Pilot Site Report: Province of Nova Scotia

Development of a Needs-Based Planning Model for Mental Health and Substance Use Services and Supports across Canada

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KEY FINDINGS

Purpose

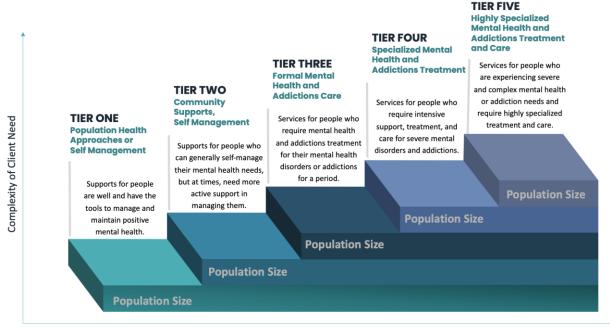
This section contains a summary of findings from the 2022 Nova Scotia needs-based planning pilot and is presented in five parts:

- 1. Background
- 2. Current Context
- 3. Learnings
- 4. Conclusions
- 5. Appendices Data Tables

Context and Background

Nova Scotia applies a Tiered Framework and Stepped Care Approach to match help-seeking individuals to the most appropriate services and levels of resources required to meet their needs effectively.

The Tiered Framework organizes mental health and addictions services and resources into five Tiers based on the intensity of service and the specialty level necessary to deliver the services at each tier. Tier 1 is the least intensive in this framework, and Tier 5 the most intensive. An overview of the Tiered Framework is provided in the diagram below:



Intensity of Supports /Services

The Stepped Care Approach involves matching individuals to the most appropriate level of care and support based on the severity of their condition. The approach consists of stepping the intensity/specialty of the service up or down as appropriate as the individual's need changes.

Together, the Tiered Framework and Stepped Care Approach enable us to:

- Ensure that individuals are receiving the right service from the right provider at the right time; and
- Utilize health and social resources as effectively and efficiently as possible.

In Nova Scotia, Nova Scotia Health (NS Health) and the IWK have traditionally been the primary providers of <u>publicly funded</u> mental health and addictions care – they focus primarily on providing Tier 3, 4, and 5 level treatments and services.

In 2016 Nova Scotia participated in a Health Services Planning process using the national needs-based planning methodology. An analysis of the data findings from the 2016 planning process highlighted a significant gap in publicly funded Tier 2 and lower Tier 3 services. These findings contributed to informing decisions to invest in initiatives such as e-mental health and peer support as a means of beginning to address the gap.

Current Context

The Nova Scotia Government recently released a Strategic Plan called *Action for Health*. The plan outlines the vision and strategy for transforming healthcare in Nova Scotia. Building a system that enables universal access to mental health and addictions care is essential to that vision.

As part of its commitment to establishing universal mental health and addictions care, the province appointed the first Minister Responsible for the Office of Addictions and Mental Health (OAMH).

The province has since launched a Universal Mental Health and Addictions Care initiative. After extensive consultation, OAMH identified the following system characteristics as essential to demonstrate initiative success:

- 1. Available and Timely
- 2. People-centered
- 3. Easy to Navigate
- 4. Efficient and Integrated
- 5. Equitable and Inclusive
- 6. Affordable and Sustainable
- 7. Safe and Effective

The province is implementing four critical strategies with help from NS Health, IWK, not-for-profits and community-based organizations, and the private sector:

- Improve mental health and addictions coverage by addressing gaps along the continuum of need, including providing additional community care and support services and investing more heavily in social determinants of health.
- Improve mental health and addictions human resource (HHR) capacity by establishing billing codes for private providers and engaging not-for-profits and community-based organizations.
- Introduce or strengthen service delivery models that encourage help-seeking and enable culturally appropriate access to under/poorly served communities.
- Enable greater coordination/collaboration across the system, including public, private, and not-for-profits and community-based organizations.

The transformation effort has highlighted the need to ensure decision-makers have access to information/analyses based on data sets appropriate to:

 Provide insight into public sector coverage across the province and the degree to which that coverage is equitable from multiple perspectives; and

- Enable assessment of need, demand, and capacity within an equitable, universal mental health and addictions system:
 - Need: Analysis of the needs of children, adolescents, and adults through the life cycle using an equity lens at the provincial, zonal, and community levels.
 - Demand: The proportion of people who seek mental health and addictions help and support.
 - Capacity: Incorporating public, private, and non-profit HHRs and e-mental health services.
 - Utilization: How resources are allocated and organized.
 - Funding: All sources, including public, private, and individual payees.

In response to this need, Nova Scotia participated in Health Canada's Needs-Based Planning Project in 2022.

