How-To Playbook for Health Workforce Planning

A resource to guide planning for the future of your health workforce

July 2024

RCPS Réseau canadien des personnels de santé

CHWN Canadian Health Workforce Network

Ontario Health Toronto

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Why Should We Plan?

Patients experience the health system through the health workforce. A patient's journey while interacting with the system can be influenced by whether they have a family doctor and how easy it is to see their doctor, whether their doctor works with other providers, and how far they must travel for medical appointments, bloodwork or imaging, or types of other care.

Most health system issues have a workforce dimension. Workforce planning is a proactive approach that helps health system leaders address workforce issues in order to respond to current and future needs of patients.

Planning is necessary to make sure that patients receive the right health services from the right health care providers in the right place at the right time

Importantly, planning ensures equity and that resources are available to the patients who need them the most. Proactive planning rather than reactive decision-making is needed to anticipate and respond to health system challenges. Health system responsiveness and resilience can be improved by planning for short-, medium-, and long-term timeframes. In so doing, progress can be made on system issues such as continuity of care with a family doctor, coordination with interprofessional health practitioners, and increasingly long wait times for care.

Ideally, Planning SHOULD BE…

- Proactive
- Iterative
- Inclusive of multiple professions
- Evidence-informed
- Based in community need
- Locally relevant
- Quantitative and qualitative

Planning SHOULD NOT BE…

- Reactive
- A one-off exercise
- Based on headcounts
- Models and spreadsheets only
- Prescriptive
- An activity behind closed doors
- Opinion-based

Tips for Planning Effectively

- Intentionally build capacity for planning
- Build a planning community: connect with others with the necessary skills doing the same work, and develop a network you can call when issues arise
- Planning should support decision-making at the appropriate scale
- Plan regularly and iteratively
- Commit to adopting leading practices
- Set aside time and funding to support planning activities
- Prioritize and advocate for high quality data and data infrastructure
- Set aside time and resources for engagement in planning; consult widely and collaborate with interested parties and experts, including adjacent regions and jurisdictions
- Listen to your partners and what they need
- Be flexible and willing to change your approach to planning when it doesn't seem to be working

The Playbook

The playbook highlights leading practices and provides curated resources, supplemented with tips and case study examples. This playbook can also be used alongside the toolkit developed by the Canadian Health Workforce Network and Ontario Health Toronto. For more information about the toolkit, visit the Toronto Region Primary Care Workforce Planning Toolkit.

Who is this playbook for?

Support for planning is urgently required at all levels of the health system. This playbook has been developed to build capacity for planning by providing guidance for users with a range of planning experience in a range of settings. Whether you are making decisions for a group, clinic, department, community, health team or region, workforce planning is important and this resource will help to guide you through the process.

Tip: Throughout the playbook we will provide key tips for planning.

How to use this playbook

Each section of this playbook is accompanied by an example or a case study to help you understand the planning process. You will see a similar box throughout the playbook whenever an example or case study is presented.

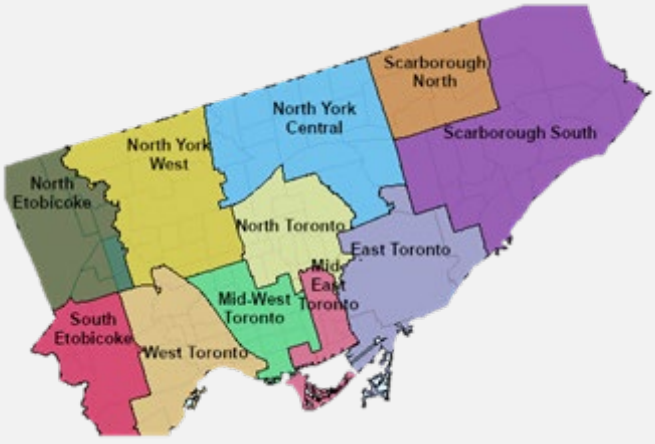
Case Study: Primary Care Workforce Planning in the City of Toronto, Ontario

Over 2.7 million people live in Toronto, the largest city in Ontario, Canada's most populous province. Health system challenges in Toronto include rapid population growth, patient mobility, and a changing primary care landscape, exacerbated by the COVID-19 pandemic.

Ontario Health Toronto is engaging in primary care workforce planning as a way to proactively address health system issues. Working with the Canadian Health Workforce Network, Ontario Health Toronto developed a comprehensive regional-level primary care workforce planning process and toolkit to respond to the unique needs of Toronto communities.

The toolkit builds a body of evidence around the current (and projected future) states of population health needs and primary care service provision at a neighbourhood level.

We continue to develop tools for planning and are building capacity for planning at a local level in Toronto though engagement with Ontario Health Teams (a collaborative of health service providers with a central leadership structure, accountable for improving the health of the local population).



Although the data in the toolkit are specific to primary care in Toronto, the planning principles and processes are eminently transferrable and can be applied in other jurisdictions, sectors, and settings.

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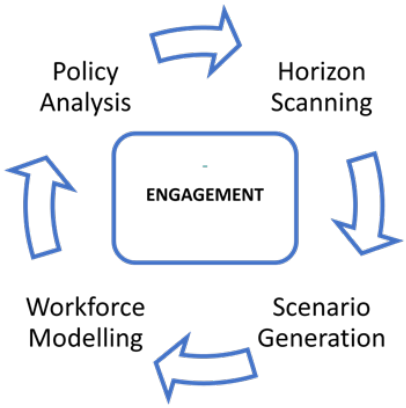
The Planning Process

Cyclical health workforce planning process

The planning approach includes horizon scanning, scenario generation, and quantitative workforce modelling activities, which inform policy analysis and decision-making.

The process is iterative, and data can be used to inform each step.

Planning is a big undertaking and can be overwhelming. In this cycle, you can start wherever you feel suits your team's needs best.



Tip: Starting to Plan? Identifying priorities through horizon scanning, then following your way through the cycle, is a good way to start.

