2025 International Health Workforce Modelling Innovation Lab: Summary Report

June 2025

Health Workforce Canada | Effectif de la santé Canada

About this Report

Health Workforce Canada, in partnership with the Australian Government's Department of Health, Disability and Ageing and the Canadian Institute for Health Information, convened over 100 health workforce planning leaders (e.g., modellers, forecasters, policy and decision-makers) from government and government supporting organizations across four continents in June 2025 for the inaugural Virtual Health Workforce Innovation Lab. This global event brought together participants to explore bold, data-driven approaches to workforce modelling and forecasting, and to share practical strategies for translating this evidence into decision making to build a resilient health workforce.

This report captures the key insights and discussions from the four-session Lab, highlighting successful international models, shared challenges, and opportunities for innovation in health workforce planning and policy. During each session, participants were asked to reflect on and discuss shared challenges in need of timely solutions. The Lab underscored the importance of international collaboration, knowledge-sharing, as well as action-oriented solutions to address workforce needs now and in the future.

We extend our sincere gratitude to all presenters and participants for their leadership, vision and candid discussions. *Please see the Acknowledgements* section *at the end of this report.* Health Workforce Canada and our partners remain committed to advancing these insights and fostering global partnerships to strengthen health workforce planning across the country and beyond.

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Overview

In June 2025, **Health Workforce Canada**, the **Australian Government's Department of Health, Disability and Ageing**, and the **Canadian Institute for Health Information** convened global health workforce leaders from government and government supporting organizations for the inaugural edition of the **International Health Workforce Modelling Innovation Lab**. This vibrant global community fostered new connections, collaborations, and collective action to address the urgent challenges facing health workforce planning around the world.

Over 100 participants joined from across four continents, uniting collaborators from presenting countries Australia, Norway, Canada, New Zealand, and the Netherlands, as well as colleagues from the United Kingdom, Sweden, the United States of America, Peru, the OECD, the WHO and more. Many of the participating countries contributed to a primer document that showcased the jurisdictions' health workforce planning structure, ongoing modelling activities and how modelling evidence is used to inform policy, see **the primer on this page for more information.**

Over four dynamic sessions, the Lab shone a spotlight on bold, data-driven approaches to workforce modelling and forecasting, showcasing innovative and practical tools, as well as real-world strategies and policy decisions to drive smarter, more sustainable solutions. By bridging divides, aligning resources, and co-creating impactful solutions, the Lab inspired collective action to build and support a strong, healthy workforce—ensuring better health outcomes for all through evidence-informed, action-oriented collaboration.

Greater collaboration and innovation at all levels is the way we move forward, as stated by Jocelyn (Jo) Voisin, Assistant Deputy Minister at Health Canada: "to build a resilient and equitable health workforce for the future, we must move beyond traditional approaches—embracing data-driven insights, fostering collaboration across jurisdictions, and supporting innovation at every level."

The Lab highlighted the importance of transparent, data-driven models, cross-sector collaboration, and the need to move beyond traditional modelling practices to account for the health systems evolution towards team-based care, task-shifting, and accelerated technical innovation (i.e., AI tools). A powerful sense of shared purpose emerged, with participants recognizing that we all have common challenges—such as workforce maldistribution, data limitations, and the translation of evidence derived from complex methodologies into actionable policy. The Lab underscored the value of ongoing international collaboration, investment in modelling literacy, and the critical role of storytelling in bridging the gap between data and decision-making.

Professor Michael Kidd, Australia's Principal Medical Advisor, reinforced these themes "We have a moral imperative to train, support, and retain the professionals our communities need—while reimagining models of care that are multidisciplinary, inclusive, and future-focused." He called for international collaboration, stating that "by working together, sharing knowledge, and championing innovation, we can ensure that everyone—no matter who they are or where they live—has access to the care they deserve."

This first international innovation lab of its kind inspired a collective commitment to working in ways that builds a resilient, adaptable health workforce that is equipped to deliver equitable and high-quality care for diverse populations now and into the future.

Highlights and Emergent Themes

The Lab spanned four impactful sessions over two weeks, each enriching our collective understanding and revealing shared pathways forward.

