote optimal care, and the role of the patient and digital health tools (such as electronic medical records [EMRs]) to improve health (Organisation for Economic Co-operation and Development, 2020).

Governance of primary care, including effective resourcing for setting system goals and expectations, performance monitoring, and accountability mechanisms is a crucial component of primary care (Working Group to the Primary Healthcare Planning Group, 2011). The accountability relationship between funders/governors and independent health professionals is another key issue in governance and is applicable to all types of care models and financial arrangements. Health systems around the world are also shifting toward integrated care approaches (Commonwealth Fund, 2020). Integrated systems value collaboration between general practitioners (GPs), specialists, and other non-physician healthcare professionals. We present findings about the governance and financing mechanisms of such innovations to explore how such policies can be implemented in other jurisdictions.

This rapid review aims to inform policy options for ongoing efforts to reform and strengthen primary care in Canada. It presents an overview of primary care reforms and models, with a focus on governance and financing, across Canada (specifically, British Columbia [BC], Alberta, Manitoba, Ontario, and Nova Scotia where progress toward primary care reform has been greater than in other provinces) and comparatively with the United Kingdom (UK; England and Scotland), the Netherlands, the United States (US; Kaiser Permanente), Australia, and New Zealand. This review provides a snapshot of how different jurisdictions are structuring their primary care systems in terms of who pays and how, and how payers hold primary care professional accountable.

Methods

We conducted a rapid jurisdictional review (October to December 2022) of primary care systems and reforms across five Canadian provinces (BC, Alberta, Manitoba, Ontario, and Nova Scotia) and six international comparators (Australia, Netherlands, New Zealand, the UK (England and Scotland), and the US (Kaiser Permanente). We drew from academic and grey literature about primary care delivery models, including financing, governance, recent system reforms impacting primary care (e.g., integrated systems), and evaluations. We searched and identified relevant literature through targeted searches on Google Scholar, from reference lists of other published materials, studies recommended by local experts, and earlier work published by the North American Observatory on Health Systems and Policies.

We collected information related to: primary care delivery models (care settings, composition and extent of interprofessional care teams within jurisdictions), financing (how GPs are paid and how other primary care practice expenses are paid, and relevant funding pathways between national or subnational governments, intermediary structures, practices, and providers, where applicable), governance (accountability mechanisms for GPs and practices including the use of contracts, performance measures, pay-for-performance schemes, and/or incentives), degree of integration of pharmacists in primary care, as well as information on recent reforms and evaluations of our select primary care systems.

We consulted 1–2 local experts from each of the 11 jurisdictions to validate and supplement the identified information. Expert informants, including healthcare providers and academics, were invited to connect at their convenience via email, phone, teleconference, or videoconference (i.e., Zoom, Microsoft Teams). We shared draft case study findings with local experts for review in advance. The research team discussed findings to identify important policy lessons and cross-cutting themes. Results were mapped against a conceptual framework built upon the sub-functions of primary care governance and financing to draw out similarities, differences, and innovative or promising reforms.

Limitations

This rapid review provides a snapshot of the current state of primary care systems and reforms in 11 jurisdictions. There are several limitations to this review: 1) there are limits to the comparability of the international comparator case studies for Canadian governments, particularly from the Netherlands and the US (Kaiser-Permanente) cases because there are multiple payers, and in the US, the main population served by Kaiser are privately insured; 2) there is a lack of evidence from robust evaluations about the primary care reforms described in these jurisdictions; and 3) this review was conducted in a short period of time and relies on publicly available data from government documents and research evaluations. While some countries have an established program of national evaluations for policy reforms by Ministry of Health bodies (e.g., through the National Institute for Health and Care Research and Department of Health and Social Care's Policy Research Program in England), research and evaluations in other jurisdictions are more ad hoc. This limits our capacity to understand and assess the impacts of these different policy decisions and primary care reforms, and reflects a major weakness in governance in these jurisdictions: ongoing monitoring and evaluation of system change is a critical component of effective governance. Despite the limitations and the rapid nature of this review, we consulted with provincial and international experts to validate and expand on our findings.

Analytic Overview

Across international and Canadian provincial settings, primary care reform is ongoing and requires strong relationships between governments (payers) and providers to deliver meaningful progress to achieve more accessible, equitable, and efficient health systems. Overall, there are several financing and governance factors that may facilitate primary care reform, including: shifting away from FFS payment models toward alternative payment plans ([APPs] e.g., blended capitation with some targeted incentives), and supporting collaborative approaches to primary care reform that emphasize GP buy-in and voluntary participation in new contractual models rather than a "command and control" model.

This review presents a summary of cross-cutting themes and high-level findings of primary care reform efforts across jurisdictions to highlight trends and patterns and draw out important lessons for Canada. We explore the implications of reforms over the last 15–20 years to identify trends in primary care organisation, contracting, governance, integration, and performance management. Key findings and policy considerations, based on cross-cutting comparisons across jurisdictions, are briefly discussed below. The international and provincial case summaries are described in detail in **Appendices A** and **B**.

Organizational forms

Primary care organizational and funding models vary across jurisdictions; these models are described in **Table 1**. Primary care reforms across Canada and internationally are focused on shifting providers from sole practice or small groups of 2–3 GPs toward larger GP teams and interprofessional teams where GPs work alongside nurses (this can include nurse practitioners [NPs]); and, to a lesser extent, other professions such as pharmacists, physiotherapists, midwives, and mental health professionals. In most jurisdictions (Australia, England, New Zealand, Scotland, and Canadian jurisdictions) these shifts have been voluntary. In some cases, there are minimum practice or patient panel requirements in order to access additional team supports.

GPs play an important gatekeeping role to specialist care in all jurisdictions in our report. Elements of patient rostering (i.e., patient registration at a single GP practice) are present in all jurisdictions but Australia, where it is voluntary for physicians to have rosters, but encouraged through practice incentives (Services Australia, 2022a). While geographical limits attached to GP practices are used in England, Scotland, and Netherlands (i.e., a GP practice can only enrol patients living within a defined geographical area, often within a couple of kilometres or less), there is no such requirement or expectation in Canada, Australia, and New Zealand. The use of geographic limits and patient rostering can support planning at the local care level, strengthen accountability to patients, and support more effective and efficient care pathways. However, unless these are required (as in the Netherlands, by contrast encouraged in Canada), efforts to support continuous, longitudinal care may not succeed. The Kaiser Permanente (US) model is an exception where rostering is required for all members, but insured patients can receive care in any Kaiser Permanente region.

Virtual care plays an increasingly important role in primary care provision following the COVID-19 pandemic. In England and Scotland, this has led to a change in how appointments are made at some GP practices, who can use virtual care to triage patients before scheduling in-person appointments though there is increasing pressure from the central government in England to do more face-to-face appointments. By contrast, in Ontario, there have been recent changes to the physician fee codes to

promote in-person appointments over virtual consultations that were widespread during the pandemic (Ministry of Health and Long-Term Care, 2022).

TABLE 1. Overview of primary care delivery and funding in select jurisdictions

Jurisdiction	Delivery characteristics			Funding mechanism	
	Primary care types	Widespread adoption of inter-professional teams	Patient rostering or registration	Remuneration (primary)	Remuneration (variants where applicable)
Australia	General practice (solo or group), Aboriginal Community Controlled Health Services, super clinics	No	Encouraged, but voluntary and informal; patients can register with multiple practices	FFS	Practice incentives, commissioned contracts
Netherlands	General practice (group, solo)	Yes	Yes	Capitation & consultation fees	Bundled payments, incentives, P4P
New Zealand (pre-reform)	General practices, health care homes, extended health teams	No	Required for public payments	Capitation, FFS	P4P subsidies for intermediary PHO to be shared with GP practices
UK: England	General practice; some walk-in clinics, urgent care centres	No	Yes	Capitation	P4P; salary
UK: Scotland	General practices including solo or multidisciplinary teams	Yes	Yes	Capitation and Salary	–
USA: Kaiser Permanente	General practices co-located with specialists, hospitals, labs, pharmacy	Yes	Yes	Salary	Incentives and bonuses
CANADA					
British Columbia	General practice (group and solo), CHC Practices may be attached to PCNs	No	Loose, required for PCNs and for physicians on APP	Providers: FFS PCNs: population-based funding	APPs and incentives
Alberta	General practice within and outside PCNs, Family Care clinics, CHC	No	Required for PCNs, required for physicians on APP	Providers: FFS PCNs: Capitation	APP: blended capitation
Manitoba	General practice, primary care centres through Home Clinics	No	Required for Home Clinics	FFS	APP
Ontario	General practice, FHTs, NPLC, CHCs	No (only FHTs)	Encouraged, required for APP physician	FFS and/or APP	–
Nova Scotia	General practices, Collaborative Family Practice Teams	No (only Collaborative Family Practice Teams)	Encouraged, required for APP physicians	FFS and APP	Blended capitation (pilot) Incentives

APP (Alternate Payment Plans); CHC (Community Health Centre); FFS (fee-for-service); FHT (Family Health Team); GP (General Practitioner); NP (Nurse Practitioner); NPLC (Nurse Practitioner Led Clinic); P4P (Pay-for-performance); PCN (Primary Care Network); PHO (Primary Health Organization).

NB: All jurisdictions have GPs as gatekeepers to specialist care. In New Zealand, while capitation is the primary form of remuneration, FFS is still a significant form of payment for primary care services, and out-of-pocket payments comprise 23% of expenditures.

Funding models for primary care reform

Since the 2000s, primary care reform across all jurisdictions has broadly focused on supply side initiatives that have brought additional funding for payments directed to GPs. More recent reform efforts add to practice income or funding for salaries for nurses and other allied health professionals. There is a focus on shifting provider payments from FFS models to APPs (e.g., salaries, capitation, blended payments, targeted incentives), and to support shifts in practice patterns such as providing after-hours care and collaborating across professions through interdisciplinary teams (**Table 1**).

In Canada, some provinces use blended models of salary, FFS, and financial incentives to persuade GPs to provide longitudinal and collaborative care. For example, the Community Longitudinal Family Physician Payment in British Columbia is an additional payment for GPs on FFS contracts intended to compensate them for providing long-term, relational care to a panel of patients (Doctors of BC, 2019); and the Collaborative Practice Incentive Program in Nova Scotia provides an annual payment to incentivize GPs to participate in collaborative practice teams (Doctors Nova Scotia, n.d.-c). The "ideal" type of payment model that most jurisdictions are working toward is the interprofessional team paid via a mix of blended capitation with some targeted incentives or bonuses for desired outcomes, often using process measures.

Governance and accountability measures

There is variation in governance mechanisms for supporting primary care reform across jurisdictions (**Tables 2** and **3**). In some, there are minimal relationships or governance mechanisms between national or sub-national governments and practices (e.g., Australia, Netherlands, Canadian jurisdictions), and most accountability measures are voluntary for practices (e.g., Australia's practice incentive program allows providers to opt-in; Canadian jurisdictions have tariffs or incentives). Few jurisdictions have accountability measures tied to contracts or service agreements (New Zealand pre-reform; US-Kaiser Permanente). There is a notable lack of accountability measures in Canada for patients to choose or hold providers to account (e.g., patient satisfaction surveys); the use of regular patient surveys was present in only three jurisdictions (England, Scotland, US-Kaiser Permanente). One jurisdiction (Australia) has introduced innovative forms of governance and service provision by commissioning contracts with GP practices through a competitive tender process. While this initiative may be effective in driving targeted change, some smaller GP practices and those with less experience or capacity submitting applications for these contracts will not participate, thereby inhibiting any broader system and population-wide improvements.

Intermediary, or meso-level, governance structures may provide a more indirect mechanism for governments to steer primary care practices to improve access and integration, and to support planning at the local level. These governance structures are present in some jurisdictions (Primary Care Networks [PCNs] in BC and Alberta, Nova Scotia Health in Nova Scotia, and Primary Health Organizations [PHOs] in New Zealand) although the roles and responsibilities of these structures varied. PCNs in Alberta were reformed in 2018 to establish clear roles, responsibilities, and accountability relationships (Church &

Neale, 2022), whereas in BC, there are various decision-making and advisory bodies whose roles are less clearly described or understood.

The size of intermediaries may impact the implementation and effectiveness of planning and innovation at the local level. In New Zealand, larger District Health Boards were abolished during a health sector reform and the government of New Zealand has proposed the development of "localities"—local networks of primary health and community providers on a smaller scale (Te Whatu Ora - Health New Zealand, 2022d). By contrast, meso-level governance structures in England are moving to higher geographic levels (from a population size of 1–3 million, to span up to 100 GP practices) that may serve to limit oversight and responsiveness to local needs (Personal correspondence, 15 December 2022).