Engagement

Engaging with partners is an activity that is embedded throughout the planning process. We define engagement as:

The iterative and ongoing process of collaborating with partners and knowledge users as active planning partners

Engage: Engagement tips are included throughout the playbook.

Planning is a social and political exercise as much as it is a technical one. Engaging with partners and knowledge users is necessary to ensure that planning is fit-for-purpose. Engagement requires identifying who your partners in the planning process are and connecting with them to ensure that your approach to planning is meaningful.

Engage: Choosing partners to engage with influences the process and outcomes of your engagement. Partners can include healthcare professionals, patients or clients, people with lived experience, and policy makers.

Engagement is central to the planning process. Each step in the planning cycle is informed by engagement activities and learnings from one step feed into the next.

Case Study: Engagement with Ontario Health Teams (OHTs)

In Toronto, engagement is embedded in planning. In the most recent phase of planning, we engaged with five Toronto-area OHTs, providing support for workforce planning and using feedback from OHTs to refine our planning tools (including this Playbook). Our collaborations are iterative and ongoing, according to OHT needs. As part of the process, we have initiated an informal 'Network of Planners' to help OHTs engage with one another around common planning needs and challenges. The hope is that this network will expand to include other OHTs and eventually evolve into a Community of Practice.

Engage: For more on engagement and its impact within planning, view the Engagement & Impact section on our website.

Horizon Scanning

Horizon scanning involves looking into the future. We define horizon scanning as:

A systematic exploration of the current state, possible future developments, driving forces, and issues that could influence workforce requirements and/or capacity over the defined planning period

Likely developments on any timescale – such as 3, 5, or 10 years into the future – can be explored. The planning period may vary, depending on main purpose or intent of planning. The primary goal of horizon scanning is to identify priorities for planning. Considering the context, pressures, and reasons for planning can help to focus the next steps of the process.

Questions to ask during Horizon Scanning

- What is the goal of the system in question and how can planning support this goal?
- What is the current state of the system?
- What are the driving forces that are influencing workforce and population trends over the defined planning period
- What levers are available to decision-makers?

There are several tools for Horizon Scanning, including:

- Systems Framework for Health Workforce Planning & Deployment
- STEEPLED Analysis
- SWOT Analysis
- Causal Loop Diagrams

With the results of Horizon Scanning in mind, consider the following questions:

- Do you fully understand the current context and possible future developments?
- Have you identified all the factors at play?
- Do your current plans leverage the strengths of your organization and address possible weaknesses?
- Do your current plans take advantage of external opportunities?
- How do your plans account for external threats?
- Are there any additions, changes, or modifications to your plans needed?
- Are there specific issues and scenarios that you may want to focus on?

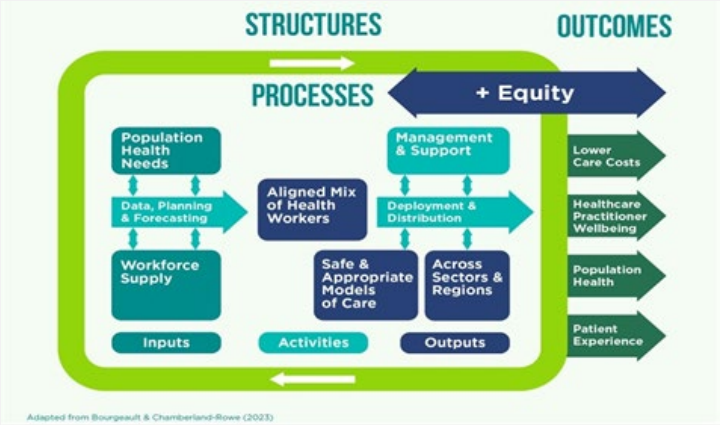
Tip: For more on horizon scanning tools, view our Primer on Health Workforce Planning.

Engage: Engage with individuals with lived experience (i.e., patients, providers, planners) with workforce capacity and requirements to effectively apply the horizon scanning tools and develop realistic scenarios.

Example: Systems Framework for Health Workforce Planning & Development

The Systems Framework for Health Workforce Planning, Policy and Management provides an overview of system structures, processes and outcomes, with equity integrated across each element.

This tool can be used at the outset of horizon scanning to help participants understand the overall system landscape, components, and interrelationships.



Example: STEEPLED Analysis

A STEEPLED analysis explores contextual factors that are relevant to the system in seven categories: **Social, Technological, Economic, Environmental, Political, Legal**, and **Educational**.

Use the STEEPLED framework when you want to generate an inventory of the driving forces at play in your local health system and you want to be sure that you have captured everything that is relevant. This analysis can help partners come together to develop a common system-level view and identify priorities for planning

Example: STEEPLED Analysis (continued)

This is a sample STEEPLED analysis conducted by an OHT planning team for their primary care

Social

- Physician retirement
- Physician burnout
- Breaking down silos & seeing the system as an integrated whole
- Patient choice in healthcare professional access
- Shifting career choices and value of work-life balance

Technological

- EMR overburden
- Never-ending inbox
- Virtual care
- Opportunities offered by automation/new technologies

Economic

- Physician remuneration
- New Physician Services Agreement
- Practice models – access, choice, innovation, limits
- Team-based models are a minority
- PPP: Public-Private Partnerships

Environmental

- Emergency department access by unattached patients
- Condo developments
- Closing of practices
- High rent/overhead
- Physician access to team-based practice models/supports
- Public-Private Partnerships (i.e., LifeLabs, Shoppers)

Political

- Newcomers
- Physician Services Agreement
- Medical school expansion
- Upcoming provincial election
- Health system integration improvements
- OHT trends
- System integration
- Public-Private Partnerships
- Advocacy for primary care

Legal

- Care Act
- Home Care modernization
- Shifting legal environment
- New scopes of practice/prescribing powers

Educational

- Fewer graduates joining
- 3-year family medicine training
- More family physician spots
- Teaching capacity pressures
- Pathways for international graduates
- Building effective and strong team-based care
- Capacity-building for planning

Demographic

- ED overload
- Changing patient expectations
- Growing patient complexity
- Cultural and language diversity
- Aging
- Chronic disease (i.e., dementia)
- Unattachment rate

Example: SWOT Analysis

A SWOT analysis explores the **Strengths, Weaknesses, Opportunities**, and **Threats** in the system and categorizes them as internal (organizational) or external (contextual). The SWOT analysis can follow upon the STEEPLED analysis, re-categorizing the driving forces previously identified. Or, the SWOT analysis can be populated with relevant factors generated independently. Use a SWOT analysis to help identify priorities for planning and to assess the degree to which you are leveraging internal strengths, addressing organizational weaknesses, taking advantage of external opportunities, and mitigating external threats.