Session 1: Australia

Health Workforce Demand and Micro Simulation Models

The team from the Australian Government Department of Health, Disability and Ageing presented a comprehensive approach to health workforce demand and micro simulation modelling reinforcing the message of Professor Michael Kidd, who described how Australia is taking a deliberate, evidence-based approach to ensure its health workforce is equipped to meet both current and future demands. He explained that advanced modelling techniques like microsimulation are central to this strategy, enabling planners to simulate complex policy scenarios and assess their workforce implications. “These are not just technical resources,” he said, “they’re essential instruments for shaping policy, for guiding investment and for ensuring our health workforce planning is both responsive and forward-looking.”

Maureen McCarty (*Senior Director, Health Workforce Data Intelligence Unit*) outlined how sophisticated modelling underpins a responsive and resilient health workforce, emphasizing the integration of diverse data sources and the importance of evidence-based planning. David Mortimer (*Modelling Lead, Health Workforce Data Intelligence Unit*) detailed the technical aspects of the modelling, highlighting the use of micro simulation for high granularity, robust policy testing, and the ability to combine population projections, chronic health condition prevalence, and a wide range of activity data (including hospital admitted patient care, emergency department, outpatient care, community mental health, and Medicare Benefits Schedule records). Natalie Bekis (*Assistant Secretary, Workforce Planning and Strategies Branch*) discussed how these data-driven insights are translated into policy, focusing on the broader implications for workforce planning and the importance of aligning modelling outputs with actionable strategies.

The team explained that demand modelling is underpinned by population projections and health condition prevalence, with activity data converted into FTE requirements—including innovative components to estimate unmet demand, such as health condition prevalence modelling and national mental health service planning framework for psychiatry. Supply projections are based on the National Health Workforce Dataset and medical college training pipeline data, modelling key factors like retention, FTEs, and geographic transitions. Projections have revealed a continuing decline in average FTE hours worked by health professionals. The presenters also addressed the complex policy context: while the workforce is often described as being in "crisis," the solution is not simply to train more professionals. Instead, policy must address maldistribution, cultural safety, workplace culture, well-being, and the development of innovative care models, such as multidisciplinary teams and virtual supervision. The international workforce was highlighted as a crucial bridging strategy, especially in rural and remote areas where distribution challenges are most acute.

Discussion: What lessons can you apply to your own context?

Breakout discussions revealed that **many workforce challenges are shared across jurisdictions**. Participants expressed a strong desire for **greater connection and learning between international modelling teams**.

Key lessons included the importance of active engagement with decision-makers to avoid "black box" models and ensure outputs are trusted and actionable. Flexibility and less rules-based approaches in modelling were encouraged, as was expanding modelling to include disciplines beyond physicians.

Participants also highlighted the need to address declining FTE productivity and to **optimize data flows across federal, provincial/territorial, and employer levels**.

Discussion: How do we move evidence into action?

Moving evidence into action requires:

- Engaging stakeholders early and throughout the modelling process and collaborating at all levels.
- Data transparency and accessibility to build trust.
- Narrative building and clear communication by framing model outputs in clear ways that are meaningful and actionable for policymakers, using compelling stories that link data to real-world population health impact.
- Maintaining a "golden thread" that connects data, dialogue, and decisions, ensuring that modelling informs tangible policy and practice. That is, upholding methodological rigor while also being adaptable.
- Embracing an action-oriented culture around planning and iteration—"just start" and continuously improve models over time rather than waiting for the perfect conditions (i.e., data, tools, etc.) to be in place.

The Australian experience reinforced the notion that increasing the supply of health professionals alone will not solve workforce issues, highlighting the complexity of factors such as productivity, sub-specialization, and effective distribution.

Bridging the gap between technical modelling and actionable policy remains a central consideration, requiring sophisticated models that anticipate demand and support strategic responses, particularly for primary care and rural/remote access. Persistent challenges include workforce maldistribution, declining average working hours, data interoperability, and the existence of multiple models using different data assets.

The session reinforced the importance of collaboration, transparency, flexibility, and continuous learning, encouraging action-oriented planning and confidence-building steps to drive ongoing improvement in health workforce planning.