Learnings

The application of needs-based planning methods shows significant promise as a means of improving mental health and addictions decision support capacity in Nova Scotia, and participation in the 2022 Needs-Based Planning Pilot provided significant value at multiple levels:

- 1. Participation in the process:
 - a. Incorporated a wide range of opportunities to share information and learn from the experiences of other jurisdictions across the country; and
 - b. Helped sharpen the focus of discussions within Nova Scotia concerning:
 - i. The value of applying needs-based planning methods at the system policy level; and,
 - ii. Clarifying the data requirements to support those methods in the context of Universal Mental Health and Addictions Care.
- 2. Application of the national model:
 - a. Provided specific insight into the degree to which publicly funded services covered estimated needs of Nova Scotians aged 15 and older in 2021:
 - i. The gap between public sector coverage (DHW-funded) and people's level of need remained considerable in 2021.
 - ii. In a universal context, this raises questions for the following:
 - 1. The degree to which private and community-based providers fill those gaps; and
 - 2. The degree to which those providers are being "funded" through private and work-related insurance or by individuals out of pocket.
 - b. Validated recent NS government decisions to invest in mental wellness, mental health, and addictions where service gaps are most significant. For example, peer support, emental health, wellness counseling, mental health day hospitals, and community-based withdrawal management.
 - c. Identified potential over-use of crisis and emergency services as an issue/opportunity for further investigation:
 - i. The use of crisis and emergency services exceeded the total estimated "need" by 80% provincially and between 57% and 117% in each zone in 2021, raising questions about the factors driving the high usage and the possibility that they are filling gaps in other service areas where access is limited.

d. Highlighted issues related to data completeness, currency/ relevance, and sample size in Nova Scotia's universal mental health and addictions system:

i. Population Surveillance (Need):

- 1. Data on prevalence among those 15 and older were drawn from a metaanalysis of several sources, including the Canadian Community Mental Health Survey (CCHS-Mental Health);
- 2. CCHS-Mental Health is renewed at 10-year intervals limiting the opportunity to assess trends and relevance for future planning.
- 3. The CCHS-Mental Health survey used to inform the current pilot project was conducted in 2012, further limiting its application to the current state, particularly given the socio-demographic and health impacts of the COVID pandemic.
- 4. The NS sample size (<2000) is insufficient to enable credible analysis at the community level and therefore offers no insight into the needs of vulnerable groups and underserved populations.
- 5. Data from population surveys used to estimate community needs typically exclude certain groups. For example, homeless or institutionalized (i.e., in a hospital or corrections) people are not represented in underlying survey data. Also, First Nations people living on reserve usually participate in other surveys.
- 6. Problem gambling is not represented in the needs-based planning methodology. These data are also not included in the population survey.
- 7. The Canadian Community Health Survey dataset does not include people under the age of 15 years and therefore offers no insight into child and young adolescent needs.

ii. Assessing Capacity:

- 1. Estimates of capacity reflect resources available through the NS Health and IWK MHA (NS DHW-funded) programs but do not include private or community-based providers. As a result, they provide insight into coverage gaps only in the most clinically intensive areas, where NS Health and the IWK are the primary providers.
- 2. Since e-mental health is a relatively new resource, it has added "FTE" capacity but does not currently factor into the capacity calculation. This contributes to the overestimation of gaps in Tiers 2-3.
- **b.** Issues related to the applicability of national assumptions in the Nova Scotia context:

i. Assessing Demand:

1. The National NBP Model applies a 100% help-seeking assumption, meaning that we estimate that 100% of people who need help will seek the support they require. Because of this assumption, the calculated gap likely overestimates the actual "demand" for Tier 2-4 services (i.e., (the

- number of people likely to seek or use services). By extension, it likely overestimates the resources required to support those services.
- 2. As of right now, Nova Scotia does not have a method for understanding and measuring demand or help-seeking intentions or behaviors.

ii. Assessing Resource Requirements:

1. The National NBP Model calculates HHR gaps, bed requirements, and overages by applying assumptions with respect to high-level treatment and delivery models and the types and numbers of human resources and beds required to support those models. The extent to which those assumptions align with the current Nova Scotian models remains unclear.