This is an example of a SWOT analysis completed using OHT inputs.

Internal (Organizational) Factors

Strengths

- Leadership
- Project management expertise
- Local integration of services
- Collective advocacy for primary care
- Capacity-building for planning

Weaknesses

- Physician retirement
- Limited team-based care models
- Limited health workforce capacity across the system
- Teaching capacity pressures

External (Contextual) Factors

Opportunities

- Health system transformation
- System integration
- Virtual care
- New technologies/AI
- New Physician Services Agreement

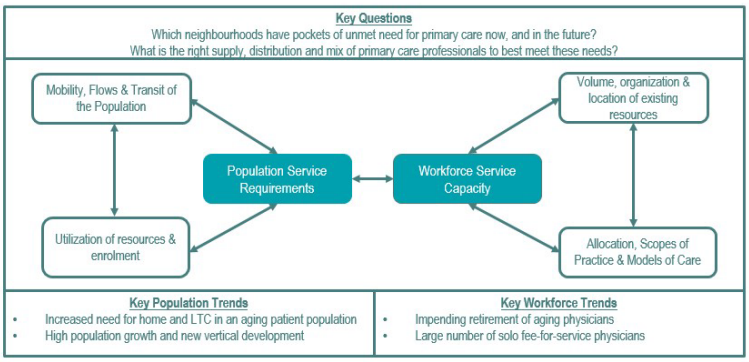
Threats

- Population growth
- Population aging
- Increasing patient complexity
- Increasing rates of chronic disease

Example: Causal Loop Diagram

A causal loop diagram provides a simplified representation of how different variables in a system are causally related. Use a causal loop diagram to explore how different parts of the system are inter-related. By visualizing relationships, this tool can help identify priorities for planning.

This is an example of a causal loop diagram completed by Ontario Health Toronto.



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Scenario Generation

Scenario Generation involves asking "What if…?". We define scenario analysis as:

The development and elaboration of a range of plausible futures

Scenarios can be related to population health or workforce trends. Through scenario generation, we hope to trace connections between scenarios and the factors that influence them.

Population health scenario examples:

- Demographics: aging population
- Disease prevalence: increased frailty, multimorbidity, mental health concerns
- Social determinants of health: increased poverty and homelessness

Workforce trend scenario examples:

- Physician retirement: aging physician workforce
- Changing practice patterns: physicians are working fewer hours than they did in the past
- Physician recruitment: family physicians are less likely to provide comprehensive primary care
- Interprofessional care providers: team-based care is desired by patients and providers

Questions to ask during Scenario Generation:

- What scenarios – related to population health and workforce trends – could develop?
- How do systemic factors and driving forces influence the scenarios?
- How probable is each scenario? How much uncertainty is associated with them?
- Are data available to support modelling of scenarios?

With the results of Scenario Generation in mind, consider the following questions:

- What could happen in your community over the next 2 years, 5 years, 10 years?
- What factors influence these scenarios?
- How likely is each scenario?
- What is the potential impact of each scenario?
- What are the options available to respond

To assemble scenarios in one place, you can use the following table as a tool to map each scenario to its probability of coming to pass and its potential impact, and then explore policy options to respond.

Scenario	Probability	Potential Impact	Options
Scenario A: Population growth due to development	Depends on the neighbourhood	Increased service requirements	Increase physician recruitment, retain physicians in the workforce longer, implement team-based care
Scenario B: Aging population	Certain	Increased service requirements	Increase physician complement, support team-based care, implement social supports for seniors

Workforce Modelling

Workforce modelling involves using data to extend our understanding of health system issues. We define workforce modelling as:

The use of quantitative and qualitative data to represent current and future health system states

Modelling enables further exploration of priorities identified through horizon scanning and scenarios related to the population and the workforce.

Tip: Modelling is not a 'crystal ball', it doesn't provide an 'answer'. It is a tool to consider different options in support of more informed decision-making.

Through workforce modelling, you can:

- Estimate the primary care resources needed to care for patients
- Identify current and future emerging needs, taking into account trends and factors such as population growth, demographic shifts, changing population characteristics, changing workforce supply, and others
- Inform strategies to improve and transform care by testing a range of relevant scenarios

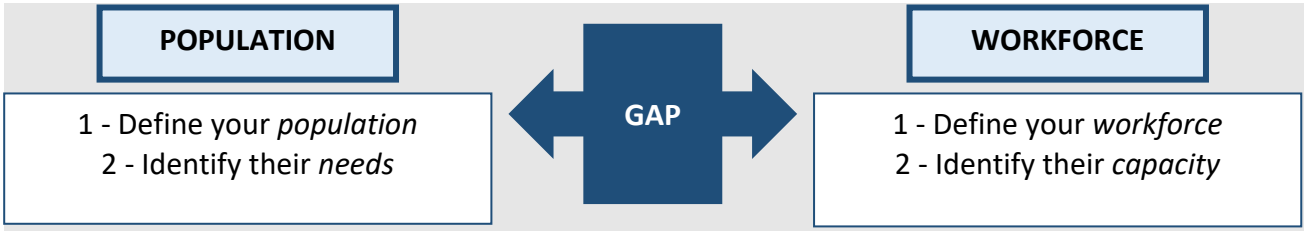
Tip: Workforce planning is more than just modelling.