One thing I learned from Session 1: Australia

Session 2: Norway

Norwegian Health Labour Force Projections: Context, Modelling, and Policy Impact

Norway's approach to national health workforce projections were the spotlight of the second session. Christin Marsh Ormhaug (*Senior Advisor, Norwegian Directorate of Health*) highlighted Norway's national policy goal to provide equal-value healthcare across the country's highly decentralized population, accounting for: challenges posed by an ageing population, especially in rural areas, and a healthcare system with areas of responsibilities divided across national, regional, and municipal levels. While regional health authorities and hospitals use their own detailed models, the national health workforce planning model is intentionally kept relatively simple and easy to understand. This simplicity allows those providing advice to policymakers to have greater confidence in the model and avoid "black box" outputs. Christin also highlighted the recent independent Health Workforce Commission's report, in which they projected significant shortage of healthcare personnel by 2040 if current service delivery models continue was brought to the attention of a much wider audience. This sparked significant public debate, and one of the Ministry of Health and Care's responses is to require that all new policy measures within their area include an assessment of workforce impacts. The government's response is now focused on improving working conditions, appropriate task sharing, efficient organization, and stable access to personnel, recognizing that simply expanding the workforce is no longer sustainable.

Jia Zhiyang (*Senior Researcher, Statistics Norway*) then spoke to the technical aspects of their national projection model, HelseMod, which has been in use since the mid-1990s. Aiming for transparency while leveraging extensive register data, HelseMod utilizes a stock-and-flow approach for supply projections, accounting for authorized professionals, their likelihood of working in the health sector, and their labour supply computed in FTEs. Demand is estimated using a utilization-based model across 14 service types, considering population projections, service contact probabilities, and per-patient healthcare needs also computed in FTEs. A gap analysis independently projects supply and demand, acknowledging limitations such as market adjustments and skill mixing.

Policy discussions revealed Norway's shift from simply increasing personnel to focusing on improving the working environment, promoting appropriate task-sharing, and ensuring stable access through recruitment and retention. A significant policy outcome is the new requirement to assess health workforce consequences for all ministerial measures.

Discussion: When trying to land on appropriate level of complexity with regards to your health workforce models…

Group Discussion: What are some of the challenges attendees have identified in their own jurisdictions?

Challenges stated by participants included the insatiable demand for more detail and complexity in models, difficulties with FTE estimation (especially breaking down FTE by sector or type of care), data quality and interoperability, lack of centralization, and the need to manage stakeholder expectations. Participants also noted the challenge of balancing model complexity with usability and the limitations of FTE-based approaches in capturing skill mix and evolving care models

Group Discussion: What are some of the solutions attendees have identified in their own jurisdictions?

Solutions proposed included enhancing modelling literacy, keeping models simple, actively engaging senior executives to secure buy-in, improving communication strategies, standardizing protocols, fostering cross-functional collaboration, and ensuring clear roles for organizations involved in modelling. The concept of demand being "infinite" and swelling to meet supply was a recurring point. It was also highlighted that national-level direction coupled with strong principles can enable solutions at more regional and local levels. Furthermore, the importance of systematic data collection and continuous improvement was reiterated, along with the willingness to embrace imperfect models and learn through iterative progress,

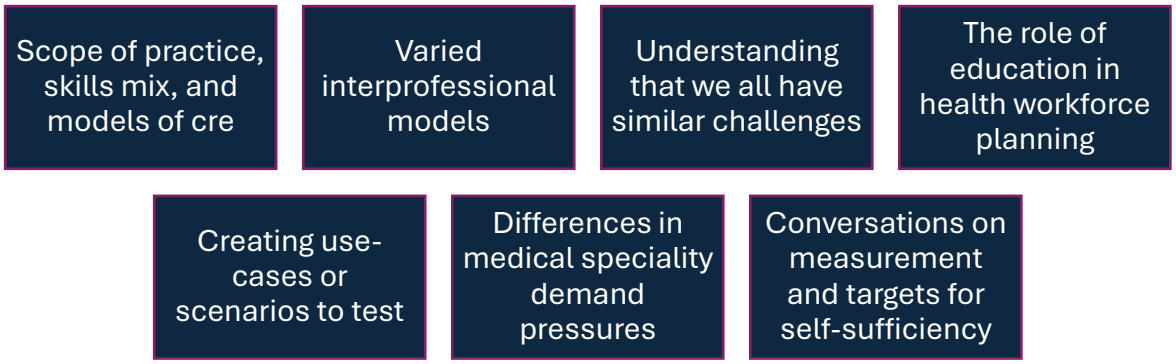
using the data already available more effectively and proactively translating complex modelling outputs for policymakers and the public.

Discussion: What applicability would the Norwegian approach have, if any to your own context? What would be benefits and challenges?

There was strong interest in how elements of the Norwegian approach—such as scenario planning, transparent data use, and role clarity—could be adapted to other contexts, while recognizing the need to tailor solutions to local governance and data realities.