TABLE 2. Governance mechanisms/actors for primary care

Jurisdiction	National/provincial level	Intermediary/ meso-level
Australia	• RACGP voluntary accreditation for GP practices; Commonwealth defines medical benefits services	• Commissioned services contracts by Primary Health Networks (with monitoring and evaluation)
Netherlands	• Sectoral agreement negotiated with Ministry of Health • Periodic reviews by Ministry of Health	• Social Health Insurance funds (with contracts with individual practices)
New Zealand (pre-reform)	• Agreements between central government and DHB (act on behalf of central government)	• Agreements between DHB and PHOs (incentives for performance targets, additional capitation payments)
UK: England	• GP contracts with BMA and central government; some negotiated at local level • CQC: inspect practices, annual patient surveys	• Integrated Care Systems (ICSs; formerly CCGs)
UK: Scotland	• Periodic patient surveys (Health Care Experience Survey) • GP practice contracts negotiated with BMA Scotland and central Scottish government	• Quality Circles: clusters of 10–15 GP practices • Health and Social Care Partnerships
USA: Kaiser Permanente	• Contractual agreements between health plan, facilities, providers • Member satisfaction surveys	• Permanente Medical Group contracts with providers
British Columbia	• Medical Service Commission – auditing • Provincial-level governance for PCN (including FPSC, formerly GPSC) • GP contract negotiated with provincial government	• PCN: several governance committees
Alberta	• PCN Provincial committee (advisory) • GP contract negotiated with provincial government	• PCN Zone committees • PCNs: financial reports and performance indicators to provincial government
Manitoba	• GP contract negotiated with provincial government	• None
Ontario	• GP contract negotiated with provincial government	• Ontario Health Teams (in progress) • Ontario Health – Voluntary MyPractice Reports
Nova Scotia	• GP contract negotiated with provincial government	• Three types of arrangements for Nova Scotia Health & Collaborative Family Practice Teams; Some include monitoring and performance (requirement for shadow billing and activity reports)

Abbreviations: APP (Alternate Payment Plans); BMA (British Medical Association); CCG (Clinical Commissioning Groups); CQC (Care Quality Commission); DHB (District Health Boards); FFS (fee-for-service); FPSC (Family Practice Services Committee);

GPSC (General Practice Services Committee); ICS (Integrated Care Systems); RACGP (Royal Australian College of General Practitioners)

TABLE 3. Primary care level accountability measures (contractual obligations and/ or financial incentives)

Jurisdiction	Minimum working hours	Rostering	Quality improvement	After hours care	Care coordination/ integration
Australia	**	–	✓ FI [1]	✓ FI [1]	✓ FI [1]
Netherlands	–[2]	✓		✓	✓
New Zealand (pre-reform)	**	✓	–	✓ FI	–
UK: England	**	✓	✓	✓	✓
UK: Scotland	**	✓	[3]	✓	✓
USA-Kaiser Permanente	✓	✓	✓	[4]	[4]
CANADA					
British Columbia	✓	✓ [5]	–	✓ FI	–
Alberta	**	✓ [5]	–	✓ FI	-
Manitoba	✓	✓ [5]	–	✓ FI	✓ FI
Ontario	**	✓ [5]	✓ FI	✓	
Nova Scotia	**	✓ [5]	–	**	✓ FI

Notes. ** Could not be determined; (–) not present; (FI) financial incentive. [1]Voluntary initiatives. [2]There are no minimum working hours, although GPs have to work for certain hours per week to remain registered as GPs: Conditions—working at least 16 hours per week as GP; performed at least 50 hours out-of-office care per year; and 200 hours professional training in the previous five years (Royal Dutch Medical Association (RDMA), n.d.). [3]In development as part of health and social care partnerships and introduction of GP Clusters.[4]There do not appear to be specific measures for after-hours care or care coordination as these are inherent features of the Kaiser Permanente model. [5]Applicable to PCNs and APPs in BC, PCNs in Alberta, Home Clinics in Manitoba, and APP models in Ontario and Nova Scotia.

Primary care and integration efforts

There is wide interest across all jurisdictions in pursuing greater coordination or integration of care to improve health, and care effectiveness and efficiency for patients with chronic conditions or complex co-morbidities. Integrated care initiatives vary in scale and scope with some jurisdictions devolving decision making to the regional or local level (England's integrated care boards in 2022, New Zealand [up until 2022], Scotland's Health and Social Care Partnerships in 2016, and Ontario Health Teams [ongoing]), while others chose to address chronic conditions through specific payments to provider groups (e.g., Netherlands, Manitoba, Nova Scotia). One notable exception is the US-Kaiser Permanente model, where care integration is inherent through co-location of services and implementation of a system-wide electronic health records (EHRs) platform. See **Box 1** for short vignettes of England and Manitoba.

Ongoing efforts to support integration of primary care with other providers and sectors face several challenges across the jurisdictions studied. One challenge relates to gaining support among GPs. GP participation and buy-in is crucial for implementation because they are often responsible for managing interprofessional teams and the case management for patients. Adequate resources for GPs/primary care practices are needed to compensate GPs for the additional workload related to task-shifting (or the

re-allocation of tasks among a health workforce team) from secondary to primary care and additional staff (e.g., nurses and allied health professionals, such as physiotherapists and mental health counselors) (European Commission, 2015; World Health Organization, 2008). This has been challenging in several jurisdictions: in Australia, the Health Care Homes pilot that focused on management and coordination of patients with complex and chronic conditions failed as physicians did not view the model as financially viable for their practices, which resulted in the low enrolment of GP practices and the withdrawal of some practices (Pearse et al., 2022); in the Netherlands, GPs are not participating in current negotiations about further expanding integrated care, stalling reform efforts (Personal correspondence, 13 December 2022). By contrast, in New Zealand, the Canterbury Model's level of integration was feasible in part because the health and social care model was set up through a collaborative "One system, One budget" approach that incorporated all aspects of care and relevant decision-makers. It should be noted that the rapidly accelerated integrated care transformation in New Zealand has been attributed in part to the external shock triggered by a devastating 2011 earthquake (Schluter et al., 2016).

BOX 1. Examples of Primary Care integration

Example 1. Devolved primary care integration (England)

England has now spent a decade pursuing integrated care models to deliver better coordinated care for the population between the National Health Service (NHS; hospitals, primary care and community and mental health services) and social care services (e.g., long-term care homes or care after hospital discharge). The reforms have focused on how to deliver patient-centred care for a targeted population of high needs patients (e.g., those with multiple co-morbidities).

In Buckinghamshire (southeast England), the introduction of new care navigators in a multidisciplinary team tasked with directing patients to non-clinical help (i.e., assistance from local charities to help patients manage their own health) appeared to reduce GP and nurse workload (NHS England, 2019).

Example 2. Bundled payments for chronic conditions (Manitoba)

In Manitoba, Chronic Disease Management (CDM) tariffs became available for GPs to provide better disease management for patients with diabetes, asthma, congestive heart failure, coronary heart failure, and hypertension. GPs are expected to demonstrate to Manitoba Health through supporting documentation that they have provided the majority of medical care for treatment of a patient's chronic condition(s); coordinated with other allied health providers; and communicated with the patient about their care plan as appropriate (Manitoba Health, n.d.-a).

Incentives and pay-for-performance

We found widespread use of targeted incentives through pay-for-performance (P4P) initiatives (**Table 4**). These initiatives are predominantly voluntary measures to incentivize policy priorities or for the achievement of specific clinical outcomes.

They are widely used to focus clinicians on policy priorities such as preventive care and after-hours care. For example, in Ontario, the access bonus is intended to promote access to GPs and minimize the use of irregular services such as walk-in clinics or other primary care venues (emergency department [ED] and specialists visits exempted) (Glazier et al., 2019). Across jurisdictions, these incentive payments are added to existing FFS arrangements (e.g., in BC and Alberta) or capitation contracts (e.g., in Ontario, England). The contribution of these P4P programs to overall reimbursement is not substantial (e.g., about 8% in England). We find that financial incentives alone are unlikely to bring about practice and system changes; evaluations consistently find that P4P measures have minimal impacts on provider

behaviours, and across jurisdictions there is little to no monitoring or enforcement to ensure provider or practice changes have their intended effects on patient access or quality of care (Lagarde et al., 2013). Performance improvements may be limited especially in settings with a high degree of variation in contract forms or fragmentation among providers. For example, in the Netherlands, Social Health Insurance (SHI) funds have differing, and potentially competing, P4P incentives in their contracts with GP practices (Kroneman et al., 2016).

TABLE 4. Pay for performance incentives in select jurisdictions

Jurisdiction	Pay for Performance present? (Yes/No)	What are incentive payments for?	Payment amount	Team or provider rewards?	% of total remuneration
Australia	Yes, voluntary	After hours care, rural loading	Varies	Team/clinic	Not known
Netherlands	Yes	Varied, set by insurers	Not known	Not known	Not known
New Zealand (pre-reform)	Yes	Performance targets	Not known, approximately $5 to 6 per enrolled patient	PHOs distributed to clinics	Up to 3%
UK: England	Yes	Clinical, public health and quality improvement targets	A maximum of 567 points; £194.83 each	GP Practice	8%[1]
UK: Scotland	No	n/a	n/a	n/a	n/a
USA: Kaiser Permanente	Unclear	Unclear	Unclear	Unclear	Unclear
CANADA					
British Columbia[2]	No	n/a	n/a	n/a	n/a
Alberta	No	n/a	n/a	n/a	n/a
Manitoba	Yes	CDM	Not known	Clinic	Not known
Ontario	Yes	Clinical targets, preventive services (e.g., vaccination) and improving access	Varied; e.g., access bonus is up to 18.58% of capitation	Team and individual	Not known
Nova Scotia	Yes	CDM and collaboration	Varied for NCDs; $5000 for collaboration	GP	Not known

CDM (Chronic Disease Management); GP (General Practitioner); PHO (Primary Health Organization)

[1] Based on overall GP practice income in 2018 (Moberly & Stahl-Timmins, 2019).

[2] While payments in British Columbia may be called “fees” or “incentives” they are not considered P4P incentives as aspects of performance is not consistently measured.

Conclusion

Findings from the reviewed literature and discussions with local experts reveal that primary care professionals generally support new financing models that use capitation (and in some cases with blended FFS and targeted incentives) and primary care reform initiatives that emphasize collaboration and interdisciplinary teams. However, there is limited evidence on the effectiveness of these schemes so more research is needed to understand how, and in what ways, these initiatives have met their stated goals. There is more work to be done to overcome barriers to reform, particularly the development of primary care models that balance cost-containment and accountability while allowing GPs to maintain their autonomy.

We synthesized six lessons for governments in Canada to consider when moving forward with primary care reform in their jurisdictions:

1. **Target funding to support and expand existing GP/primary care teams and providers.**

In some jurisdictions, GP salaries or funding formulas have not been updated for many years. Policymakers can introduce new funding formulas (e.g., Family Health Teams in Ontario) or offer amendments to existing practices (e.g., add-ons to expand rostered patients) to promote access or equity by addressing policy issues such as access to family doctors. The introduction of earmarked funding can enable the development of interprofessional team members and implementation of interdisciplinary teams. Targeted funding for improvements in infrastructure, information systems, and quality improvement is also essential to further primary care reforms.

2. **Governance and funding arrangements should work to optimize the balance of virtual and in-person care.**

There are important considerations related to resource allocation and accountability about the appropriate balance of care between virtual and in-person care. While there is evidence in some jurisdictions that virtual care has led to duplicative care, policymakers should note that there may be implications for continuity of care if virtual care restrictions are imposed without consideration for patient care pathways, particularly for some specialities or for patients in more rural or remote regions.

3. **New contractual models for reimbursement can be instrumental in practice change but may be most beneficial if change is made incrementally and collaboratively.**

GPs value their autonomy within the health system but broadly support policy initiatives to improve clinical practice and quality of care. Primary care professionals are most receptive of incremental and voluntary add-ons to existing contractual agreements, such as the gradual introduction of APPs and new care models. This can enable providers to test new arrangements and assess the financial risks/rewards of new contractual models for providing care to their patients.

4. **Governance mechanisms to plan, monitor performance, support quality improvement, and hold providers accountable can be strengthened while still maintaining clinical/provider independence.**

It is important to develop mechanisms for accountability when introducing primary care reforms, such as APPs, so that governments can understand if reforms are meeting their stated goals rather than simply providing funding on good faith. For example, requirements for shadow billing help support routine

monitoring and evaluation; and enforcement of contractual obligations such as after-hours care could be strengthened.