Key tips for Workforce Modelling:

- Define the bounds of your system: neighbourhood, sub-region, community
- Draw on Scenario Generation examples to inform modelling
- Consider multiple healthcare professions
- Which practitioners come together to deliver care?
- Use high quality data (complete, granular, timely, from a reliable source), to describe current and future health system states
- If the data inputs to the model are of poor quality the outputs will be poor quality as well
- Seek feedback from partners and validate results
- Do the results resonate with what is happening on the ground?

Engage: Solicit help with modelling from data-minded leaders and colleagues, data stewards, and other planners.

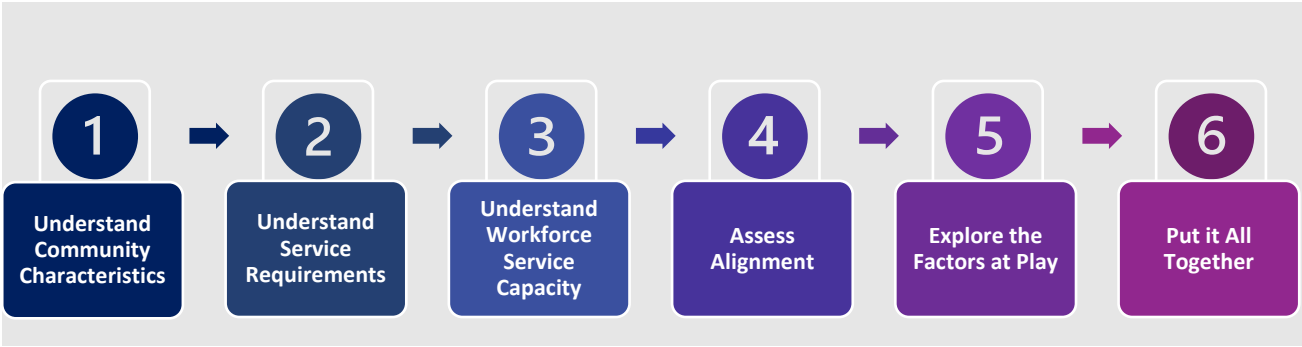
Modelling Alignment:



Translating the results of Workforce Modelling

Sometimes, summarizing the results of your modeling exercises in a spreadsheet is sufficient. More often, it will be necessary to present the results of workforce modelling in a way that makes them more accessible to partners. Outputs of modelling may take the form of charts, tables, maps, slides, static dashboards, or interactive dashboards. The format will depend on the audience and the material that you need to convey.

In Toronto, we synthesize the results of our modelling in a six-step interactive dashboard that makes the process and outputs easy to access and understand.



Tip: Workforce planning should always start with the needs of communities.

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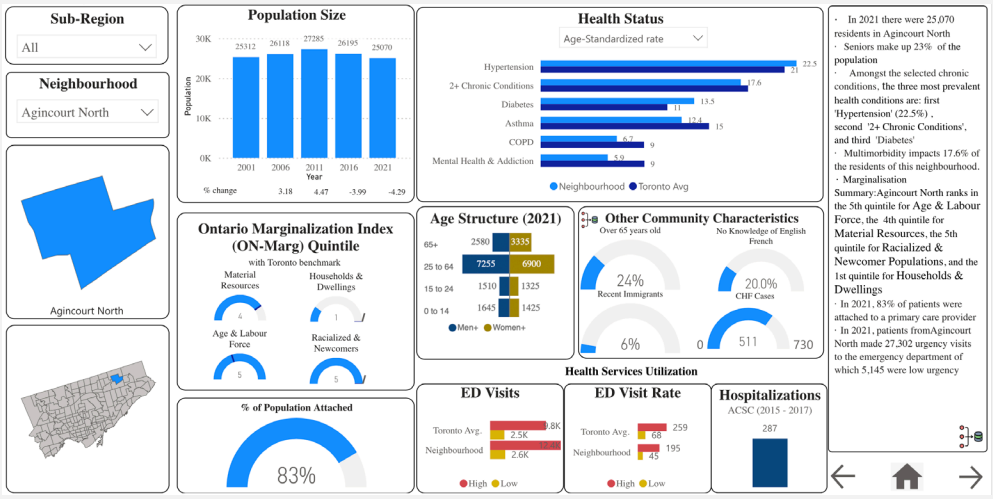
Step 1: Understand Community Characteristics

Community characteristics including population size, age structure, health status, marginalization, diversity, and utilization patterns can influence the need for care. To meet the needs of your community, you must understand who is in the community, what services they need, and why they need those services. You should explicitly consider equity and the need for culturally competent care.

Questions to consider to understand community characteristics:

- Who are the patients in this community/neighbourhood/sub-region?
- What services do they need (primary care and otherwise)?
- What are the unique features of this community?



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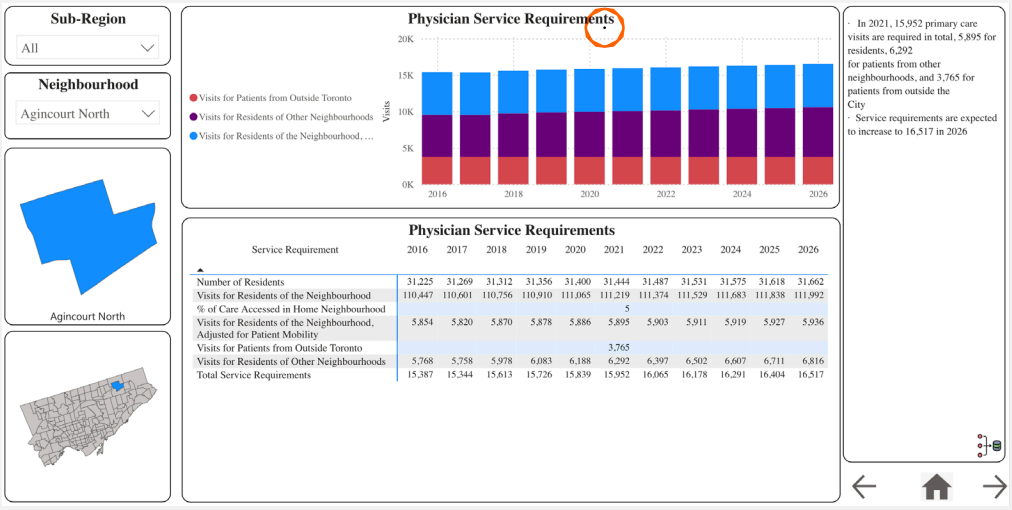
Step 2: Understand Service Requirements

Understanding health service requirements involves exploring the need of the population for healthcare services. Starting with a defined group of patients, we elaborate the services they need in order to derive benefit from healthcare. This quantifies both the kind of service – treatment, prevention, or supportive care – and the number of services required. As such, service requirement estimates can relate to a range of services, such as the number of visits to a primary care physician or nurse practitioner that are expected each year, the expected number of cancer screenings required, or the number of prenatal visits expected in a community. Service requirements should be measured in units that match service capacity.