The discussion deepened to explore how countries can collaboratively work towards common solutions that are adaptable to diverse national, state/provincial/territorial, and local contexts. It also posed questions on how to effectively leverage collective knowledge and build skills, and particularly, how to support modelling literacy and knowledge translation to bridge the gap between technical models and policymaking. The dialogue extended to learning about different models of care, interprofessional teams, and scopes of practice beyond just FTE counts.

To close, participants shared “one thing” they wanted to explore further following this session:



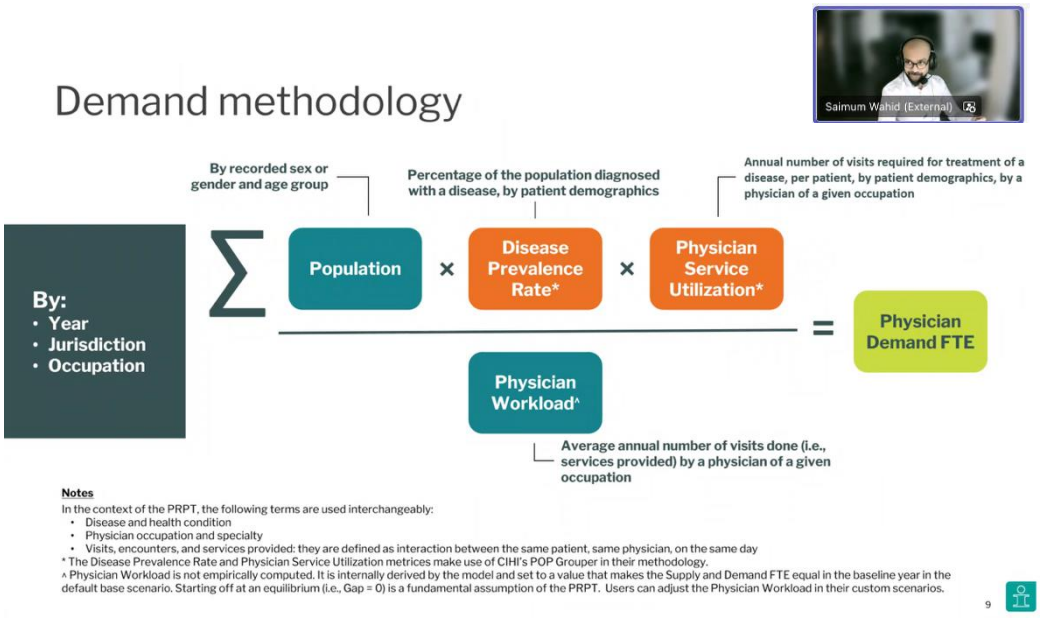
The Norwegian experience reinforces that increasing the supply of health professionals alone will not solve workforce challenges. Productivity, skill mix, and effective distribution are equally critical. National-level projections have been invaluable for starting necessary debates, prioritizing education and recruitment, and setting realistic expectations, even as gaps remain. The session highlighted and reiterated the need to bridge the gap between technical modelling and actionable policy.

Session 3: Canada and New Zealand

Introduction to the POP Grouper and Its Integration in CIHI's Physician Resource Planning Tool (Demand)

Canada's health system is highly decentralized, with ten provinces and three territories holding primary responsibility for health care delivery and administration. The federal government provides funding, cares for specific populations (such as military personnel, veterans, and Indigenous communities), and supports pan-Canadian standards development, data advancement and reporting through independent organizations like the Canadian Institute for Health Information (CIHI). Yannick Fortin (*Senior Leader for Modelling and Forecasting at Health Workforce Canada)* outlined how health workforce modelling in Canada is not centralized but occurs through a patchwork of federal, provincial/territorial, and academic initiatives, with CIHI playing a key role in collecting and centralizing data and supporting pan-Canadian tools for supply and demand planning for physicians. As stated by Health Canada ADM Jo Voisin in the first session**, innovation, adaptability, and a pan-Canadian approach is critical to address current and future workforce needs, including supporting internationally educated health professionals and advancing team-based care**.