5. Targeted incentives can draw providers to political and clinical priorities but policymakers should be aware of limitations to their use.

Performance targets can increase costs without commensurate improvements in quality or an ability to measure the added value of such initiatives. Some jurisdictions have experienced gaming of P4P indicators, lack of physician buy-in, and limited to no evidence of positive impacts. While few jurisdictions appear to have routine performance data or reports at the primary care level, performance measures could be acquired through better data sharing initiatives and/or as a condition of funding contracts.

6. Collaboration with GPs and other primary care providers are central to the implementation of integrated care initiatives.

There is a wide range of initiatives underway to promote better care coordination and chronic disease management with GPs continuing to play a central role. We identified no incentives or payment mechanisms that optimally promoted care integration or task shifting of GPs work to other members of a health workforce team. Reforms should also consider how to facilitate added value or efficiencies for the providers who are expected to deliver health system improvements. For example, primary care reforms can be enabled through better EMR capacity to minimize administrative backlogs or difficulties to create more responsive information systems that can enable integration between different healthcare and social services providers.

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Appendix A. International Case Studies

Australia

Overview of primary care organization and delivery

Primary care is provided by GPs and nurses and is primarily delivered through general practices. NPs, midwives, and pharmacists are also involved in primary care delivery in other settings (e.g., super clinics, community pharmacies), but to a lesser extent than GP practices. Patients are free to choose their GP and there is no formal registration or rostering required between patients and GPs. GPs act as gatekeepers and specialists require a referral in order to receive payments from the Commonwealth (federal government) (Tikkanen et al., 2020).

Primary care financing

In Australia, the federal government is responsible for funding primary care through the Medicare Benefits Scheme (MBS) that is funded through national taxation, general government revenues, and a special levy. Approximately 42.7% of health expenditures are funded by the federal government (2020–2021 estimate) (Australian Institute of Health and Welfare, 2022). GPs are primarily paid through FFS and set their own fees, but they can also receive performance-based funding through the federally funded Practice Incentives Program (PIP) (described in the next section). Through the MBS model, the federal government pays GPs 100% and specialists 85% of MBS schedule fees. GPs can set their fees above the MBS fee schedule and there are no regulatory limits on extra billing. Patients must pay the remaining amount out-of-pocket (private health insurance cannot be used to pay gap fees for primary care). It is estimated that approximately 67.6% of patients had all of their GP services bulked billed in 2020–2021 (Australian Government, 2022b).

Increasingly, value-added primary care services are commissioned to select primary care practices through competitive tender processes. These commissions are usually managed through Primary Health Networks (PHNs)—who are also mandated to identify local service gaps and can apply to access central government funding to commission services to close those gaps (Australian Government Department of Health and Aged Care, 2021b). Commissions may also come through state or central governments. Successful responses to tendered commissions are often from group practices or small-to-mid-size corporations that run multiple primary care practices. There have also been instances of Aboriginal Community Controlled Health Care Services (ACCHSs), faith-based organisations, and consortiums of clinics being successful in being granted commissions. Commissioned services are run under contract conditions that may include quality, reach, and performance targets; however, they may be more limited—such as a capital works grant. Examples of commissioned services could include:

- Provision of after-hours urgent care
- Provision of a multi-discipline/inter-professional “super clinic” in rural areas
- Mental health urgent care
- Care-coordination telephone services
- Diabetes care planning
- On-call gerontology

Governance

The only mandatory provider or practice accountability measures in Australia appear to be those used in standard accreditation processes and those associated with commissioned services (described in the previous section). The PIP provides performance-based financial incentives to general practices and providers to improve integration and care coordination. The PIP accounts for approximately 5.5% of federal expenditures on GPs (Tikkanen et al., 2020). Participation in the PIP is voluntary, but primary care practices must be accredited through the Royal Australian College of General Practitioners to take part in the program. From 2021–2022 there were 6,401 accredited general practices (approximately 80% of practices) participating in the PIP (Australian Government, 2022a).

The PIP has three payment streams (Quality, Capacity, and Rural Support) and offers nine incentives, including: after hours care, rural loading, Indigenous health, eHealth, COVID-19 vaccines, teaching, aged care access, quality improvement, and procedural activities. Payments are made to practices and amounts are determined by Standardized Whole Patient Equivalents (SWPE) that account for practice size and a weighting factor for each patient's age and gender. There are bulk billing incentives for rural and remote areas, where GPs receive incentives for not extra-billing patients (Australian Government Department of Health and Aged Care, 2022a). Payments are made on a quarterly basis to participating practices. Within the PIP, there is a Service Incentive Payment (SIP) that is paid to GPs for providing eligible MBS services in residential aged care facilities (Services Australia, 2022a). Prior to 2019, there were three other SIPs that focused on care provision for patients with asthma, diabetes, or for GPs to conduct cervical screenings, but these were removed and enveloped into the PIP quality improvement stream (Services Australia, 2022b).

Practices and GPs can also participate in a Workforce Incentive Program (WIP). The WIP has several aims that include supporting team-based care models as well as engaging allied health professionals, nurses, and Aboriginal and Torres Strait Islander providers. There are two funding streams for the WIP: 1) Doctor stream for GPs, and 2) practice stream for practices (WIP). Through the doctor stream, payments are made directly to GPs for providing care in rural settings. Payments are made to practices through the WIP practice stream based on the type and average number of hours eligible allied professionals are engaged in participating practices (Australian Government Department of Health and Aged Care, 2021a). As of 2020, the WIP practice stream also includes incentives for pharmacists to work in general practices, where the majority of pharmacists in this setting appear to be in a non-dispensing role (Dineen-Griffin et al., 2020).

Services that are delivered through commissioned contracts undergo monitoring and evaluation by PHNs to ensure that the services and outcomes "provide value for money" (Australian Government Department of Health and Aged Care, 2021c). These activities involve a range of indicators and measures that reflect activity, outputs, and performance. The vast majority of GP clinics do not participate in responding to tender commissions, meaning that the PIP, workforce continuing professional development requirements for registration, and capacity building activities provided through PHNs remain the key tools for quality improvement and innovation in primary care.

Issues and reforms

- In May 2020, the Australian government announced a National Health Reform Agreement, which was subsequently endorsed by Health Ministers in 2021 (Australian Government Department of Health and Aged Care, 2022b).

- There have been a few pilots and reviews of primary care practice in Australia (see **Box A1**).
- The Health Care Homes project was a pilot carried out from June 2016 – June 2021 (see **Box A2** for additional resources). Although promising, the pilot was met with low GP participation particularly since, as noted by local experts, the program was not financially viable for GPs.
- Pharmacists have not been able to independently prescribe and generally have a non-dispensing role in general practices. New South Wales and Queensland have brought in limited schemes allowing pharmacists to prescribe antibiotics (New South Wales Government, 2022). Their activities include medication reviews, consultations, vaccinations, and patient support (Sudeshika et al., 2021).

BOX A1. Select sources for primary care plans, pilots, and evaluations in Australia

- Recommendations on the Australian Government's Primary Health Care 10 Year Plan. 2021. Available here: https://consultations.health.gov.au/primary-care-mental-health-division/draft-primary-health-care-10-year-plan/supporting_documents/Primary%20Health%20Reform%20Steering%20Group%20%20Recommendations%20September%202021.pdf
- Kosari S, Deeks, LS, Naunton M, Dawda P, Postma MJ, Tay GH, Peterson GM. Funding pharmacists in general practice: a feasibility study to inform the design of future economic evaluations. Research in Social and Administrative Pharmacy. 2021. May 1;17(5):1012-6. DOI: 10.1016/j.sapharm.2020.07.030
- Bonney A, Russel G, Radford J, Zwar N, Mullan J, Batterham M, Mazza D, Peterson G, Eckermann S, Metusela C. Effectiveness of Quality Incentive Payments in General Practice (EQuIP-GP) cluster randomized trial: impact on patient-reported experience. Family Practice. 2022 Jun; 39(3):373-80. https://doi.org/10.1093/fampra/cmab157
- Lane RI, Russel GM, Francis C, Harris M, Powell-Davies G, Jessop R, Harris-Roxas B, Kirby S. Evaluation of the primary health networks program. Ernst & Young. Available here: https://www.health.gov.au/sites/default/files/documents/2021/06/evaluation-of-the-primary-health-networks-program.pdf

BOX A2. Select sources for Health Care Homes pilot program in Australia

Health Care Homes program features: Patient enrolment, risk stratification, bundled payments per enrolled patient based on complexity

Pilot timeline: June 2016 to June 2021.

Evaluation reports and publications

- Pearse, J, Mazevska, D, McElduff, P, Stone, C, Tuccia, J, Cho, O, Mitchell, S, McElduff, B, Tran, DT, Falster, MO, Pearson, S, Jorm, L, Yu, S, Naghsh Nejadm M, van Gool K, Wright M, Hall J, Bower M, Dunbar J, Henryks J, Rosen R, & Smyth T. (2022). Health Care Homes trial final evaluation report, Volume 2: Main report. Health Policy Analysis. Commissioned by the Australian Government Department of Health. https://www.health.gov.au/sites/default/files/documents/2022/08/evaluation-of-the-health-care-homes-trial-final-evaluation-report-2022-main-report.pdf
- True A, Janamian T, Dawda P, Johnson T, Smith G. Lessons from the implementation of the Health Care Homes program. The Medical Journal of Australia. 2022 Jun;216(Suppl 10):S19.

Netherlands

Overview of primary care organization and delivery

Primary care is provided by GPs, nurses, pharmacists, physiotherapists, psychologists, and midwives. Most GPs work in dual (38.7%) or group-based general practice (43.9%), with the remainder (17.4% in 2018) in single practice (Vis et al., 2020). GPs in the Netherlands have a broad scope of work and are responsible for acting as gatekeepers and coordinating care for chronic conditions and mental health care. They work alongside practice nurses in solo and group practices and are of increasing importance, responsible for managing care for patients with chronic conditions (i.e., diabetes, chronic obstructive pulmonary disease [COPD], cardiovascular disease [CVD]). Patients must register with a GP of their choice, but the GP retains the right to refuse registration if their patient list is full or the patient is geographically far. All GP practices are required to register with a local after-hours service. GPs must work a specific number of after-hours based on their patient load but can transfer shifts to other GPs. To maintain annual GP licensing, all GPs must complete 50 hours each year of after-hours care (Kroneman et al., 2016).

Primary care financing

The Netherlands uses a Social Health Insurance (SHI) system where enrolment is mandatory for all citizens. Premiums are based on an income dependent premium (50%) and a community rated premium (50%). Individuals with an income below a certain threshold (approximately 20% of the population) receive a subsidy for their insurance premium from the government. The government sets the threshold for the subsidy each year and individuals must apply via the taxation office to qualify. There is no insurance deductible when accessing primary care. Healthcare is financed through a combination of community rated premiums via health insurance plans and an income-dependent contribution into a special health insurance fund, the Zorgverzekeringsfond. This fund pays insurers based on their case-mix, the risk-adjustment compensation, and includes a payment for children; acute care for children is funded through general taxation. Health insurers are responsible for the actual purchasing of care for children, so GPs bill the insurer for a child's care. Preventative public health measures are financed under the *Public Health Act* and organized at the municipal level. This includes vaccinations, cancer screening programs, and preventive care for children under 13 years of age (Kroneman et al., 2016).

The current funding model—introduced in 2015 following lengthy negotiations with GPs and the Ministry of Health—maintains the importance of primary care in the Dutch health system with an emphasis on stimulating integration, cooperation between providers, and substitution from secondary care. There are three funding streams covering 1) basic primary care services (capitation and a FFS) consultation fees—the FFS amount does not cover the total cost of the consultation so there is some cross-subsidisation through the mix of capitation and FFS payments; 2) bundled payments for integrated care services (see section Issues and Reforms below for further details) for patients with Type 2 Diabetes, COPD, asthma, and high risk of CVD; and 3) innovation and pay-for-performance (P4P). The first stream comprises 77% of payments while the second and third account for 23%; it is unclear how the second and third funding streams differ relative to one another because of GP-practice level variation and individual-level negotiations with SHI funds. Innovation and P4P refer to innovations in the care that can be financed, for example. If some GPs have a new idea about organising care, they can

negotiate payments for it with insurers.[1] Broadly, general practice is funded through a range of revenue streams that include capitation, consultation fees (billable by duration of <5 minutes, 5–20 minutes, and >20 minutes) and hourly rates (i.e., for after-hours care), bundled payments, and a mix of payments for innovation initiatives and performance incentives. Consultation fees for virtual and in-person appointments are the same. Individual GPs can be salaried or operate as independent small business owners, so their income is the difference between revenue and the costs of operating the practice. Practice nurses are salaried and paid by the GP practice (Kroneman et al., 2016).