Conclusions

- 1. Using the needs-based planning methodologies shows significant promise in improving mental health and addictions decision-support capacity.
- 2. An expanded model that includes the private and community sectors and considers the issues of demand and variations in local service delivery models is required to support Nova Scotia's planning needs.
- 3. The datasets available to populate a model in Nova Scotia need to be more comprehensive to inform decision-makers concerning critical elements of the vision of effective, sustainable, universal access to mental health and addictions care.
 - a. The available data is sufficient to provide a high-level (order of magnitude) understanding of the degree to which the <u>need</u> for (adult) services is or is not covered by current publicly (NS DHW) funded resources (primarily NS Health and IWK program resources).
 - b. Data is insufficient to inform a thorough analysis of coverage either from a <u>demand</u> point of view or from a <u>capacity</u> point of view.
- 4. There is a need to strengthen Nova Scotia's:
 - a. <u>Data infrastructure</u> to ensure decision-makers have access to the information/analysis necessary to assess the following:
 - i. Need: Including children, adolescents, and adults at the provincial, zonal, and "community" levels;
 - ii. Demand (help-seeking): Proportion of people who are likely to seek help.
 - iii. Capacity: Including HHR and e-mental health service equivalents available through public, private, not-for-profit, and community-based providers.
 - iv. Utilization: The organization and allocation of those resources.
 - v. Funding: Including public, private, and individual payees.
 - b. <u>Capacity to project, segment, and analyze that data</u> to provide decision-makers with an integrated view of those data sets to enable both planning and evaluation at the policy, organizational, and community levels:

- i. Level and nature of the need: Individual, community, and population needs of Nova Scotians; the relationship between their circumstance, condition, and need to access non-clinical supports or clinical services.
- ii. Level, type, and pathways of services required, i.e., mental health and addictions non-clinical and clinical services. The impact of their interaction on effectiveness.
- iii. Service delivery models that can and should enable optimum resource utilization, connectivity, and access across the continuum and organizations and sectors.
- iv. Mental health and addictions resource requirements, capacity, and utilization. Encompassing all service providers and their engagement with patients/ people regardless of what Tier (i.e., level of service) or what organization or sector they are in.
- c. <u>Operational capacity</u> to maintain and renew the data and analyses to ensure currency and relevance and to enable the trending and projection required for future planning, rather than describing the past.

Appendices

The appendices attached contain tables that illustrate the following:

- The data requirements and gaps related to supporting needs-based planning in the Nova Scotia context; and
- The potential value of a fully populated expanded model.
- The potential over-utilization of crisis and emergency services.

The tables are populated as much as possible based on the currently available data.

The data available is sufficient to provide a high-level (order of magnitude) understanding of the degree to which the <u>need</u> for (adult) services is or is not covered by current NS DHW-funded resources (primarily NS Health and IWK program resources). (Appendix 5.1)

A more comprehensive data set is required to inform an analysis of coverage from a <u>demand</u> perspective, from an equity perspective, and the perspective of resource requirements or availability (<u>capacity</u>) across the system.

The tables are contained in separate appendices:

- Table Definitions
- Examples of Charts and How to Read Them
- Provincial High-Level Overview
- Summary Overview Central Zone
- Summary Overview Eastern Zone
- Summary Overview Northern Zone
- Summary Overview Western Zone

Table Definitions

Below are the terms and definitions used in the tables in this document.

Term	Description
NBP Projected Need	Estimated number of persons in need based on the needs-based planning modeling. This can also represent resources (# of Full Time Equivalents, # of beds, or # of slots), as noted in the document. The NBP projected need is based on the assumption that 100% of people who meet the criteria for services would be help-seeking.
Projected demand	This figure is intended to identify the actual projected demand in the population amongst the people who meet the criteria for services. This data is unavailable, and the estimate cannot be provided at this time.
Public sector (current capacity)	This reflects the resource availability (capacity) of the publicly funded services. Information included in Needs-Based Planning contains data only from NS Health, IWK, physician services (covered by MSI), and non-profit organizations funded by the NS DHW, IWK, or NS Health. Not all publicly funded organizations were involved (e.g., Department of Education, Department of Community Services) or were able to provide data, which is denoted as "Unknown" or "Data not available."
Private sector (current capacity)	This represents resource availability (capacity) in the private sector. This data is not available, and a data gap in this report.
Not-for-profit (current capacity)	This represents resource availability (capacity) in not-for-profit and community-based organizations, not included in the public sector category. This data is unavailable, and a data gap currently.
Current coverage provided by the public sector (%)	The graph illustrates the public sector's coverage of the projected needs. There are several charts used (see below for examples and descriptions).
Current coverage of projected demand	This is intended to represent the estimated coverage of projected demand. However, this data point is unavailable due to the unknown nature of projected demand.

Examples of charts and how to read them

These charts are used within the current coverage provided by the public sector column in the tables.