Building on this, Natalie Damiano (*Director, Health Workforce Information*) and Saimum Wahid *(Program Lead, Health Workforce Information)* from the Canadian Institute for Health Information (CIHI) introduced the **Physician Resource Planning Tool (PRPT) and** its integration with the Population Grouper (Pop Grouper). The PRPT is a **scenario-based, user-adjustable model forecasting physician supply and demand** for 31 specialties over 20 years across all provinces and territories, supporting partners in planning for the right mix and quantity of physicians. The **demand component is an epidemiology-based multiplicative model leveraging CIHI's Pop Grouper, which integrates diverse clinical and cost data** (hospital, facility-based long-term care, home care, physician billing claims) to profile individuals and inform disease prevalence and physician service utilization in the PRPT. This enables planners to model the impact of changing population health needs, disease prevalence, and service use, and to simulate the effects of different policy scenarios—such as increasing access for underserved groups or adjusting physician workloads. The tool's user-adjustable nature allows for custom "what-if" scenario modelling, supporting policy impact analysis. While the model's flexibility and granularity were highlighted as key strengths, the team also acknowledged ongoing challenges with fragmented data and the need for continued investment in data integration and modernization.



Overview of CIHI demand methodology leveraging the Pop Grouper as presented by Saimum Wahid.

An Approach to Quantify Unmet Need

Dr. Emmanuel Jo from Health New Zealand then presented an emerging innovative approach to quantifying unmet need in primary medical care. Moving beyond using traditional forecasting – a **system dynamic model that tracks individual general practitioners** by age, entry, re-entry, and exit patterns to project future workforce numbers and identify minimum training needs – they have moved beyond traditional forecasting to estimate **unmet need in primary care by using non-ACC (non-accidental) Emergency Department (ED) admissions as a proxy**. By mapping ED admissions against GP clinic locations, deprivation indices, and population characteristics, the team identified areas where access to primary care is likely insufficient—particularly in regions with high deprivation and clinic closures. Dr. Jo explained the methodology for setting benchmarks based on the best-performing clinics - considering patient profiles, including age, gender, ethnicity, deprivation, and distance to care - and then quantifying "excess" ED admissions above these benchmarks as a measure of unmet need. This approach revealed significant regional and demographic disparities and raised further questions about how many additional GPs or nurse practitioners would be needed to close these gaps. Dr. Jo emphasized that each layer of analysis generates new questions, underscoring the complexity of translating these findings into actionable workforce planning.

Discussion: What are the principal challenges in estimating demand?

When initially discussion estimating demand, participants identified a wide range of challenges, including:

- Lack of access to high-quality, granular, and comparable data across jurisdictions.
- Difficulty defining and measuring unmet need, especially for non-physician roles and team-based care.
- Fragmented data systems, missing clinical data, and limited insight into service utilization.
- The challenge of accounting for demographic changes, evolving care delivery models, and patient expectations.
- Political imperatives, unstable policy environments, and the need to find suitable predictors for modelling.
- The persistent issue that population health needs and demand are not the same, and that demand can be "infinite" or expand to meet available supply

Discussion: How do you measure demand in your country?

Breakout discussions revealed that approaches to measuring demand vary widely, but most countries rely on a combination of service utilization data, population health indicators, and proxies such as vacancy rates or ED admissions. Some participants noted the use of quality indicators and annual planning processes, while others described reliance on supply analysis as a stand-in for demand. There was broad recognition that most models still struggle to capture and measure team-based care, skill mix, and interprofessional roles. These conversations also surfaced the challenges of integrating ethnicity and income data, and the need to address the persistent gap between population health needs and actual demand, tying into the larger conversation around self-sufficiency measures for healthcare workers. Participants highlighted the importance of using available data more effectively, engaging with local and regional contexts, and adapting national-level models to operational realities.

Discussion: How does the demand relate to the needs of government decision-making?

Participants agreed that translating demand estimates into policy and action remains a core challenge and reiterated the need to support modelling literacy and knowledge translation. While demand modelling is technically complex, the greater difficulty lies in the "so what?"—turning model outputs into actionable decisions for government. Policy shifts, budget constraints, and the need for national direction with local adaptation were all cited as factors that shape how demand estimates are used. There was consensus that clear communication, scenario planning, and a focus on actionable insights are essential for ensuring that modelling informs real-world decision-making.

What surprised you or challenged your thinking for Session 3: Canada/New Zealand?