Governance

Patient choice and managed competition between providers are important features of the health system. It is expected that choice of provider and transparency about performance indicators will allow the market to function and foster improved quality and access. There are multiple efforts underway to promote transparency and the development of quality indicators. The Ministry of Health commissions periodic reviews of the population and overall health systems performance. The State of Public Health and Health Care website provides health system figures and performance indicators. The Institute for Health Care Quality (Kwaliteitsinstituut) in the National Healthcare Institute is dedicated to developing quality standards. There is no strong evidence that the choice behaviour of patients is influenced by quality information (Kroneman et al., 2016). A 2015 study found that 79% of patients referred to hospital by their GP did not use quality information to choose their hospital, instead basing their decisions on loyalty (satisfaction with previous experience) or convenience relative to their home (Victoor & Rademakers, 2015) .

The use of P4P incentives is a small percentage of the overall funding formula in primary care. These payments are subject to contracts with health insurers. They are used to target a range of practices in primary care; for example, in previous years P4P incentives have targeted practice accessibility, accreditation of a general practice (several quality norms must be met for accreditation, such as care provided and learning ability of practices), or the rational prescribing of medicines (Kroneman et al., 2016).

Issues and reforms

The current policy focus in the Netherlands is on affirming the centrality of GPs in primary care and enabling further horizontal integration between primary care providers. This has involved incremental changes to funding formulas and the development of new payment pathways in primary care, such as bundled payments. There is continued task shifting from secondary care to primary care with GPs and practice nurses taking on a central role in the coordination of care for patients with chronic conditions. For example, the Netherlands provides an interesting example of targeted integrated care reforms through their use of bundled payments alongside existing capitation payments for primary care. Introduced in 2010, the Dutch Health Authority described the care standard for four chronic conditions and how it can be managed by care groups. Care groups are new actors in the health care system and are independent care providers that include groups of GP practices (ranging from 4–150) and other

[1] This is different from P4P schemes that are directed towards processes or outcomes associated with GP actions, e.g., having a certain number of diabetes patients participating in the integrated care pathway.

relevant health professionals, such as dieticians, who assume all clinical and financial responsibility for the assigned patient's chronic condition (e.g., all patients in the diabetes care program). The bundled payment supersedes traditional healthcare purchasing for that patient. This divides the market into two segments: one where insurers buy care from care groups, and a second where care groups contract for services from individual providers, such as GPs, specialists, or dietitians. The care group negotiates a fixed fee-per-patient with a health insurer (varies widely due to individual-level negotiations with care group and insurer) about the content and funding of care as well as for the fees for the subcontracted providers (Struijs & Baan, 2011). It then remunerates GP practices in the care group for care associated with that patient's chronic condition (i.e., disease management by a practice nurse). Their GP will still receive the existing capitation payment for the patient. Patients are free to participate in the care group. The bulk (80%) of GPs currently participate in care group (Kroneman et al., 2016). Services for patients with the chronic conditions included in the bundled payments are free of charge because they are covered through the standard insurance package that all Dutch citizens must hold (Struijs & Baan, 2011).

There are further efforts underway to refine the funding pathway for patients with chronic obstructive pulmonary disease (COPD) and high CVD risk through additional quarterly capitation payments to further foster the cooperation of primary care providers and their partners (e.g., district nurses, hospitals, physical therapists, municipalities, and mental health care institutions) to prevent unnecessary referrals to secondary care (Kroneman, 2018b). There are also efforts underway to refine the capitation payment for adults aged 65+ through the introduction of new capitation payments for multiple age groups 65+. This reflects the higher healthcare needs of older people (aged 85+) and to enable GPs additional funding to incentivize extended consultations with this age group but GP workloads remain high and it is unclear if they have time available to carry out these tasks (Kroneman, 2018a).

New Zealand

Note: At the time of writing New Zealand was undergoing a health reform as of July 1, 2022. Most content is based on pre-reform information and has been updated where possible.

Overview of primary care organization and delivery

Primary care is largely publicly financed and privately delivered. Approximately two-thirds of GPs work in small practices comprising four to six GPs per practice with few in solo practice. There has also been a rise in corporate practices in New Zealand where corporations own several practices. Most GPs are independent, self-employed, and contract with one of 30 Primary Health Organizations (PHOs). PHOs are region-based, non-profit organizations funded by the central government. PHOs operated as a network of providers responsible for ensuring care provision to enrolled patients through general practices (Ministry of Health – Manatū Hauora, 2022c). District Health Boards (DHBs) coordinated and provided funding to PHOs for primary care services and were responsible for the provision, organization and financing of care in their regions (Gauld, Robin, 2020). Due to the reform, DHBs have been abolished and replaced by a single organization known as Te Whatu Ora and the future status of regional divisions is not known at this time.

Primary care services are provided by GPs, NPs, nurses, and, outside of GP practices, also pharmacists and other health professionals (Ministry of Health – Manatū Hauora, 2022b). There are also clinics owned by trusts or non-governmental organizations (NGO) primarily in smaller communities (Sheridan et al., 2022), as well as Maori and Pacific Islander providers who provide care. GPs act as gatekeepers for specialist care. Patients are not required to register and are free to choose their GP; however, GPs and PHOs are required to have formal registries of patients to be eligible for government subsidies and incentives, and patients must be enrolled within PHOs in order to receive publicly funded primary care. Primary care is free for children 13 years and younger and subsidized for approximately 94% of adults who are enrolled with PHOs (Irurzun-Lopez et al., 2021).

Primary care financing

The central government is the primary healthcare funder through pooled general taxes. Prior to reform, the central government funded regional DHBs who then provided funding to PHOs. GPs are paid through capitation (approx. 50% of income), patient co-payments, and payments from the Accident Compensation Corporation (Gauld, Robin, 2020). The minority of GPs who work for larger corporate providers or NGOs are paid by salary. Nurses and NPs in primary care are paid by salary through their primary care practices.

- GP capitation rates are set through negotiations between GPs and their PHOs, though the rates are generally established at the national level (Te Whatu Ora - Health New Zealand, 2022b).
- Co-payments are set by individual GPs and are capped for patients who reside in designated low income areas, high users (verified by a High Use Health Card), adults 65 years and older, and low-income adults with community service cards (Gauld, Robin, 2020).
- There are no co-payments for children and youth aged 13 years and younger.
- Notably, the funding formula for capitation (primarily based on age and sex—with some additional subsidies for other demographics—has not changed since 2003, and GPs have expressed concerns that the payment system is not viable (Ministry of Health – Manatū Hauora,

2022d). A recent report suggested the formula be based on age, sex, ethnicity, deprivation, and morbidity rather than age and sex alone (Department of the Prime Minister and Cabinet; Te Tari O Te Pirimia Me Teo Komiti Matua, 2022).

Governance

Prior to reform, there were several governance arrangements, including contractual agreements, related to primary care. In 2016, the System Level Measures (SLM) framework was introduced by the New Zealand Ministry of Health with the aim of improving quality and integration of care (Ayeleke et al., 2020; Tenbensel & Silwal, 2022). This scheme focused on a collaborative approach to quality improvement rather than a fully hierarchical form of governance (e.g., P4P scheme or national targets), although as described below, some incentives were still tied to performance measures. Analyses of the SLM framework implementation have been published in the literature, with some evidence pointing towards the SLM facilitating organizational relationships at the local level (Tenbensel et al., n.d.) and introducing data management and information systems (Ayeleke et al., 2020), but also challenges due to inter-organizational complexities in some districts or reluctance of some groups to participate or share data (Tenbensel & Silwal, 2022).

The Crown Funding Agreement (CFA) was an agreement between the Minister of Health and DHBs (Ministry of Health – Manatū Hauora, 2022a). The CFA set out an operational framework, performance measure reporting requirements, and service coverage schedules for DHBs. DHBs were accountable to the central government through this agreement, where Crown funding could be withheld if performance measures were not met or if DHBs failed to comply with reporting requirements (Ministry of Health – Manatū Hauora, 2022a). Through the CFA, DHBs had annual financial reporting requirements and quarterly non-financial reporting requirements to the Crown. The quarterly reports included performance indicators that were measured against agreed upon annual plans by the DHBs. The performance measures reflected government priority goals and targets and are publicly reported at the district-level (Te Whatu Ora - Health New Zealand, 2022c). For example, previous SLM included: childhood ambulatory hospitalisation rates, acute hospital bed days per capita, patient experience of care, amenable mortality rates, babies living in smoke-free homes, and youth access to and utilisation of youth appropriate health services (Ministry of Health – Manatū Hauora, n.d.).

DHBs had service agreements with PHOs that covered activities and funding arrangements between the two parties. Through service agreements with DHBs and PHOs, PHOs were eligible to receive up to 3% in additional funding through SLM pay-for-performance (P4P) subsidies. The P4P subsidies were based on system-level measures and primary care targets (as described above in the CFA) and funds were paid in three installments. The first and second payments were intended to assist PHOs in building capacity and capability, where the third payment was linked to quarter four performance targets (see Schedule G of the CFA)(Ministry of Health – Manatū Hauora, 2022a).

Through the PHO service agreement with DHBs, PHOs could receive capitation payments to deliver health promotion, services to high-needs persons (individuals with a High Use Health Card), or for the number of patients enrolled in Care Plus services (patients with two or more chronic health conditions and require intensive clinical care) (Te Whatu Ora - Health New Zealand, 2022b). These capitation payments are now referred to as the Flexible Funding Scheme, which is a combination of these pools of

funding. Service agreements were also in place between PHOs and GPs and related to provision of care and capitation rates.

Issues and reforms

- In 2018, the New Zealand Health System underwent a review. The final report was delivered in June 2020 and subsequently led to a major structural reform. The Te Pae Tata New Zealand Interim Health Plan 2022 sets out the health system transformation activities for the first two years (Te Whatu Ora - Health New Zealand, 2022a).
- Part of the Interim Health Plan includes a Voluntary Bonding Scheme that targets recent health professional graduates with the aim of encouraging them to work in hard-to-staff areas. Introduced in July 2022, program registrants will have payments made against their student loan account (if relevant) or directly to the provider (Te Whatu Ora - Health New Zealand, n.d.).
- The status of regional divisions and PHOs is uncertain. The government has proposed the development of "localities" that would cover a smaller population than PHOs and DHBs, but no guidelines or roles have been established at the time of writing.
- There has been a gradual movement towards a non-dispensing pharmacist prescriber role in general practices, where these pharmacists are hired through DHBs and PHOs. This practice is not widespread and less than 1% of pharmacists have this additional scope of practice (approximately 37 of 4,062 pharmacists in New Zealand) (Foreman, 2022; Haua et al., 2019).
- The Health Care Homes (HCH) model has been rolled out across many districts in New Zealand (approximately 200 general practices) (Collaborative Aotearoa, n.d.). The key features of HCH include a team-based approach, triaging practices through phone, video, and email, as well as care coordination for patients with chronic conditions (Collaborative Aotearoa, n.d.). This model has been evaluated by independent research groups and results suggest the HCH model presents a lower risk for patients requiring unplanned hospital visits and emergency department visits (Dasgupta & Pacheco, 2018; Pinnacle Incorporated, 2019), establishing strong foundations for system-wide transformation and integration (Ehrenberg et al., 2020), improved patient experience and consistent patient enrollment (Ernst & Young, 2017; Tenbensel et al., 2018).[2] Publicly available research and evaluation reports are also available here: https://healthcarehome.org.nz/onboarding/research-and-evidence/
- The Canterbury Model is an internationally renowned model of primary care integration (**Box A3**). Due to the current reform, there is some uncertainty in the future of this model.

[2] Publicly available research and evaluation reports are also available here: https://healthcarehome.org.nz/onboarding/research-and-evidence/

BOX A3. Canterbury Model and primary care in New Zealand

Features: Health and social care integration, health pathways, shared electronic records, alliance contracting

Description: In New Zealand, District Health Boards (DHB) were responsible for care provision, including organization, financing, and provision. The Canterbury integrated health and social care model was set up in collaboration with the Canterbury DHB in the early 2000s through a "One system, One budget" approach.

The model shifted from FFS contracts to alliance contracting with PHOs, which is described as, "a collective contract with pre-agreed gains and losses dependent on the overall performance of all the parties, rather than with penalties solely for whoever fails within it." Partners include: Canterbury DHB, Pegasus Health, pharmacy, public and private nursing organisations, and laboratory providers. Alliances have no legal entity, but keep to existing legal contracts within their original organization.

The Canterbury DHB were funded through block grants on an annual basis. Funds were allocated through collective decision-making between alliance partners. There were no financial incentives or penalties within the Canterbury Model.