In Toronto, we consider primary care service requirements by neighbourhood. Focusing on physician visits, and taking into account patient mobility, we estimate total service requirements, or the number of physician visits required for residents of a given neighbourhood, for residents from other neighbourhoods, and for patients from outside the city.

Questions to consider to understand service requirements:

- Are current patterns of care seeking being influenced by a shortage or concentration of service capacity within the community?
- Could residents be enabled to access more care closer to home if additional resources were available?
- What factors influence care-seeking patterns beyond availability of resources? For example, is patient mobility underpinned by a preference for culturally specific care, or for care in a specific language?



Service Requirement	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Number of Residents	31,225	31,269	31,312	31,356	31,400	31,444	31,487	31,531	31,575	31,618	31,662
Visits for Residents of the Neighbourhood	110,447	110,601	110,756	110,910	111,065	111,219	111,374	111,529	111,683	111,838	111,992
% of Care Accessed in Home Neighbourhood						5					
Visits for Residents of the Neighbourhood, Adjusted for Patient Mobility	5,854	5,820	5,870	5,878	5,886	5,895	5,903	5,911	5,919	5,927	5,936
Visits for Patients from Outside Toronto						3,765					
Visits for Residents of Other Neighbourhoods	5,768	5,758	5,978	6,083	6,188	6,292	6,397	6,502	6,607	6,711	6,816
Total Service Requirements	15,387	15,344	15,613	15,726	15,839	15,952	16,065	16,178	16,291	16,404	16,517

Engage: Service requirements can be estimated quantitatively or elaborated descriptively through a community engagement process. This is particularly important to capture unmet needs.

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Step 3: Understand Workforce Service Capacity

Understanding and characterizing workforce service capacity is necessary to be able to assess whether the needs of a community can be met. Workforce profiles should be multi-professional and should extend beyond headcounts, considering characteristics such as provider age, scope of practice, and practice patterns. The units of measurement depend on the service and the provider. For example, service capacity may be measured in visits (which makes sense for physicians and nurse practitioners), in hours (which makes sense for counselling and some other mental health services), or in FTE (which makes sense for some nursing services).

In Toronto, we quantify primary care service capacity in physician visits and identify service capacity at risk due to physician retirement using age-related retirement probabilities.

Questions to consider to understand workforce service capacity:

- Is the neighbourhood at risk of being underserved, even though at first glance it may look like there will be a surplus of capacity in the future?
- What proactive planning can be done to address these visits at risk?
- What other service capacity is available?

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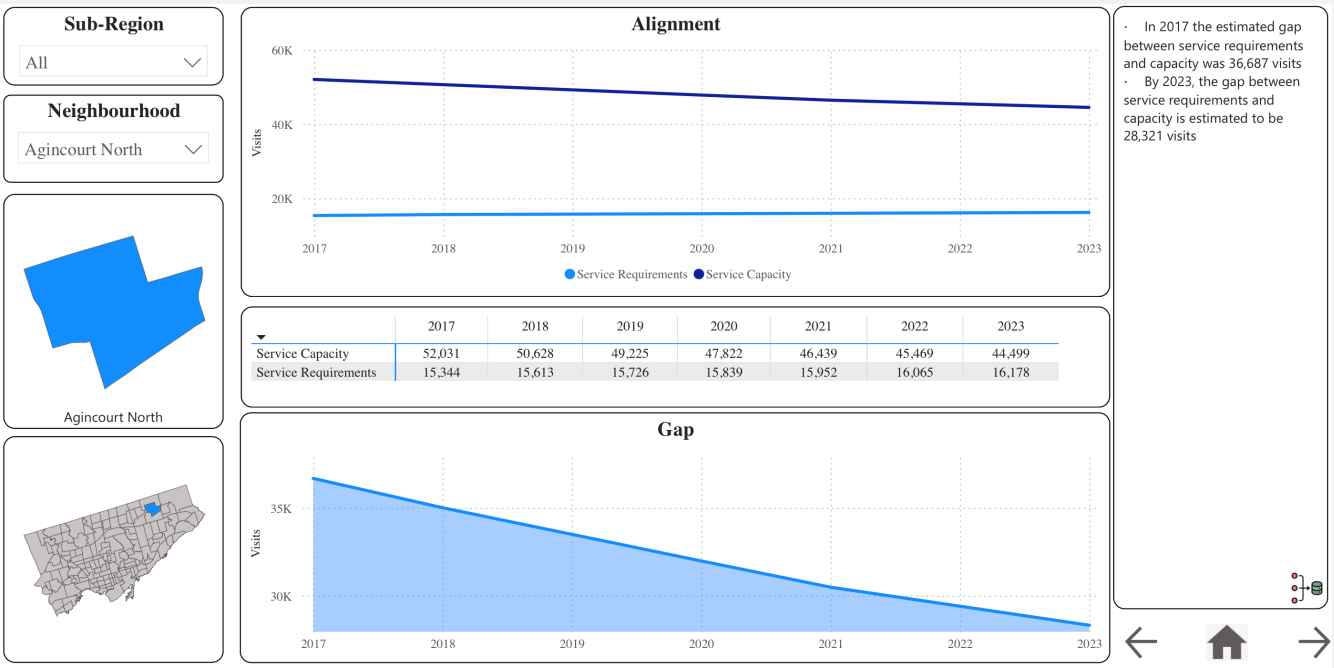
Step 4: Assess Alignment

Assessing alignment involves exploring how needs and capacity match up. A projected deficit or surplus in one neighbourhood may be related to the situation in another, so it is important to take a holistic view of the health system when examining alignment. Gaps may be related to population growth, physician retirement, to both of these, or to something else. Once true gaps in alignment are identified, options to shift the allocation of resources or mobilize additional resources can be explored.