This session highlighted the growing sophistication of demand modelling in both Canada and New Zealand, as well as the persistent challenges of data integration, defining unmet need, and translating evidence into policy. Both approaches underscored the importance of flexibility, transparency, and ongoing iteration—embracing the reality that each new insight often raises further questions. The discussions reinforced the need for continued collaboration, investment in data infrastructure, and a willingness to adapt models to evolving care delivery models (ex. team-based care) and policy needs. The session also surfaced the ongoing debate about self-sufficiency measures for healthcare workers and the importance of supporting modelling literacy and effective knowledge translation for government and system leaders.

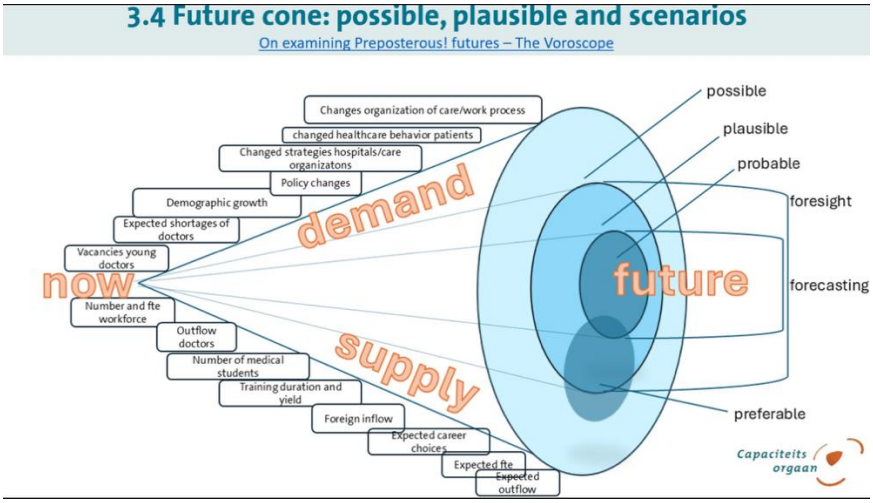
Session 4: Netherlands

Health Workforce Modelling and Translating Modelling Evidence into Decision-Making

The Netherlands provided an in-depth look at the Dutch approach to health workforce modelling and the complexities of translating evidence into policy.

Dr. Ronald Batenburg (*Program Leader at the Netherlands Institute for Health Services Research (NIVEL)*) opened with an overview of the Dutch healthcare system, highlighting its high per capita health spending, a strong emphasis on long-term and primary care, and a growing recognition that the **system is reaching limits in terms of quality, accessibility, and cost**. He explained that the Netherlands applies a **participatory, demand-based workforce planning model** that is updated every three years. This model combines a stock-and-flow projection of supply (tracking inflows, outflows, and retention) with expert- and data-informed estimates of required capacity, including scenario analysis for trends like task shifting and efficiency gains. The model is used to calculate optimal yearly training inflow for various health professions (medical, dental, and specialized nursing professions) and is supported by active involvement of stakeholders—including health professionals, training institutes, and insurers—to ensure reliable data and consensus on both inputs and outputs. Dr. Batenburg emphasized that while the model is robust, it reveals a persistent and growing gap between projected demand and available supply, particularly in primary care and mental health sectors.

Dr. Cisca Joldersma (*Director of the Advisory Committee on Health Workforce Planning (ACHWP)*) focused on **translating modelling evidence into decision-making and bridging the gap between research and actionable policy**. Drawing on her experience as both a policy scientist and a former member of Parliament, she discussed the challenges of bridging the gap between research and policy in a context shaped by political values, stakeholder interests, and system complexity. Dr. Joldersma highlighted that models, while essential, cannot capture every aspect of reality—especially behavioural dynamics and stakeholder preferences. She described how the ACHWP uses a combination of probable, plausible, and possible scenarios to inform its advice, always considering the feasibility of recommendations in light of financial constraints, stakeholder interests, and emerging trends like substitution between professions. She also highlighted the **distinction between disagreements (fact-based) and controversies (frame-based) in policy discussions**, emphasizing that policymakers often interpret facts through their own frames of reference. The approach advocates for **integrating "foresight" alongside traditional "forecasting," moving towards participatory policy analysis** that accounts for stakeholder behaviour and uncertainties, and exploring not just probable but also plausible and possible future scenarios. The challenge lies in communicating feasibility scenarios, acknowledging that supply cannot always adjust to demand, and integrating financial restrictions and emerging trends like substitution into policy advice. The importance of **clear communication, transparency about model assumptions, and ongoing dialogue between researchers and policymakers is paramount** to ensure that modelling supports practical, implementable solutions.