The HealthPathways programme of the Canterbury Model engaged with GPs, hospital specialists, allied health professionals, and funders. The program included local agreements on best practices for management and referral pathways for patients with certain conditions. The Canterbury Model also had a centralized nurse-led triage system and centres that offered extended opening hours, and there were several other programs aimed at improving care integration (e.g., Community rehabilitation enablement and support teams; Acute demand management system).

Relevant sources:

- Charles, A. (2017). Developing accountable care systems: Lessons from Canterbury, New Zealand. The King's Fund, London, Available at: www.Kingsfund.org.uk/Sites/Default/Files/2017-08/Developing_ACSs_final_digital_0.Pdf
- Cumming, J., Middleton, L., Silwal, P., & Tenbensel, T. (2021). Integrated Care in Aotearoa New Zealand 2008–2020. International Journal of Integrated Care, 21(S2), Article S2. https://doi.org/10.5334/ijic.5679
- Timmins, N., & Ham, C. (2013). The quest for integrated health and social care: A case study in Canterbury, New Zealand. https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/quest-integrated-care-new-zealand-timmins-ham-sept13.pdf

England

Overview of primary care organization and delivery

In England, primary care is provided by a range of healthcare professionals (GPs, practice nurses, therapists) in general practices or alternate forms of primary care provision, such as walk-in clinics, urgent care centres, and community health service providers. A general practice can include GPs or GPs working in multidisciplinary teams with practice nurses, district nurses (providing skilled care for patients in their homes), and midwives (nurses with specialized training in obstetrics based in some GP practices). GPs play an important gatekeeping role to the health system; referrals to secondary care are only available through GPs. Registration with a GP is required and restricted to a geographical area, although some GP practices have extended practice boundaries or can accept patients outside of their catchment area. Practices are required to accept all patients within their geographical boundaries. It is rare for practices to have closed lists but GPs can remove patients from their roster at their discretion. Practices can provide their own after-hours care or contract it out (Anderson et al., 2022; Boyle, 2011).

GPs work as independent self-employed contractors and nurses are salaried (Anderson et al., 2022). There is a growing trend of GPs choosing to join practices as salaried employees of the general practice (up to 27% of GPs in England in 2020 from 20% in 2015) rather than taking on the administrative burden of practice organisation (Miller et al., 2021; Rolewicz, 2021).

Primary care financing

The English National Health Service (NHS) is financed through general taxation and is free for use at the point-of-service. NHS England (the operating name of the NHS Commissioning Board established in 2013 following the *Health and Social Care Act 2012*) is the payer for all publicly funded health services. The responsibility for primary care planning remains at the local level (Checkland et al., 2018).

There are three types of contracts through which primary care is funded in England:

1. **The General Medical Services contract (GMS)**: This is negotiated between the British Medical Association (BMA) and NHS Employers. From 2004, GP practices, rather than individual GPs, hold the contract. Practices receive a capitation payment with a P4P component. The capitated amount is based on the Carr-Hill formula (based on a refined weighted capitation formula that accounts for sex, age, number of new patients, morbidity profile of the population, rurality, and the market forces factor [MFF]). GP practice partners hold the organisational and financial responsibility for running the practice and distribute funds to salaried and freelance GPs.
2. **Personal Medical Services contract (PMS)**: These GP practice contracts are negotiated at the local level without input from Department of Health and Social Care (DHSC) or BMA. These contracts are intended to be flexible and allow local authorities to purchase services for under-served populations or enable performance management, but in practice these contracts are not policed and can entrench inequalities between practices (Checkland et al., 2018; Majeed et al., 2012). These contracts account for 26% of GP practices in England but are being phased out.
3. **Alternate Provider Medical Services contract (APMS)**: This contract was introduced in 2004 for non-traditional providers of primary care and for "under-doctored" areas (Checkland et al., 2018). They are used for a wide range of provisions including after-hours services or walk in clinics (Anderson et al., 2022). While this contract was the preferred way of setting up additional

GP services in the 2000s to increase competitive pressures on GPs (Coleman et al., 2013), just 2% of GP practices in England operated under APMS contracts in In 2018–2019 (Beech & Baird, 2020).

England introduced the Quality and Outcomes Framework (QOF), a large-scale and novel P4P experiment, for GMS practices. In 2020/2021, practices scored points based on achievement against indicators, up to a maximum of 567 points worth £194.83 each (Anderson et al., 2022; British Medical Association, 2022). GPs retain the right to exclude patients on their roster from the overall denominator (dubbed exemption reporting); subsequent studies found some evidence that there were more exemptions made for complex processes and intermediate outcomes than for straightforward incentivized processes (e.g., blood pressure checks) (Doran et al., 2008). In the early years, QOF was introduced to increase GP remuneration and accounted for 15–20% of overall GP practice income because the NHS baseline estimates of expected performance were considerably lower than actuality. At present, the QOF is comprised of process-based, intermediate, and end outcomes. QOF payments are made directly to practices and accounted for 8% of overall GP practice income in 2018 (Moberly & Stahl-Timmins, 2019).

The QOF allows NHS England, the payer, to negotiate and set out desirable outcomes for GP practices on an annual basis. QOF has been a catalyst in accelerating the adaptation of EMRs and the use of multidisciplinary teams in chronic disease management (Roland & Guthrie, 2016).

Beyond QOF, the 2004 contract allowed for both nationally and locally determined “add on” contracts, known as “Enhanced Services.” These provide additional funding over and above the core GMS/PMS/APMS contract, usually for delivering specific services. Some are locally negotiated, while others are nationally mandated. Local examples include additional payments to provide anticoagulant monitoring in GP practices. National examples include vaccination programs and a recent contract designed to promote collaboration between practices.

Governance

Governance and accountability for primary care providers falls into three categories: 1) Historically there has always been a local meso-level contracting authority responsible for monitoring contract adherence (e.g., QOF performance), dealing with complaints, and also supporting practices facing difficulties. These have been known by a variety of names over the years, but until 2022 this function was carried out by Clinical Commissioning Groups covering populations of around 300–400,000; 2) GP practices are subject to monitoring by a national independent regulator known as the Care Quality Commission (CQC). The CQC publishes reports based upon individual inspections of GP practices. For example, a practice level report will provide a 15–20 page document about whether services are safe, effective, caring, responsive to people’s feedback, and well-led based on an inspection and results of the National GP Patient Survey (with results aggregated to the practice level) (Care Quality Commission, 2016). Finally, softer approaches to accountability include the publication of performance indicators, including results of an annual patient survey (Anderson et al., 2022). The objective of sharing these performance indicators is to promote competition between providers, but there is limited evidence that this is significant in primary care.

Issues and reforms

At present, England has now spent a decade pursuing integrated care models to deliver better coordinated care for the population between the NHS (hospitals, primary care, and community and mental health services) and social care services (e.g., long-term care homes or care after hospital discharge). The reforms have focused on how to deliver patient-centred care for a targeted population of high-needs patients (e.g., those with multiple co-morbidities). In 2022, 42 Integrated Care Systems became operational across England. The Integrated Care Systems are partnerships of NHS organisations and local authorities tasked with planning services, improving health, and reducing inequalities. The role of overseeing local primary care has passed from Clinical Commissioning Groups to Integrated Care Systems. These are much larger, covering populations as large as 1–3 million; it is likely that most systems will delegate primary care support and oversight to a lower geographical level, but this is not currently clear (Checkland & Hammond, n.d.).

The reforms have also included the development of a new national add-on contract (the Network Contract Direct Enhanced Service 2020/21), designed to incentivize practices to work together as PCNs (NHS England & NHS Improvement, 2020). These collaborations are underpinned by multiple (potentially conflicting) policy objectives (Checkland et al., 2020), but are essentially intended to provide additional support to practices as they struggle with excessive workload, as well as provide economies of scale and an infrastructure to support collaboration with other community-based providers such as community nursing services. Ring-fenced funding is provided to employ a wide range of new staff, and PCNs are expected to deliver a range of new services. This is expected to enable GPs to redirect their time to better help patients (see **Box A4** for examples) (Charles, 2022; NHS England, n.d., 2019).

The evidence suggests that a decade of experimentation with integrated care has led to some examples of clinical excellence and new models of care but at the macro-level, expected improvements did not materialize. There is evidence that health inequalities worsened, emergency admissions to hospital continued to grow and "patients within primary care reported being less involved in their care" (Miller et al., 2021). There is also evidence that efforts to reduce GP workload by introducing new providers at the primary care level has not induced complementarity or substitutability between staff groups (Francetic et al., 2022), and that it can generate additional work for both GPs and administrative staff (Spooner et al., 2022).

BOX A4. Examples of Primary Care integration

Primary care integration efforts are devolved to the local level to deliver patient-centred care. NHS England provides several examples of good practice that varied in scale and scope:

- In Sheffield (north England), GP practices formed a hub to improve access to weekend, evening, or nurse practitioner appointments and are credited with reducing pressure on GPs and secondary care and admissions to the emergency department.
- In Buckinghamshire (southeast England), the introduction of new care navigators in a multidisciplinary team tasked with directing patients to non-clinical help (i.e., assistance from local charities to help patients manage their own health) reduced GP and nurse workload (NHS England, 2019)

Scotland

Overview of primary care organization and delivery

In Scotland, primary care is provided by a range of healthcare professionals (GPs, practice nurses, therapists) in general practices. A general practice can include GPs or GPs working in multidisciplinary teams with practice nurses, district nurses (providing skilled care for patients in their homes), and midwives (nurses with specialized training in obstetrics based in some GP practices). GPs play an important gatekeeping role to the health system. Registration with a GP is required and restricted to a geographical area, although some GP practices have extended practice boundaries or can accept patients outside of their catchment area. Practices are expected to accept all patients within their geographical boundaries. It is rare for practices to have closed lists but GPs can remove patients from their roster at their discretion (Anderson et al., 2022; Boyle, 2011; Steel & Cylus, 2012). In recent years, due to many GP practice closures, patients have struggled to find a GP practice that will accept them (personal correspondence, 12 January 2023).

GPs generally work as independent self-employed contractors and nurses are salaried (Anderson et al., 2022). There is a growing trend of GPs choosing to join practices as salaried employees rather than taking on the administrative burden of practice management (Miller et al., 2021).

Primary care financing

The NHS Scotland is funded through general taxation. NHS Scotland is the payer for all health services, which are free at the point-of-use. There are three types of contracts through which primary care is funded in Scotland:

1. **New General Medical Services (nGMS) contract**: This is negotiated with the Scottish Government and the Scottish General-Practitioner Committee of the BMA. The contracts are held by GP practices not individual GPs. Most GPs in Scotland are individual contractors (87% in 2012) but there is a significant shift to more salaried GPs (11.2% in 2011) paid by practices or the NHS board. GP practice partners hold the organisational and financial responsibility for running practice and can also distribute funds to salaried and locum GPs.
2. **Section 17C practices**: These are negotiated at the local level (e.g., the municipal level) without input from Department of Health and Social Care (DHSC) or BMA and account for 9% of practices in Scotland.
3. **2C practices**: These are run by the NHS Board (Public Health Scotland, 2020).

The nGMS contract (Phase 1) was formalized in 2018 but became operational in April 2016. The nGMS has several novel features including a new funding formula with £23 million in additional investment, a minimum income guarantee for GPs, and plans for a transfer of premises ownership to the Scottish health boards over the next 25 years. This new contract will see an extra £250 million in funding for general practice and an additional £500 million for primary care by 2021–2022 (Anderson et al., 2022). Negotiations for the 2018 nGMS contract (Phase 2) remain underway. A 2021 progress update transferred the following responsibilities from GPs to health boards: vaccinations and immunisations (fees transferred to global sum capitation); pharmacotherapy, community treatment, and care services. Further, health boards will be responsible for regulating urgent care and levels of staffing for allied

health professionals (e.g., mental health professionals and physiotherapy); previously, urgent care or staffing required was locally determined (Scottish Government & British Medical Association, 2022).

Governance

There are a number of measures to promote accountability and transparency, particularly through patient experience surveys and performance indicators (e.g., Audit Scotland). The Scottish Government holds the Health and Care Experience Survey every two years (since 2009). This is a patient experience survey that asks respondents about their experiences accessing their GP or after-hours care, about care and support provided by local authorities, and their caring responsibilities. Results are publicly available (Scottish Government, 2022).