Chart type	Meaning	Chart Example
Showing current coverage of people in need in the public	Variant 1 when the coverage does not exceed 100%. A yellow progress bar with a red vertical target line denoting the current coverage of people in the public sector (24% coverage shown).	24%
sector	Variant 2 when the coverage exceeds 100%. A yellow progress bar combined with a purple vertical line and purple progress bar denoting excess in coverage of people in the public sector (109% coverage shown).	109%
Showing current coverage of resources in	Variant 1 when the coverage does not exceed 100%. A teal progress bar with a red vertical line denoting current coverage of resources in the public sector (50% coverage shown).	50%
the public sector	Variant 2 when the coverage exceeds 100%. A teal progress bar combined with a purple vertical line and purple progress bar denoting excess in coverage of resources in the public sector (109% coverage shown).	109%

Provincial High-Level Overview

The tables in this section:

- Provide high-level estimates/projections at the provincial and zonal levels with respect to the following:
 - Projected Need Estimated number of individuals in need of each core service;
 - Public Sector Capacity Based on the number of individuals who received services from NS DHWfunded service providers over the course of 2021.
 - Public Sector Coverage Percentage of need covered by public sector capacity.

For example, the table below shows that an estimated 7,040 people across the province need a Continuum of WMS services. Public sector/NS DHW Funded capacity is sufficient to cover/serve 3,372 people or 49% of the total need.

- Due to data availability issues, the tables do not provide estimates/projections concerning the following:
 - Projected Demand number of individuals in need who will seek help;
 - Private, Not-for-Profit and Community Capacity / Coverage Number and percentage of individuals who received services from private, not-for-profit and community-based providers;
 - Total system coverage of need or demand.

High Level Summary for Nova Scotia	Current System Capacity						
Core Service	NBP Projected Need (people)	Projected Demand (people)	Public sector - DHW funded services (people)	Private sector	Not-for- Profit / Community Based	Current coverage of projected need provided by public sector (%)	Current coverage of projected demand
Tier 2 to 3 MH/SU Community Services (blended or Independent) incl. Peer Support	254,817	Data not available	76,747	Data not available	Data not available	30%	Data not available
Intensive Case Management Services (ICM)	3,967	Data not available	1,679	Data not available	Data not available	42%	Data not available
Community-based Intensive Day or Evening Treatment Services	8,082	Data not available	390	Data not available	Data not available	5%	Data not available
Addiction Medicine Specialty Services	9,452	Data not available	2,952	Data not available	Data not available	31%	Data not available
Continuum of WMS	7,489	Data not available	3,472	Data not available	Data not available	46%	Data not available
Continuum of Bed Based Substance Use Services	5,826	Data not available	190	Data not available	Data not available	3%	Data not available
Primary Care	378,444	Data not available	229,159	Data not available	Data not available	61%	Data not available
Emergency and Crisis	12,588	Data not available	22,619	Data not available	Data not available	180%	Data not available
Supportive/Supported Housing	16,701	Data not available	Unknown	Data not available	Data not available	Unknown	Data not available
Mental Health Bed Based Continuum	12,510	Data not available	2,724	Data not available	Data not available	22%	Data not available

Please note:

- The overview charts do not provide Needs Based Planning Projections that were compiled at the individual core service level. Individual service users may need/access multiple services, and the total estimate for all core services combined would be smaller than the sum of its parts (individual core service estimates).
- Due to variations in resources required between different core services (some core service resource needs
 may be beds, and other core services may reflect FTEs), a summative table identifying all resource
 requirements cannot be compiled.

Summary Overview for Central Zone

High Level Summary for Central Zone	Current System Capacity						
Core Service	NBP Projected Need (people)	Projected Demand (people)	Public sector - DHW funded services (people)	Private sector	Not-for- Profit / Community Based	Current coverage of projected need provided by public sector (%)	Current coverage of projected demand
Tier 2 to 3 MH/SU Community Services (blended or Independent) incl. Peer Support	121,943	Data not available	36,807	Data not available	Data not available	30%	Data not available
Intensive Case Management Services (ICM)	1,898	Data not available	690	Data not available	Data not available	36%	Data not available
Community-based Intensive Day or Evening Treatment Services	3,867	Data not available	388	Data not available	Data not available	10%	Data not available
Addiction Medicine Specialty Services	4,523	Data not available	927	Data not available	Data not available	20%	Data not available
Continuum of WMS	3,584	Data not available	917	Data not available	Data not available	26%	Data not available
Continuum of Bed Based Substance Use Services	2,788	Data not available	124	Data not available	Data not available	4%	Data not available
Primary Care	181,105	Data not available	117,938	Data not available	Data not available	65%	Data not available
Emergency and Crisis	6,024	Data not available	10,386	Data not available	Data not available	172%	Data not available
Supportive/Supported Housing	10,773	Data not available	Unknown	Data not available	Data not available	Unknown	Data not available
Mental Health Bed Based Continuum	5,986	Data not available	963	Data not available	Data not available	16%	Data not available