Future Cone - as presented by Cisca Joldersma

Discussion: What factors are influential in decision-making, beyond modelling estimates?

Participants widely acknowledged that decision-making is shaped by a complex mix of contextual, political, and human factors beyond modelling estimates, including:

- **Finances and budgets:** Fiscal realities set hard limits, requiring trade-offs regardless of model recommendations.
- **Political will and values:** Policy direction and consensus often determine which modelling insights are acted upon.
- **Community expectations and system complexity:** The structure of health systems, digital transformation, and the ability to tell a compelling story all add layers of complexity.
- **Clear communication of trade-offs**: Success depends on spelling out trade-offs in simple, straightforward terms, recognizing that demand is often infinite and supply is not.
- **Direct connection between data experts and decision-makers**: Effective implementation requires connecting data experts ("data nerds") directly with policymakers and frontline professionals, ensuring models are built upon a deep understanding of policy frameworks and real-world realities.
- **Acknowledging human agency**: Participants highlighted the importance of acknowledging human agency-choices of practitioners and patients-and involving younger generations/future health workers in planning to align with evolving expectations.
- **Integration of education sector**: Integrating the education sector into health workforce planning is critical.
- **Willingness to try new approaches**: There was an emphasis on being willing to try new approaches, learning from iterative progress rather than striving for "perfect" models, and understanding that "more money is not the answer, we have to innovate."

Discussion: Can we identify some general principles to use modelling estimates for governmental action/decision-making, in the presence of scarcity of finance and shortage of available care professions?

The central query for this session was whether general principles could be identified to effectively use modelling estimates for governmental action and decision-making, particularly in the face of financial scarcity and professional shortages. It challenged the tendency to treat factors beyond mere modelling estimates as peripheral, emphasizing that core factors beyond modelling estimates are influential in decision-making, such as politics, budgets, and stakeholder influence.

The Netherlands' experience underscores that while robust workforce models are essential for planning, they are only one part of a much larger system of decision-making shaped by politics, budgets, stakeholder interests, and evolving models of care. Across the Lab, participants recognized that challenges are remarkably similar worldwide—fiscal constraints, system complexity, and the need for innovation are universal themes. The session reinforced the importance of collaboration, clear communication, and humility in modelling, with an emphasis on shared learning and continuous adaptation.

Top Things Learnt Throughout the Innovation Lab

When asked what they learned throughout the four engaging Innovation Lab sessions – including presentations and discussions, participants highlighted:

Recommendations & Pathways for Collective Action

The 2025 Virtual Health Workforce International Innovation Lab demonstrated that while health workforce challenges are remarkably consistent around the world, there are significant opportunities for improvements to create great impacts. Drawing on the insights and experiences shared across four dynamic sessions; the following pathways emerged to guide collective action:

How might we work collaboratively towards common solutions that can be adapted to our national, regional, and local contexts?

- Sustain international dialogue by creating active and ongoing opportunities for peer learning, sharing tools, models, and lessons learned to build collective resilience.
- Support open spaces for exchange (e.g., a LinkedIn community page named the Health Workforce International Innovation Lab was created to offer an avenue for continued dialogue between participants and the greater Health Workforce modelling, forecasting, and planning community).
- Build strong, cross-functional networks among modellers, policymakers, educators, and frontline health workers to break down silos and accelerate innovation.
- Actively share wisdom and experience, creating open spaces for collaboration.

How might we leverage our collective knowledge, tools, and capabilities to advance data and modelling practices?

- Strive for transparency and accessibility (e.g., open-source) principles around data, models, and results, develop simple models first and iterate overtime to avoid creating complex “black boxes,” making evidence widely usable.
- Invest in robust data infrastructure and embrace iterative improvement, starting with the best available data and refining over time.
- Dive deeper into methodology, advancing modelling and operationalization of concepts around team-based care, interprofessional roles, and evolving service delivery models.
- Be upfront about modelling limitations and make continuous improvement a shared responsibility.

How might we support modelling literacy and effective knowledge translation for action?

- Engage and empower stakeholders—including policymakers, system leaders, and frontline professionals—early and sustained throughout the process from modelling to monitoring.
- Integrate "foresight" alongside traditional "forecasting".
- Translate technical outputs into compelling stories that connect data, dialogue, and decisions, focusing on real-world impact and population needs.
- Support modelling literacy for policymakers, practitioners, and the public, making evidence accessible and actionable.