Alongside England, Scotland introduced the QOF, a large-scale and novel P4P experiment, in 2004 (Roland & Guthrie, 2016). The QOF was abolished in 2016 following protracted UK negotiations for a new GP contract. The Scotland-specific nGMS contract is a major shift in governance away from a single contract to a divergent model of care in the NHS for the devolved Scottish Government. The QOF was replaced by a new model of care called GP clusters, geographically based groups of up to 15, but often much less, GP practices expected to work collaboratively to identify and develop quality improvement projects. The GP clusters (quality circles) are part of the nGMS contract and includes an obligation for practices to take part in the new framework for quality improvement and new models of care (Smith et al., 2017). No centrally set targets or financial incentives replaced the QOF. This decision was based on evidence of steady improvements in quality of care from the decade preceding QOF and evidence that the development and implementation of guidelines and standards encouraged by local clinical audits are effective (Roland & Guthrie, 2016).

Issues and reforms

In 2016, Scotland introduced the *National Clinical Strategy* for the integration of Health and Social Care that emphasized primary care as the vehicle to transform the model of care (Smith et al., 2017). The integrated joint boards (announced as law in 2014) between health and social care integration merged primary care and local authorities into 31 integration authorities (Scottish Government, n.d.). As part of these efforts, a key component of the nGMS contract was to expand multidisciplinary teams, GP clusters (geographical groups for 5–6 practices pursuing improved quality of care, and planning and development for integrated care). There is evidence that the clusters are welcome avenues for GP collaborations but progress is limited by capacity for key tools and training, such as data analytics and quality improvement methods (Huang et al., 2021; Mercer et al., 2020). It is unclear what the appropriate balance between central planning and professional autonomy should be but experts indicate that the clusters require more resources to deliver significant quality improvement (Stewart et al., 2022).

The introduction of multidisciplinary teams is expected to reduce GP workload by shifting clinical work to other primary care providers, such as advanced NPs, mental health nurses, and pharmacists. There has been considerable growth in the numbers of staff appointed to multidisciplinary teams between March 2018 and March 2021 with 2,463 new staff, nearly half being pharmacists and pharmacy technicians. Despite this, one study found there was little perceived change to GP workload following the adoption of multidisciplinary teams and argues that more workforce planning and better primary care data is needed to enable the nGMS contract to succeed (Donaghy et al., 2022).

So far, there have been limited efficiency gains nor improvements in the quality of health and social care following the publication of a National Health and Wellbeing Outcomes Framework in 2015 (Scottish Government, 2015). A 2018 Audit Scotland report and a 2019 ministerial progress review revealed significant issues with measurement, variation, and financial planning (Donaghy et al., 2022). It is possible that progress of the integrated joint boards in Scotland is limited because the boards are not responsible for procurement and contracting of services so they are limited in their capacity to influence service change and operational delivery. Progress to integration is in the early stages and the "cluster quality" leads will have a joint role in quality improvement and integration with Health and Social Care Partnerships (Donaghy et al., 2022), but there is no explicit mention of how primary care will operate in an integrated health and social care system (Reed et al., 2021).

United States: Kaiser Permanente

Overview of primary care organization and delivery

In the United States (US), Kaiser Permanente (KP) is the largest non-profit integrated healthcare delivery system with over 12.5 million plan members across eight states and the District of Columbia, with the majority in California (where 9 million Californians, or close to a quarter of the state's population, are enrolled) (Kaiser Permanente, 2022). Through the KP model, primary care and specialist care is delivered through medical centres (734 medical offices) that comprise group of multidisciplinary physicians (23,656 physicians—general practitioners and specialists) and medical staff (65,005 nurses, 75,000 allied health professionals) (Kaiser Permanente, 2022). Most KP health facilities (e.g., physician offices, hospitals, labs, pharmacists) are co-located (Kaiser Permanente Institute for Health Policy, 2022).

Kaiser is internationally regarded as an integrated system of care comprising coordinated inpatient and outpatient care through its hospitals and medical centres in each region. There are three main entities involved in the organization and delivery of care through the KP model (Kaiser Permanente Institute for Health Policy, 2022):

- **Kaiser Foundation Health Plan (KFHP)**: Not-for-profit, responsible for health coverage, group and member enrolment, contracting medical group partners, and managing medical facilities and KP-owned hospitals.
- **Kaiser Foundation Hospitals (KPH)**: Not-for-profit, owns hospital and medical facilities, contracts with independent hospitals (39 hospitals).
- **Permanente Medical Groups (PMG)**: For-profit physician-led multispecialty medical groups, region-based, exclusively contracted with KFHP. Provide clinical care, hire manage staff, and manage quality improvement.

Primary care financing

Healthcare services through KP are primarily funded through private insurance plans (employer and employee contributions) in the form of premiums and co-payments. KP also serves individuals who have Medicare and Medicaid health plans, but to a lesser extent than private insurance plans (Kaiser Permanente, 2022; Kaiser Permanente Institute for Health Policy, 2022).

KFHP plan member premiums are distributed to hospitals and PMGs through capitation on a monthly basis (Kaiser Permanente Institute for Health Policy, 2022). Physicians, nurses, allied health professionals, and employees are paid salaries. Salaries are negotiated by the Coalition of Kaiser Permanente Unions (22 local unions) and KP through the Labour Management Partnership (Kaiser Permanente & Coalition of Kaiser Permanente Leaders, 2019). Physicians appear to have their own contracts with their PMGs to negotiate salaries.

There are some incentives and performance-based payments available to PMGs, medical centers, departments, and individual physicians. However, these payments make up a small percentage of their income compared to other health organizations in the US. Physician groups can earn bonuses of up to 5% of their salary. The incentives are based on quality and service goals set out by KP (McCarthy et al., 2009). There are also performance bonuses available to non-physician providers and employees, which is made available through a Performance Sharing Plan (PSP) (Kaiser Permanente & Coalition of Kaiser

Permanente Leaders, 2019). PSP payouts are based on mutually agreed-to performance factors (quality, service) and targets and is distributed on an annual basis at 3% (Kaiser Permanente & Coalition of Kaiser Permanente Leaders, 2019).

Governance

At the national level, the KFHP and KPH share a common board of directors. KFHP has contractual agreements between KFH, PMGs, and individual and employer group plan members (Pines et al., 2015). The Permanente Federation LLC represents PMGs at a national level. Permanente Medical Groups are physician-led, self and locally governed professional corporations or partnerships. Salaried physicians are governed through their employee contracts. Allied health professionals, nurses, and employees are governed through agreements set out between their labor unions and KP; these are arranged through the Labor Management Partnership, which is a partnership between the Alliance of Health Care Unions and KP (Kaiser Permanente & Coalition of Kaiser Permanente Leaders, 2019; McCarthy et al., 2009).

KP has a Quality and Health Improvement Committee (QHIC) that is accountable to KP and the Kaiser Permanente National Quality Committee (KPNQC) that is accountable to the QHIC. The KPNQC is responsible for establishing and supporting a National Clinical Quality Strategy that sets out national targets and measures. KP collect quality indicators that are revised annually through its electronic health platform and member satisfaction ratings (Kaiser Permanente, 2022).

Issues/Reforms

- **System-wide electronic health records platform and care integration**: All health information (e.g., clinic, lab results, pharmacies, hospitals) is linked through the KP Health Connect system. This process allows for streamlined data sharing between providers and prescription renewals (Kaiser Permanente International, 2019). Data within the KP Health Connect system is also used to assess performance and quality of care. More recently, KP announced the integration of social services data into KP Health Connect in order to connect patients to community services (Kaiser Permanente Institute for Health Policy, 2022). The integrated electronic health platform has been favorably perceived by Canadian health commentators (Schull, 2014).
- Through the system-wide electronic health system and support from care managers, KP teams and providers are notified to follow-up and coordinate visits with patients. These issues could include prescription refill notifications, monitoring lab results (e.g., blood glucose), or flagging that a patient has not yet received a flu vaccination.
- Due to the structure of the KP model, where physicians have the freedom to enter or exit as providers, a substantial number of physicians accept the model of care. However, some observers suggest that Canadian physicians may not accept the model due to accountability and working hour requirements set out in the physician contract (Schull, 2014).
- Since KP mostly serves privately insured patients, which can be healthier and less complex than Medicare and Medicaid patients, it may be difficult to transfer lessons to a context with population-wide coverage like Canada (Bell, 2019; Schull, 2014).

Appendix B. Canadian Case Studies

British Columbia

Overview of primary care organization and delivery

In British Columbia (BC), primary care is provided by a range of healthcare professionals (GPs, NPs, registered nurses, as well as midwives in specialized clinics, and community pharmacists). Generally, primary care is delivered through GP practices (solo or group) as well as community health centres. GPs act as gatekeepers to specialist care and rostering is not required.

There are several groups and institutions involved in the organization and delivery of primary care at the provincial, regional, and local levels (General Practice Services Committee, 2020), outlined in **Table B1**.

TABLE B1. Key groups and institutions involved in primary care in British Columbia

Provincial and Regional level	• The Government of BC Ministry of Health is accountable for the healthcare system and provides funding for primary care. • Doctors of BC represents physicians and advocates, supports, and collaborates with the Government on physician activities and funding. • The Family Practice Services Committee (FPSC, formerly known as General Practice Service Committee) is one of four joint collaborative committees between the Ministry of Health-Doctors of BC that provides support and additional funding for primary care. • The Provincial Health Services Authority and its five regional health authorities plan and coordinate delivery of care. They are involved in governance of Primary Care Networks (PCNs) in their catchment areas.
Local level	• Divisions of Family Practice (Divisions, est. 2009) are community-based networks of GPs and NPs that provide support to members within their communities (Divisions of Family Practice, n.d.). This includes allocating funding from FPSC for their communities, as well as engagement. They collaborate with local health authorities and partners to help govern PCN in their communities. • There are 43 PCNs that act as clinical networks of primary care services providers within a geographical boundary. These include a mix of primary care practices, community health centres, urgent and primary care centres, and First Nations primary care clinics. PCNs were developed as part of the BC Government 2018 Primary Care Strategy (Office of the Premier, 2018).

BC (British Columbia); FPSC (Family Practice Services Committee); PCN (Primary Care Networks)

Primary care financing

Most GP services are paid through the provincial Medical Services Plan (MSP), which is funded by the BC Government. Physicians are predominantly paid through a FFS scheme, with about 18% of total payments to GPs from APPs, such as salaries that are based on population-based funding models (Canadian Institute of Health Information, 2022a).

The provincial government and Doctors of BC (representing doctors) negotiate a Physicians Master Agreement. This agreement sets out the terms and conditions for payment for physicians in the province and outlines the role and composition of various committees that support physician practice. The FPSC receives funding from the BC Government to provide support and grants to GPs and their practices as described in the previous section (Divisions of Family Practice, 2022).

The FPSC also provides direct payments and incentives to physicians and their practices that support longitudinal family care. These include (Family Practice Services Committee, n.d.):

- **Community Longitudinal Family Physician Payment (est. 2019)**: "recognizes physicians who work under FFS and provide long-term relationship-based care for a panel of patients" (Doctors of BC, 2019).
- **Team-Based Care Grant**: Provides $15,000 to eligible family practices that have onboarded interprofessional team members.
- **Panel Management Incentive:** $3,000 bonus payment for family practice teams that participate in up to 15 hours of panel management activities including empanelment (develop accurate list of active patients), building registries (create registries that reflect patients within a panel with a specific diagnosis coded by ICD-9 codes), and proactive and preventive care (using data to implement care goals using decision support tools from EMRs).
- **Group Family Practice Development Grant:** $30,000 per physician for joining or forming a new or expanded group practice.

The Ministry of Health also funds some primary care services under APPs, including (Primary Care Network Toolkit, 2020):

- **Population Based Funding (PBF)**: Patient-based funding to clinics where they are paid based on panel complexity. Includes a core basket of funded services, requirement for patients to be registered, and FFS payments for services outside of the core basket.
- **Northern Model (NM)**: Patient-based funding model to primary care teams based on panel size, complexity, and quality improvement indicators. Includes a core basket of services, quality payment for meeting prescribed targets, and FFS for services outside of the core basket.
- **Service contracts (GPs and NPs)**: Administered by the health authority. Payments based on time spent delivering services where providers must commit to a minimum 0.5 full-time equivalent (FTE), act as independent contractors, and sign up for a 3-year term. Also includes a requirement for providers to submit attachment records and hours worked to health authority.

Governance

There do not appear to be any formal accountability measures for physicians, but there are also two notable arrangements that govern primary care services in BC.

- The Medical Service Commission manages the MSP on behalf of the provincial government. Within the Medical Service Commission, there is a Billing Integrity Program that audits physician billing practices and patterns for MSP claims (Ministry of Health, n.d.).
- PCNs are governed through an array of entities that make up decision-making committees and advisory committees that operate at the local, regional, and provincial level. More details are available elsewhere[3] and in **Table B2**.