Questions to consider to assess alignment:

- What does the gap show: a surplus or a deficit?
- How does the gap in one neighbourhood relate to the gap in surrounding neighbourhoods?
- How does the gap in visits translate into physician resources (number of physicians, FTEs)?
- Are there other workforce resources that could be mobilized to address the gap?



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Step 5: Explore the Factors at Play

A variety of factors can influence the need for services and the capacity of the workforce to deliver. In Toronto, important factors include patient mobility, population growth due to vertical development, and physician retirement. In other communities, other factors may be more important, such as remoteness or seasonality.

In this step, explore the factors that are relevant in your community. This can involve horizon scanning and mobilization of data to support your understanding further, and consideration of potential scenarios that are relevant to each factor.

Factors at Play in Toronto: Spatial Patterns of Utilization

In Toronto, we look deeply into spatial patterns because these patterns have an important impact on how we understand service requirements, service capacity, and alignment.

Spatial patterns refer to the distribution of primary care resources and utilization in a given area or neighbourhood. Spatial patterns that we have considered in Toronto include:

- Care-seeking: Where patients access primary primary care
- Overall neighbourhood-level resources: how many physicians work in the neighbourhood, locations of clinics, pharmacies and other independent health facilities, and transit
- For residents of a particular neighbourhood: how much care patients access in their home neighbourhoods (or close to home), and which neighbourhoods are care hubs (neighbourhoods where significant amounts of care are accessed by patients from other neighbourhoods)
- For patients who use services in a particular neighborhood irrespective of where they come from: whether the neighbourhood borders the edge of the city, how much care is provided to patients from outside Toronto

Questions we ask Toronto communities to consider:

- What spatial patterns are relevant in your community?
- How would you like to see spatial patterns represented?
- What explains observed spatial patterns?

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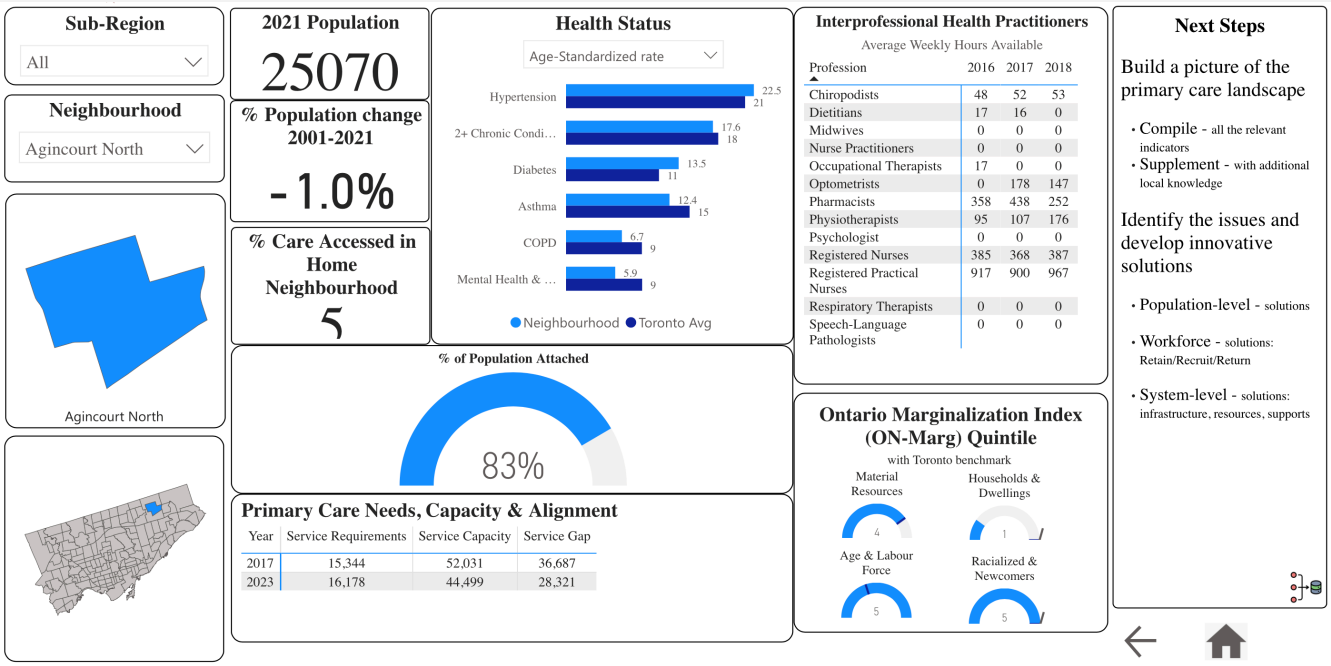
Step 6: Putting it All Together

In this final step we look back over the previous five steps and try and identify the biggest drivers of the patterns we have identified. These, in turn, guide our actions.

For example, a projected gap between service requirements and workforce capacity may be mostly due to strong population growth increasing the need for services. Or, the same absolute gap may be driven by decreasing workforce capacity due to an aging workforce. The most appropriate policy options in these situations may be similar or different.

In this step, we assemble links to resources that can be helpful.



Policy Analysis

Policy analysis asks: “What actions can we take?”. We define policy analysis as:

Using intelligence gleaned from horizon scanning, scenario generation and modelling to make evidence-informed decisions

The primary goal of policy analysis is to ‘future-proof’ the workforce by choosing, adapting, or creating policies and guidelines that accommodate a range of possible scenarios. Transparent, data-driven planning processes have credibility and are more likely to be accepted and adopted by interested partners and funders.

Tip: Policy analysis within the context of workforce planning is slightly different from business policy analysis.