How might we learn about and implement innovative models of care, interprofessional teams, and new scopes of practice?

- Clearly articulate trade-offs and simplify complex scenarios so decision-makers can act with confidence.
- Recognize that demand will nearly always outpace supply—plan for feasibility, explore alternative futures, and support innovation in care models.
- Integrate education sector perspectives and foster collaboration across the training and service continuum to ensure workforce strategies are sustainable.
- Champion a culture of learning, adaptation, and continuous improvement, accepting that more funding or continuous increases in the supply of health care providers alone are not the answers to all our challenges. Leveraging advances in digital and artificial intelligence for instance, along with new ways to deliver care, can complement our health workforce to meet the evolving needs of the population

How might we keep equity and core system values at the centre of health workforce planning?

- Ensure all strategies deliver on the values and needs of diverse communities, keeping equity and population health at the forefront.
- Acknowledge and support human agency—engage younger generations, and equity-deserving populations, support practitioner well-being, and design systems that are responsive to evolving expectations.

Acknowledgements

This summary report, capturing the insights from the 2025 Virtual Health Workforce Innovation Lab, would not have been possible without the invaluable contributions of our esteemed presenters:

Opening Remarks
- **Dr. Deborah Cohen**, COO, Health Workforce Canada.
- **Jocelyne Voisin**, Senior Assistant Deputy Minister of Health, Health Canada.
- **Professor Michael Kidd AO**, Chief Medical Officer for the Australian Government's Department of Health, Disability and Ageing.

Australia
- **Maureen McCarty**, Senior Director, Health Workforce Data Intelligence Unit, Australian Government Department of Health, Disability and Ageing, for outlining how models help shape a responsive and resilient health workforce.
- **David Mortimer**, Modelling Lead, Health Workforce Data Intelligence Unit, Australian Government Department of Health, Disability and Ageing, for detailing the modelling techniques, including the health workforce demand and micro simulation models.
- **Natalie Bekis**, Assistant Secretary, Workforce Planning and Strategies Branch, Australian Government Department of Health, Disability and Ageing, for discussing the translation of data into policy settings and broader implications.

Norway
- **Dr. Christin Marsh Ormhaug**, Senior Advisor, Norwegian Directorate of Health, for introducing the Norwegian healthcare system and its context.
- **Dr. Jia Zhiyang**, Senior Researcher, Research Department, Statistics Norway, for providing details on the projections of supply and demand for health professionals using the Norwegian national level model (health mode).

Canada
- **Dr. Yannick Fortin**, Senior Lead, Modelling and Forecasting, Health Workforce Canada, for providing context on the Canadian healthcare system.
- **Natalie Damiano**, Director, Health Workforce Information, Canadian Institute of Health Information (CIHI), for discussing CIHI's mandate and initiatives in health workforce data.
- **Saimum Wahid**, Program Lead, Health Workforce Information, Canadian Institute of Health Information (CIHI), for presenting on the Physician Resource Planning Tool (PRPT) and the integration of CIHI's Population (Pop) Grouper into its demand model.

New Zealand
- **Dr. Emmanuel Jo**, Manager of Analytics and Forecasting, Health New Zealand, for discussing attempts to quantify unmet need in primary medical care (in relation to ED admissions).

Netherlands
- **Dr. Ronald Batenburg**, Program Leader, Netherlands Institute for Health Services Research (NIVEL), for giving an overview of the Dutch healthcare system and its health workforce planning system.
- **Dr. Cisca Joldersma**, Director, Advisory Committee on Health Workforce Planning in the Netherlands, for discussing translating modelling evidence into decision-making.

Closing Reflections
- **Deb Gordon**, CEO, Health Workforce Canada.

A special thank you to the entire **Health Workforce Canada team** for their exceptional work in organizing this international innovation lab. In particular, we recognize **Dr. Deborah Cohen, Dr. Yannick Fortin**, **Danika Goveas**, and **Katharine Proulx** for their hard work in delivering this event. We also extend our gratitude to **Meghan Perrin** of 4C Impact for her expert facilitation throughout the lab and in the writing of this report. Their collective commitment has been instrumental in fostering international learning and collaboration to address health workforce challenges.

Finally, thank you to all participants who shared their expertise and fostered a spirit of collaboration throughout the series. Without you, this series would not have been possible.