[3] https://www.pcnbc.ca/media/pcn/PCN_Collaborative_Governance_Roles_and_Responsibilities.pdf

TABLE B2. PCN Governance Membership (adapted from (General Practice Services Committee, 2022))

Committee	Members	Role/Purpose
FPSC General Practice Services Committee	• Ministry of Health • Doctors of BC • Regional Health Authorities • Divisions of Family Practice • First Nations Health Authority • Nurses and Nurse Practitioners of BC • BC Family Doctors	**Decision-Making**: "A collaborative partnership of the Government of BC and Doctors of BC. Works to strengthen full service family practice and the provision of quality patient care by GPs. It also supports the integration and alignment of physician services with other health service delivery, and promotes collaborative practice in meeting the needs of the population."
Collaborative Services Committee (CSC)	• Divisions of Family Practice • Local Health Authority • Local First Nations Partners • Local Community Partners	**Decision-Making**: "Provides PCN strategic leadership for the establishment of local PCN Steering Committee(s), PCN design and implementation, SCSP alignment, and analysis of data to help identify community care needs and outcomes."
Interdivisional Strategic Council (ISC)	• Divisions of Family Practice • Local Health Authority • Local First Nations Partners • Local Community Partners	**Advisory**: "A regional forum that includes representatives of all division and health authority primary and community care leads within a region. Provides an opportunity for regional strategic discussions and alignment regarding PMH, PCN, and health authority services."

Issues and reforms

- A **new payment model** launched in February 2023. The model provides an alternative to the current FFS scheme. The new model incorporates: time spent with a patient; number of patients a doctors sees in a day; number of patients doctors supports in their office; complexity of patient issues; and administrative costs (Doctors of BC, 2022b). The new payment model is consistent with recommendations made as part of physician engagement. For example, the Doctors of BC undertook a BC member engagement project, where the resulting report suggested a "blended model of salary and fee for service with time modifiers and incentives rewarding hard work" (Doctors of BC, 2022a). The new payment model and master agreement received 94% acceptance from voting physicians (Doctors of BC, 2022b).
- In 2018, BC introduced **Urgent and Primary Care Clinics (UPCC)** as part of their primary care strategy (Office of the Premier, 2018). UPCCs were seen as a way to address access issues for patients who did not have a regular GP or NPs, to provide after-hours and weekend care, and to mitigate the burden on hospital emergency departments. There have been recent concerns that most UPCCs are understaffed, that they increase staff competition with primary care in local areas, and that most new funding is aimed at UPCC instead of other primary care initiatives (CBC News, 2022; Doctors of BC, 2022a).
- Pharmacists in BC can only prescribe in an emergency and cannot prescribe independently nor in a collaborative setting or agreement. In 2018, the BC Government announced a $23 million investment to co-locate 50 FTE pharmacists in general practice. Health authorities were responsible for hiring clinical pharmacists in this role (Canadian Pharmacists Association, 2022; College of Family Physicians of Canada & Canadian Pharmacists Association, 2019; Government of British Columbia, 2021). In 2023, the government also announced changes to pharmacists scope of practice where they would be able to prescribe some medications independently (Ministry of Health, 2022).

Alberta

Overview of primary care organization and delivery

Primary care is provided by a range of healthcare professionals (GPs, NPs, registered nurses, pharmacists). GPs act as gatekeepers to specialist care. Primary care is generally delivered through GP practices (solo or group), community health centres, and some family care clinics. Pharmacies operate as independent businesses. Acute and continuing care is managed centrally through a single health authority, Alberta Health Services and organized into five regional zones across Alberta.

There have been several evolutions in the move towards team-based care and to support integration at the regional/zone and clinic levels:

- **Primary Care Networks (PCNs) (est. 2003, reformed 2017)**: Joint venture between Alberta Health Services and a group of family physicians in their respective areas. PCNs are voluntary and approximately 84% of GPs have signed a contract with a PCN (Alberta Health, 2022). The PCNs evolved organically addressing local priorities without strict standards or accountabilities.
- **Community Health Centres (CHCs)**: Interdisciplinary teams providing health promotion, social services, and health services primarily to marginalized populations; (mostly located in inner cities addressing vulnerable populations).
- **Family Care Clinics (est. 2012)**: Interdisciplinary teams paid through grant funding. There was an ambitious plan to establish 150 FCC's which never materialized.

Primary care financing

Primary care physician services are generally paid through the Alberta Health Care Insurance Plan.

- Physicians, including GPs, are funded through a physician agreement negotiated between Alberta Medical Association and Ministry of Health Alberta. This was recently ratified in 2022 after a few years of no agreement and ongoing disputes. Physicians are primarily paid through FFS payments (85.9%), with 14% of physician billings from alternate payment plans (Canadian Institute of Health Information, 2022b).
- PCNs receive separate funding through the Alberta Health-PCN grant agreements. They are funded on a per capita basis (approx. $62 per panelled patient per year). Most of these funds are used to hire allied health workers, chronic disease management, providing 24/7 access to care, and for infrastructure and equipment (Church & Smith, 2022; Leslie et al., 2020).
- GPs who are contracted with PCNs continue to be paid by FFS and also receive some payments to support role in PCN administration (Leslie et al., 2020).

Governance

The accountability mechanisms for primary care providers who work outside of PCNs are outlined in the Alberta Medical Association and Alberta Health Agreement, and also within Alberta Health Services privileging and College of Physicians and Surgeons professional practice regulations. There is a governance and accountability structure embedded within the Alberta Health-PCN grant agreement related to outcomes expected for the grant funds received.

The Office of the Auditor General of Alberta conducted an evaluation of PCNs in 2012 and a follow-up in 2017. The audit identified several areas of concern on the issue of accountability. Stemming from this report a new PCN governance framework was introduced (Church & Neale, 2022). This was a move for more standardization of plans across PCNs to ensure shared goals between key partners addressing health issues in a particular geography.

- Some of the key changes from the 2017 PCN governance framework reform include:
    - Creation of zone PCN committees for joint development and implementation of service plans between PCNs and Alberta Health Services.
    - Establishment of a provincial PCN committee that plays an advisory role to the Alberta Minister of Health.
- Primary Care Networks are governed through the provincial PCN committee, which comprises representatives from PCN, AHS, Alberta Federation of Regulated Health Professionals, and the Alberta Medical Association. The Provincial PCN Committee "provides governance, leadership and strategic direction and priorities for PCNs" (Alberta Medical Association, 2022).
- PCNs provide business plans to the Ministry of Health for review. They provide regular financial reporting to ensure compliance with ministry policies and business plans (Church & Neale, 2022)
- As part of the PCN grant agreement, PCNs must collect and report on a standard primary health care indicator set, known as the "Schedule B Indicators" (Church & Neale, 2022). These indicators are annually reported and publicly available (Alberta Government, 2022). The indicators aim to provide actionable data to improve patient care and are intended to evolve in response to health system changes. From 2016/17 to 2020/21 fiscal year, the reporting indicators include: third next appointment, patient experience, screening, governance, leadership, team effectiveness for member physician clinics and PCN-operated clinics, and patient's medical home. Most indicators have above 80% reporting rate by PCNs, with patient experience indicators having the lowest proportion of reporting (73% of PCNs reported this data in 2020/21) (Alberta Government, 2022).
- The Alberta Government also publishes PCN zone profiles to assist with planning activities in each zone. The profiles include demographic, socioeconomic, and population health status statistics (Alberta Government, 2021a).

Issues and reforms

- In 2019, the Alberta government commissioned a report—the MacKinnon Report—to review the finances and budget of the Alberta government. The report recommended ending the primary care FFS model and expand uptake of the Alternative Relationship Plan model as a way to improve care and provide more predictable costs (Lange et al., 2020; MacKinnon, 2019).
- Alberta does have the most expansive scope of practice for pharmacists in Canada and is leading internationally in terms of pharmacists' scope of practice.
- The Alberta government is currently carrying out a Primary Care Network Nurse Practitioner Support Program. The program is in phase two and is being rolled out in up to 25 additional PCNs (Alberta Government, 2021b).
- The Alberta Primary Care Alliance, which comprises representatives from the Alberta Medical Association, produced the *Primary Care 2030 White Paper* that outlined several concerns with

the existing organization and financing of primary care in Alberta (Primary Care Alliance, 2022). These concerns included:

  - Misaligned funding and compensation models (p. 1);
  - Insufficient measurement and accountability (p. 3);
  - Mismatch between per capita spending and expected outcomes (p. 2);
  - Health care providers not well integrated into teams (p. 4); and
  - FFS model not conducive to integrated primary care initiatives (p. 17).

- The Alberta government announced the Modernizing Alberta's Primary Health Care System initiative in 2022 to strengthen primary healthcare in Alberta and ensure all Albertans have access to timely, appropriate primary healthcare services (Government of Alberta, 2022).

Manitoba

Overview of primary care organization and delivery

In Manitoba, primary care is provided by a range of healthcare practitioners (GPs, NPs, and nurses in GP practices and primary care centres). Other primary care providers include nurses, midwives, dieticians, pharmacists, mental health professionals, and others. Since 2017, the majority (70% of primary care clinics who have enrolled 52% of the provincial population) of primary care occurs through a Home Clinic, a hub for the coordination of care and management of health records (Manitoba Health, n.d.-c). There is not yet any evaluation as to whether the Home Clinic initiative has stimulated any tangible change in the health system. Home clinics are required to have a roster of patients and use an EMR. The majority of GP practices are either solo and small group practices (Peckham, Kreindler, et al., 2018). My Health Teams are interprofessional primary care networks that partner with the regional health authorities (RHAs), GP practices, and community organisations to provide coordinated primary care, often through largely FFS GP practice. These were known as PCNs prior to 2014. My Health Teams are expected to provide after-hours care (Peckham, Ho, et al., 2018). The MBTelehealth and MyMCTVideo applications are used by primary care providers to request specialist consultations for patients in rural or remote areas (Li et al., 2020). Mobile clinics (2014–present) are buses staffed by an NP and registered nurse to provide comprehensive primary care in three regions. The buses are intended to serve remote and underserviced communities (Kreindler et al., 2019).

Primary care financing

Physician services are covered by the provincial Manitoba Health Services Insurance Plan. The province is divided into five regional health authorities who act as providers and purchasers of care (Marchildon & Allin, 2021).

Most GPs are paid FFS (e.g., 64.3% of clinical payments for family doctors in 2021) (Canadian Institute of Health Information, 2022b). The fee schedule is negotiated every four years between the government and provincial physicians association (Manitoba Medical Association) (Kreindler et al., 2019). This is supplemented by quality-based incentives for chronic disease management and prevention to the clinic. The remaining 35.7% of clinical payments are made through APP (Canadian Institute of Health Information, 2022b). Experiments with alternative payment schemes are focused on recruiting physicians to work in rural or underserviced area (Levesque et al., 2012; Peckham, Ho, et al., 2018).

In 2014, Manitoba introduced quality-based incentives through the Chronic Disease Management (CDM) tariffs became available for GPs to provide better disease management for patients with diabetes, asthma, congestive heart failure, coronary heart failure, and hypertension. To be eligible for these tariffs, GPs are expected to demonstrate to Manitoba Health through supporting documentation that they have provided the majority of medical care for the treatment of the chronic condition; coordinate with other allied health providers; and communication with the patient and their care plan as appropriate (Manitoba Health, n.d.-a). Complex Care Management (CCM) tariffs (2017–present) account for age (50–74 years and 75+), number of chronic diseases (tariffs for 1, 2, and 3 conditions) and management of mental health and substance use disorders (from 2020) are applicable to enrolled patients and GPs can claim payments by demonstrating compliance with disease management guidelines (Kreindler et al., 2019; Manitoba Health, n.d.-b).

Governance

Reforms to the primary care contracting model have introduced a degree of accountability. For example, through the introduction of the CDM and CCM, the Manitoba government has introduced incentives for better chronic disease management. It is not yet clear whether these had the desired effect.

Manitoba's *RHA Act* does not address alignment between RHA's mandates and the accountability of primary care. There are no accountability measures for quality improvement or data about primary care options available for patients to learn about or monitor their providers (Peckham, Ho, et al., 2018).

Issues and reforms

In Manitoba, as across Canada, it has been challenging to introduce primary care reforms to modify the payment type or transition to a more team-based care model because GPs are independent providers that value professional autonomy (Martin et al., 2018). As such, Canadian policymakers aim for primary care reforms that are voluntary and palatable to GPs while achieving substantive practice changes (Kreindler et al., 2019).