Engage: Who makes decisions in your health system? Who is your workforce planning going to impact?

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In the policy analysis phase of planning, health system leaders can:

- Identify planning priorities
- Identify which communities are potentially at risk of being underserved and why
- Reorganize the way that care is delivered
- Identify levers for change
- Advocate for additional resources

With the results of horizon scanning, scenario generation, and workforce modelling in mind, consider the following questions:

- What is the issue?
- What are your goals or the objectives?
- What are the driving forces?
- What levers are available?
- What are the policy options? What actions can you take?
- What evidence supports each option/action?
- What are the resources involved?
- Are there risks, tradeoffs or potential unintended consequences

Policy analysis supports:

- Evidence-informed decision-making
- Optimized and equitable resource deployment
- Development, implementation, and evaluation of innovative solutions to local issues
- In the absence of direct policy levers, advocacy for resources and supports necessary to address health system issues can be undertaken

Policy Analysis Case Study: Primary Care Expansion in Thorncliffe Park

Issue: Thorncliffe Park is a high-needs area with many seniors and complex patients who are unattached to primary care

Driving Forces: Physician attrition combined with population needs is resulting in a growing need for primary care physicians in the area

Intervention: An innovative union of Community Health Centre (CHC) and Family Health Organization (FHO) models of care

Analysis: Using scenarios and modelling, an integrated interprofessional team that can care for an additional 2800 patients was proposed, along with a cost-benefit analysis and key performance indicators.

Closing

Health workforce planning is urgently required to address widespread health workforce challenges. Given that knowledge of and capacity for health workforce planning is limited, support for planning is needed, particularly at local and regional levels.

This How-To Playbook for Health Workforce Planning has been developed to build capacity for planning. The Playbook highlights leading practices, supplemented with tips and case study examples, and assembles curated resources to support planning. The Playbook is a resource to guide you as you plan for the future of your health workforce.

This Playbook can be used alongside other resources for health workforce planning and is a living document that will be updated regularly.

Your Feedback is Important to Us

Your feedback is important to us. We want to know how we can continue to improve our efforts to build capacity for workforce planning across Canada. Let us know if there are ways for us to improve this playbook or if you would like to collaborate with us.

Please fill out the Feedback Form

Resources

Ontario Community Health Profiles Partnership (OCHPP) Website: https://www.ontariohealthprofiles.ca/

Simkin S, Chamberland-Rowe C, Bourgeault IL. Key considerations in health workforce planning. In Research Handbook on Contemporary Human Resource Management for Health Care 2024 Feb 15 (pp. 181-199). Edward Elgar Publishing. https://doi.org/10.4337/9781802205718.00020

Simkin S, Chamberland-Rowe C, Damba C, Sava N, Lim T, Bourgeault IL. Implementing leading practices in regional-level primary care workforce planning: Lessons learned in Toronto. Healthcare Management Forum. 2023;36(1):15-20. https://doi.org/10.1177/08404704221117263

Bourgeault, I.L., Chamberland-Rowe, C. & Simkin, S. Co-developing an integrated primary care workforce planning approach at a regional level: overarching framework and guiding principles. Hum Resour Health 19, 87 (2021). https://doi.org/10.1186/s12960-021-00578-z

Chamberland-Rowe, C., Simkin, S. & Bourgeault, I.L. An integrated primary care workforce planning toolkit at the regional level (part 1): qualitative tools compiled for decision-makers in Toronto, Canada. Hum Resour Health 19, 85 (2021). https://doi.org/10.1186/s12960-021-00610-2

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Bourgeault, I.L. (Ed.), (2021) Introduction to the Health Workforce in Canada. Canadian Health Workforce Network.

Bourgeault, I.L., Simkin, S. & Chamberland-Rowe, C. Poor health workforce planning is costly, risky and inequitable. CMAJ 191 (42) E1147-E1148 (2019). https://doi.org/10.1503/cmaj.191241

Potential Sources of Data

If you have feedback on this table or would like to add to it with potential sources of data from your province or territory or from across Canada, please let us know using the Feedback Form.

Engage: Which data do you need for planning and how will you get access to these data?

Population Data- Data Elements	**Population Data- Geographic Unit(s)**	**Population Data- Data Source/Steward**
Census of Population	Variable pan-Canadian geographies	Statistics Canada
• Census Variables • Adult Health Indicators • Child and Youth Health Indicators • Emergency Department Care Visits Indicators • Hospital Related Conditions Indicators	• Neighbourhoods • Ontario Sub-Regions • Ontario Local Health Integration Networks • Ontario Health Regions • Ontario Health Team Attributed Population	Ontario Community Health Profiles Partnership (OCHPP)
• Demographics • Population Indicators • Families • Language • Income • Household Stats • Immigration • Housing • Diversity • Work	• City • Neighbourhood	Municipal data: • City of Toronto: • City of Kingston • City of Ottawa
• Health Status • Health Care Utilization • Health Determinants	Variable pan-Canadian geographies	Canadian Community Health Survey
Public Health Indicators	Ontario	Public Health Ontario
Primary Care Attachment	• Ontario • FSA • Ontario Health Team	INSPIRE-PHC
Population-level case-mix classification and predictive indicators	Variable population boundaries	CIHI Population Grouping Methodology

Workforce Data- Data Elements	Workforce Data- Geographic Unit(s)	Workforce Data- Data Source/Steward
26 Health Professions: • Demography • Geography • Education • Employment	Ontario	Health Professions Database (HPDB) Ontario Ministry of Health
Regulatory Colleges for Healthcare Professionals	Variable	
Physicians	Ontario	ICES Physician Database (IPDB)

Glossary

Health Workforce: The WHO defines “health workforce” as “all people engaged in actions whose primary intent is to enhance health”. This broad definition includes frontline clinical staff who work directly with patients, those who provide support to these staff, and those who manage the health workforce and health system.

Workforce Profiles: A collection of information about a defined health workforce. Comprehensive workforce profiles include headcounts and information about, demographics (including age, gender, ethnic or cultural identity), education and training, skills and competencies, language capability, and practice patterns.