Summary Overview for Eastern Zone

High Level Summary for Eastern Zone	Current System Capacity						
Core Service	NBP Projected Need (people)	Projected Demand (people)	Public sector - DHW funded services (people)	Private sector	Not-for- Profit / Community Based	Current coverage of projected need provided by public sector (%)	Current coverage of projected demand
Tier 2 to 3 MH/SU Community Services (blended or Independent) incl. Peer Support	42,551	Data not available	17,043	Data not available	Data not available	40%	Data not available
Intensive Case Management Services (ICM)	662	Data not available	350	Data not available	Data not available	53%	Data not available
Community-based Intensive Day or Evening Treatment Services	1,350	Data not available	Unknown	Data not available	Data not available	Unknown	Data not available
Addiction Medicine Specialty Services	1,578	Data not available	1,059	Data not available	Data not available	67%	Data not available
Continuum of WMS	1,251	Data not available	554	Data not available	Data not available	44%	Data not available
Continuum of Bed Based Substance Use Services	973	Data not available	33	Data not available	Data not available	3%	Data not available
Primary Care	63,196	Data not available	39,373	Data not available	Data not available	62%	Data not available
Emergency and Crisis	2,102	Data not available	3,310	Data not available	Data not available	157%	Data not available
Supportive/Supported Housing	3,759	Data not available	Unknown	Data not available	Data not available	Unknown	Data not available
Mental Health Bed Based Continuum	2,089	Data not available	836	Data not available	Data not available	40%	Data not available

Summary Overview for Northern Zone

High Level Summary for Northern Zone	Current System Capacity						
Core Service	NBP Projected Need (people)	Projected Demand (people)	Public sector - DHW funded services (people)	Private sector	Not-for- Profit / Community Based	Current coverage of projected need provided by public sector (%)	Current coverage of projected demand
Tier 2 to 3 MH/SU Community Services (blended or Independent) incl. Peer Support	38,248	Data not available	8,888	Data not available	Data not available	23%	Data not available
Intensive Case Management Services (ICM)	595	Data not available	406	Data not available	Data not available	68%	Data not available
Community-based Intensive Day or Evening Treatment Services	1,213	Data not available	Unknown	Data not available	Data not available	Unknown	Data not available
Addiction Medicine Specialty Services	1,419	Data not available	344	Data not available	Data not available	24%	Data not available
Continuum of WMS	1,124	Data not available	573	Data not available	Data not available	51%	Data not available
Continuum of Bed Based Substance Use Services	874	Data not available	Unknown	Data not available	Data not available	Unknown	Data not available
Primary Care	56,804	Data not available	31,805	Data not available	Data not available	56%	Data not available
Emergency and Crisis	1,889	Data not available	4,098	Data not available	Data not available	217%	Data not available
Supportive/Supported Housing	3,379	Data not available	Unknown	Data not available	Data not available	Unknown	Data not available
Mental Health Bed Based Continuum	1,878	Data not available	394	Data not available	Data not available	21%	Data not available

Summary Overview for Western Zone

High Level Summary for Western Zone	Current System Capacity						
Core Service	NBP Projected Need (people)	Projected Demand (people)	Public sector - DHW funded services (people)	Private sector	Not-for- Profit / Community Based	Current coverage of projected need provided by public sector (%)	Current coverage of projected demand
Tier 2 to 3 MH/SU Community Services (blended or Independent) incl. Peer Support	52,075	Data not available	14,009	Data not available	Data not available	27%	Data not available
Intensive Case Management Services (ICM)	811	Data not available	233	Data not available	Data not available	29%	Data not available
Community-based Intensive Day or Evening Treatment Services	1,652	Data not available	2	Data not available	Data not available	0%	Data not available
Addiction Medicine Specialty Services	1,932	Data not available	622	Data not available	Data not available	32%	Data not available
Continuum of WMS	1,530	Data not available	1,428	Data not available	Data not available	93%	Data not available
Continuum of Bed Based Substance Use Services	1,191	Data not available	0	Data not available	Data not available	0%	Data not available
Primary Care	77,340	Data not available	40,043	Data not available	Data not available	52%	Data not available
Emergency and Crisis	2,573	Data not available	4,825	Data not available	Data not available	183%	Data not available
Supportive/Supported Housing	4,601	Data not available	Unknown	Data not available	Data not available	Unknown	Data not available
Mental Health Bed Based Continuum	2,556	Data not available	531	Data not available	Data not available	21%	Data not available