The provincial government has pursued a series of initiatives to promote access to a family doctor for all Manitobans by 2015. There are several policy efforts stemming from that aimed at expanding engagement of FFS physicians and promoting greater alignment between private and public delivery models. To do so, the Manitoba government introduced contracts that offer the opportunity for FFS providers to gain more funding by accepting more patients and working with other primary care providers to promote multidisciplinary teams and integrated care models, such as My Health Teams (Struthers et al., 2019). The new initiatives include the CDM tariff (as described above) as well as the following:

- **The Family Doctor Finder** (piloted in 2013, rolled out widely from 2014–present), a centralized service to connect patients with a GP.
- The introduction of **My Health Teams** (2013–present) are contractual agreements between the RHA and FFS clinics to plan and coordinate services throughout a geographical area. This included widening services, often by hiring allied health providers to work across clinics. As part of these, participating providers needed to commit to an "attachment deliverable" requiring they enroll 2,000 new patients collectively.
- The **Interprofessional Team Demonstration Initiative** (2013–present) where funds were available to develop multidisciplinary teams by hiring nurses and physician assistants. To participate, GP practices needed to join a My Health Teams and attach 500 new patients (Kreindler et al., 2019; Struthers et al., 2019).

Ontario

Overview of primary care organization and delivery

In Ontario, primary care is provided by a range of healthcare practitioners (GPs, NPs, and nurses, and in some care models also a range of other professionals such as pharmacists, social workers, dietitians, etc). Primary care is delivered primarily through physician-led general practices (solo physician, physician group or interprofessional teams) and walk-in clinics (for GPs who are not part of a group or interprofessional practice). There are also a small number of other primary care options such as NP-led clinics and community governed community health centres. GPs and NPs play a gatekeeping role for specialist care.

Primary care financing

Primary care services are covered by the provincial Ontario Health Insurance Plan. Since the 2000s, Ontario has introduced a series of primary care reform initiatives to diversify GP remuneration to improve access. By 2016, the majority (over 85%) of Ontarians were registered with a GP who was paid through APPs that featured rostering, extended weekday or weekend hours, and blended payments (capitation, incentives, and P4P bonuses in addition to FFS) (Glazier et al., 2019; Rudoler et al., 2019).

The physician payment models in use for Ontario (all require rostering in order to receive capitation or practice-level bonus payments) are described in **Table B3**.

TABLE B3. Physician payment and practice models in Ontario

FFS blended with targeted incentives and bonuses	• **Family Health Group**: 3 or more GPs (approximately 27% of all Ontario residents). • **Comprehensive Care Model (CCM):** Solo GP (3%) (Marchildon & Hutchison, 2016).
Capitation with targeted incentives and bonuses	• **Family Health Organisation (FHO)**: The FHO was introduced in 2006 and comprised of: capitation adjusted for age and sex (70%), incentives and bonuses (10%), and a limited set of FFS codes (Glazier et al., 2019). • **Family Health Network (FHN)**: A capitation model blended with targeted incentives and bonuses introduced in 2002 that is similar to FHOs but provide a smaller basket of primary care services (<2%) (Marchildon & Hutchison, 2016). By 2016, 29% of Ontarians were enrolled with a FHN or FHO (Rudoler et al., 2019). • **Rural and Northern Physician Group Agreement**: From March 2020, this group shifted from a salary with targeted incentives and bonuses to a blended capitation model. There are currently 38 of these groups serving 65,000 people in Northern Ontario (<1%) (Government of Ontario, 2020).
Capitation (using FHO or FHN model above) or salary	• **Family Health Team (FHT):** A practice model introduced in 2005 featuring GPs and nurses working in interprofessional teams with other health providers (e.g., nurse practitioners, dieticians, pharmacists, social workers, psychologists, occupational therapists). GPs are paid through blended capitation (using FHO or FHN model) or (in few community-governed FHTs) salary. All other health professionals on the teams are salaried. As of 2016, 25% of Ontarians were enrolled in an FHT (Rudoler et al., 2019).
Salary (and variants)	• **Nurse Practitioner (NP) led clinic**: These clinics are led by NPs (salaried) and collaborating physicians (sessional payments and FFS) and provide primary care for communities with high numbers of patients that are not rostered to a GP (Marchildon & Hutchison, 2016). There are now 205 full time NPs providing these services in 2022, up from 109 in 2015 (College of Nurses of Ontario, 2022).

Note. After hours care is required for all models except CCM and NP-led clinics.

While there have been substantial reforms to the payment formula across primary care in Ontario, it is worth noting that these schemes are voluntary and focused on increasing payments to primary care providers with the aim of improving access for patients but without embedding or requiring evaluations that can demonstrate commensurate benefits for equity, efficiency, or access (Aggarwal & Williams, 2019; Marchildon & Hutchison, 2016).

There are a variety of targeted incentives related to blended funding models. For example, in FHTs, some of the incentives available are targeted payments for prenatal and intrapartum care, home visits, or palliative care. One P4P initiative available for primary care is the access bonus, introduced in 2004. This incentive is designed to promote access to GPs and minimize the use of irregular services such as walk in clinics or other primary care venues (ED and specialists visits exempted). The access bonus offers practices an incentive of up to 18.58% of capitation that was reduced on a dollar for dollar basis if an enrolled patient sought care elsewhere (Glazier et al., 2019). The bonus is deposited into a practice group's account on a monthly basis for distribution to GPs (Premji et al., 2021). Glazier et al. (2019) suggest that this bonus benefits GPs outside urban areas providing the least after hours care, higher ED visits and highest adjusted ambulatory costs. Payment reform is recommended that differentiates between rural communities and dense urban areas (Glazier et al., 2019).

Currently, there are ongoing efforts to reduce the degree of primary care delivered virtually by limiting remuneration available for virtual visits. Specifically, as of December 1, 2022, the Ontario government removed the temporary fee codes that were put in place in March 2020 in response to the COVID-19 pandemic, and introduced specific requirements for new billing codes for "limited" or "comprehensive" virtual care (Ministry of Health and Long-Term Care, 2022).

Governance

The main mechanism of primary care governance is the Physician Services Agreement negotiated between the Ontario Medical Association and the provincial government. The most recent agreement covers the period 2021–2024 (Ontario Medical Association, 2022). As such, the main mechanism by which the provincial government can hold primary care accountable is via funding models; there are examples of such bonuses for prevention targets, targeted incentives for intrapartum care or the access bonus. For the most part, Ontario's primary care reforms have relied on persuasion or economic incentives so accountability mechanisms are often voluntary and additional to negotiated budgets (Aggarwal & Williams, 2019).

There are no accountability measures for quality improvement or data about primary care options available for patients to learn about or monitor their providers (Peckham, Ho, et al., 2018). There are voluntary *MyPractice* reports available to non-salaried family physicians—produced by Health Quality Ontario, now part of Ontario Health—that provide primary care practices with practice, regional, and provincial-level performance data that can be used for their own quality improvement efforts (Health Quality Ontario, n.d.).

Issues and reforms

Ontario is pursuing a large-scale transformation of its health system to enable better integration through the establishment of Ontario Health Teams (OHTs) where hospitals, doctors, long-term care, and

community organizations will work as a comprehensive and coordinated team. To start, each OHT is taking a segmented approach by identifying a priority population in a specific geographic area to receive a coordinated continuum of care (Ministry of Health and Long-Term Care, 2019). The intention is for OHTs to eventually receive an integrated envelope of funds to support more coordinated care across the continuum. Each OHT will hold a consolidated budget for all providers. This would be a major change because physician budgets have largely been sheltered from health system reforms since Medicare was established (Marchildon & Allin, 2021). Few OHTs are led by Family Health Teams (e.g., Couchiching OHT and All Nations Health Partners OHT in rural/northern Ontario), though many include primary care within their teams and in leadership roles (e.g., through primary care working groups). At this early stage of implementation, OHTs appear to serve as a catalyst for collaboration between primary care and other health organizations and providers; however, it is unclear whether and how OHTs will change governance or finance of primary care.

Nova Scotia

Overview of primary care organization and delivery

Primary care is provided by a range of healthcare professionals (GPs, NPs, registered nurses, midwives, pharmacists). Primary care is delivered through GP practices (solo or group), or through one of 96 collaborative family practice teams across the province (Nova Scotia Health Authority, n.d.). In central Nova Scotia, primary care is also delivered through Community Health Teams, which are coordinated between the IWK Health Centre and the Nova Scotia Health Authority. GPs act as gatekeepers to specialist care and patient rostering is required for GPs who are paid through alternate payment plans (APP), such as capitation (Doctors Nova Scotia, n.d.-d).

Primary care financing

In Nova Scotia, most physician services, including primary care, are covered by the provincial Medical Services Insurance (MSI) program. GPs fees are set through a contract (Master Agreement) between the Doctors Nova Scotia and the government of Nova Scotia (Doctors Nova Scotia, n.d.-c). Through the Master Agreement, GPs are paid by FFS or APP. APP can be paid directly to an individual GP or a group of GPs. If payment is made to a group of GPs then the funding formula factors in income sharing.

In June 2022, the Nova Scotia government introduced a blended capitation payment pilot as a form of APP. This payment compensates GPs based on the number of patients they have and number of services they provide. There are also bonuses for timely access to care. With the blended capitation payments, capitation to represent 70% of earnings, and FFS represent 30% services billed. Physicians are eligible if they commit to using electronic medical records (EMR), have appropriate team size (minimum four GPs per practice), and commit to provide comprehensive, continuous primary services (Communications Nova Scotia, 2018).

Nurses, NPs, and midwives are salaried with the Nova Scotia Health Authority.

There are three different types of contracts available for GPs to operate or be involved in Collaborative Family Practice Teams (CFPT) (Nova Scotia Health, 2021). GP payment is not tied to the type of contract, as GPs from any of the below contracts can receive FFS or APP. In addition, most CFPT models operate through the Turn-key or Co-leadership governance model.

1. **Turn-key governance model**: Nova Scotia Health (NSH) manages clinic activities, provides clinical team members, and sets up all infrastructure and activities. Participating family physicians pay overhead to NSH.
2. **Co-leadership governance model:** NSH provides clinical team members employed by Nova Scotia Health and provides some funding for overhead costs (e.g., supplies, start-up equipment).
3. **Contracted services governance model:** NSH provides funding to hire team members and operating costs and is involved in monitoring performance and accountability.

GPs in Nova Scotia are eligible for the following incentives as per Schedule I of the Master Agreement (Doctors Nova Scotia, n.d.-c):

- **Collaborative practice incentive program (est. 2008)**: Annual $5,000 per physician payment available to GPs who are participating in a collaborative practice (separate from CFPT models).

- **Chronic disease management (CDM) incentive program:** Base and additional incentive payments per patient who is managed for an annual cycle of care who has one of the following : T1D, T2D, IHD, COPD.
- **Complex Care Visit (CCV) fee:** claimed up to four times per patient per year. For patients under active management for three or more chronic conditions (asthma, COPD, diabetes, chronic liver disease, hypertension, chronic renal failure, congestive heart failure, ischaemic heart disease, dementia, chronic neurological disorder, cancer).
- **EMR incentives**: the current Master Agreement also provides financial assistance to physicians who implement and operate EMRs. Grants include: 1) One-Time EMR Investment Grant to assist physicians in adopting EMRs; 2) annual EMR Participation Grant for GPs who invest at least four hours per year in EMR events and activities; and/or 3) EMR Utilization Grant for GP practices that have implemented EMRs and billed a minimum of $30,000 in MSI billings over 12 months (Doctors Nova Scotia, n.d.-b).

Governance

The Department of Health and Wellness oversees and directs funding for the healthcare system. Aside from the Master Agreement, there do not appear to be any formal accountability measures for GPs who are paid through FFS. There is an accountability framework for GPs that are paid through APPs. The accountability measures include a requirement for GPs to conduct shadow billing that is subject to audit as well as an annual activity report that describes activities they carry out aside from shadow billing (Doctors Nova Scotia, n.d.-a). There have been some concerns of data gaps due to inconsistencies with shadow billing.[4]

Issues and reforms

As above, Nova Scotia introduced a blended capitation pilot in June 2022. There is an expectation that this model may be able to compensate GPs equally to FFS expectations. However, there are concerns with the ability of the new model to account for risk adjustment or the needs of different patient groups.

Pharmacists in Nova Scotia cannot prescribe independently for most conditions, but can prescribe in a collaborative practice setting or agreement and for specific conditions, such as uncomplicated urinary tract infections, contraception, herpes zoster, and lyme disease prevention (Canadian Pharmacists Association, 2022; Government of Nova Scotia, 2021). There does not appear to be widespread implementation of pharmacists co-located in general practice in Nova Scotia.

[4] As described by local experts in consultations.

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