Community: The WHO defines communities as “groups of people that may or may not be spatially connected, but who share common interests, concerns or identities. These communities could be local, national or international, with specific or broad interests”. Commonalities such as culture, language, health conditions, care needs, residence in a given neighbourhood or city, or membership in a given organization are examples of community characteristics that may be relevant to health workforce planning.

Health Regions: Statistics Canada defines “health regions” as "administrative areas defined by provincial ministries of health".

Primary Care: The WHO defines “primary care” as a model of care that supports first-contact, continuous, comprehensive and coordinated person-focused care.

Primary Care Attachment: Formal or informal patient access to the same individual primary care provider or group of providers.

Service Requirements: Services needed in order for patients to derive benefit from healthcare.

Engagement: An iterative and ongoing process of collaborating with knowledge users as active partners and co-producers.

Horizon scanning: A systematic exploration of the current state, possible future developments, driving forces, and issues that could influence workforce requirements and/or capacity over the defined planning period.

Scenario generation: The development and elaboration of a range of plausible futures.

Workforce modelling: The use of quantitative and qualitative data to represent current and future health system states.

Policy analysis: Using intelligence gleaned from horizon scanning, scenario generation and modelling to make evidence-informed decisions.

Capacity: The range and availability of health services in a given community, geography, or service area OR the amount of service a professional, program, or service area is able to provide.

Ontario Health Team (OHT): Groups of providers and organizations that are accountable for delivering a full and coordinated continuum of care to a defined population.

Our Team

Authors

Canadian Health Workforce Network

Sarah Simkin (MD, CCFP(FPA), MSc) is a family practice anaesthetist, health workforce researcher, and the Health Workforce Planning theme co-lead for the Canadian Health Workforce Network. She has been supporting primary care workforce planning activities in Toronto since 2017. She uses health administrative and other data to address a diverse range of health workforce issues and questions and has a particular interest in optimizing data to support health workforce decision-making.

Zeenat Ladak (PhD(c), MSc) is an evaluator, health services researcher, and implementation scientist. She is currently completing her PhD in health equity and health services and has been supporting the capacity building for workforce planning since 2023.

Ivy Bourgeault (PhD) is a Professor in the School of Sociological and Anthropological Studies at the University of Ottawa and the University Research Chair in Gender, Diversity and the Professions. She leads the Canadian Health Workforce Network and the Empowering Women Leaders in Health initiative. Dr. Bourgeault has garnered an international reputation for her research on the health workforce, particularly from a gender lens. She has been a consultant to various provincial Ministries of Health in Canada, to Health Canada, the pan American Health Organization (PAHO), the OECD and to the World Health Organization. She was inducted into the Canadian Academy of Health Sciences in September 2016 and received the 2016/17 University of Ottawa Award for Excellence in Research.

Ontario Health Toronto Health Analytics Team

Cynthia Damba (MBChB, MHSc), is the Director of the Health Analytics Team at Ontario Health Toronto with experience in population health surveillance, health care system planning, performance measurement and evaluation, health equity, quality, and health workforce planning. She has experience in primary care health workforce planning and has worked with the Canadian Health Workforce Network team to develop and implement the fit-for purpose Toronto Region Primary Care Workforce Planning Toolkit since 2017.

Shelly-Ann Hall (PhD) is a Manager, Health Analytics at Ontario Health Toronto, with over 15 years' experience in the Health Sector in Ontario. She has a background in Epidemiology and Public Health and has worked in a number of areas including, primary care and health system planning and monitoring. Shelly-Ann has been supporting the Toronto Region Primary Care Workforce Planning Project since 2023.

Joy Ikeh (MPH) is a public health specialist who specializes in health analysis. She is adept at utilizing data insights to enhance healthcare delivery and optimize patient outcomes. Since 2022, she has supported the development of dashboards and capacity building for Toronto's primary care workforce planning initiatives.

Ontario Health Toronto Health System Strategy, Planning and Implementation Team

Rachel Frohlich (MA, PMP) is a Lead with the Health System Strategy, Planning, Design & Implementation team at Ontario Health Toronto, supporting the development, implementation, and acceleration of Toronto’s Ontario Health Teams. She has direct experience working with the OHT context, including knowledge of effective engagement strategies with all levels of OHT partners. Her current focus is enhancing Primary Care access and attachment in Toronto Region.

Ruth Trainor (MSW, RSW) is a Specialist with the Health System Strategy, Planning, Design & Implementation team at Ontario Health Toronto, supporting the development, implementation, and acceleration of Toronto's Ontario Health Teams. She has experience building partnerships through engagement with OHT leads and partners, with a focus on health equity and population health priorities in relation to Primary Care access and attachment.

Canadian Health Workforce Network

Our Vision: A strong and sustainable health workforce supported through better planning, policy and management.

Our Mission: Generating, sharing and facilitating the timely use of health workforce knowledge to inform decision-making.

Our Values: Knowledge mobilization, Equity, Accessibility, Collaboration, Innovation

Our Strategic Priorities:

- Producing and mobilising valuable information regarding Canada's health workforce.
- Facilitating the transparent and open sharing of data and evidence to promote equity, diversity, inclusion and social justice in the health workforce.
- Leveraging and accelerating leading practices for improved care, health, cost and meaning in work.
- Developing and sustaining collaborative partnerships with regional and national organizations for enhanced knowledge and advocacy.
- Strengthening Canada's health workforce through cultivating a culture of innovation.

Ontario Health

Ontario Health is an agency created by the Government of Ontario to connect, coordinate and modernize our province's health care system. We work with partners, providers and patients to make the health system more efficient so everyone in Ontario has an opportunity for better health and wellbeing.

We oversee health care planning and delivery across the province to build a person-centred health care system.

Ontario Health Toronto is one of six regional teams. Ontario Health regions work with local community and health care partners to improve patient experience, improve population health outcomes, achieve better value, and improve front-line provider experience. They do this through implementing health system changes, leading the health systems within each region, funding health care providers, and monitoring health care performance.