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# **Pilot Site Report: Niagara Region, Ontario**

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

## Acknowledgements

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The Needs-Based Planning project team wishes to acknowledge and thank all the pilot site representatives for their support with the pilot work.

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# Background to the National NBP Project

## 1.1 Background and Need Addressed

Mental health services and supports have traditionally been funded without a comprehensive planning model to help allocate resources equitably and according to population needs (1). There is ample evidence in the Canadian context that this has contributed to a significant “treatment gap”, such that the current capacity of mental health services falls far short of meeting the needs of the population (2, 3). Further, the planning and funding of mental health and substance use services remains quite siloed and hindered by the lack of a planning and resource allocation model that includes both these service delivery sectors. To support the allocation of resources, as well as future population-based performance indicators, work was needed at the national level on practical, evidence-based tools for mental health and substance use/addiction system planning.

A project aimed at improving the planning and allocation of resources for substance use and concurrent disorders services has been underway with Health Canada support from the Drug Treatment Funding Program (2010-14) and the Substance Use and Addictions Program (2016-18); the project being led by Drs. Jürgen Rehm and Brian Rush at the Centre for Addiction and Mental Health, with Co-Investigators Drs. Joel Tremblay and Daniel Vigo. Feedback during pilot work across Canadian jurisdictions as well as the project’s summary evaluation report confirmed the high interest among the members of the National Advisory Committee, as well as important policy makers and planners in several Canadian jurisdictions, in expanding the work to better represent mental health services and develop a fully integrated, national mental health and substance use Needs-Based Planning model.

Importantly, during roughly the same time, a highly complementary project was funded by the BC Ministry of Health for the development of a comprehensive planning model for that province. While the goals of the two projects were very similar, different although complementary methodologies were utilized, and a collaborative process ensued between the investigators on the CAMH-led project and Dr. Daniel Vigo and his team at the University of British Columbia, supporting the respective projects through consultation and sharing of information.

This project was a continuation of this collaboration and aimed at ***the development of a national, mental health and substance use planning model that would support the development of more***

***integrated, accessible, and effective services for all Canadians.*** The aim was to draw upon the strengths of each project through methodological and data source triangulation, as well as scale-up of the work to a national mental health and substance use planning model that would support the development of more integrated, accessible, and effective services for all Canadians.

The overall goal of the Needs-Based Planning project was to develop a quantitative model that key decision-makers in health planning jurisdictions across Canada can use to estimate the resources required to address the needs for services and supports relating to Mental Health and substance use problems in their population.

### **What is Need-Based Planning?**

Needs-Based Planning (NBP) uses a systematic quantitative approach to planning mental health and substance use treatment and support systems. NBP estimates the required capacity of services and supports, based on needs of the whole population, and all levels of severity and complexity of those needs. A critical ingredient for NBP is an agreed upon set of “core” mental health and substance use services and supports that should be available and accessible to all those in need. The evidence-based foundation of NBP is rooted in systematic design and planning and includes these key principles<sup>1</sup>:

- a broad systems approach to address the full spectrum of issues
- accessibility and effectiveness through collaboration across stakeholders
- a range of system supports.

This evidence-based approach advances local planning and creates a more equitable balance of resources. It provides direction to decision-makers on their investment decisions and, when fully implemented, can reduce costs and improve access to services and client and family outcomes. It is the optimal way to use resources wisely, and to fit services to the dynamic, evolving needs of a population.

### **What promise does it hold?**

#### **Immediate**

- increased understanding of population needs and the advantage of NBP over alternative existing approaches

- increased use of evidence-informed practices for planning and delivering services and supports
- improved decisions for optimal resource allocation for mental health and substance use/addiction services and systems

### **Medium to Longer term**

- strengthened, evidence-informed treatment, support services and systems
- increased access to services and coverage of population needs
- improved client, family and population health outcomes

### **The Research**

Canada has played a significant role in developing NBP models, first for substance use and addiction, and now also including a broader focus on mental health. The Canadian work has included model development and implementation for both adult<sup>ii</sup> and youth<sup>iii</sup> substance use services, as well as work based in British Columbia for (adult) mental health and substance use services. This work has built upon, and benefited significantly, from close communication with colleagues in the United Kingdom, Australia and elsewhere. Although there are differences in scope and methodology across countries, all NBP models have the same essential purpose, namely to bring a population health perspective to a quantitative, evidence-based approach to planning and resource allocation. To date the adult and youth substance use NBP models have been the most widely implemented in Canada.

### **Benefits of the model**

The model is an overarching tool to assist in decision making and planning, prediction of resources that leads to an increase in appetite for increasing treatment resources in underfunded jurisdictions and parts of the treatment and support continuum. Embedding the tool in a National Framework encourages its use nationally.

The model is an aspirational goal. It leads to appreciation of unmet needs and highlights different elements across the continuum of care. Hence, it is not just the finished product but the process of development of the model itself that is also very helpful as it brings to light evidence-based practices and difference in opinions among planners and service providers. While the gap analysis provides an “outcome”, the real value is that it provides funders with a powerful planning and prioritization tool that allows funding decisions to be made based on the evidence. The model yields examples of inequitable

resource distribution, provides a common language, raises questions and issues for discussion regarding an evidence-based system and services.

### **Challenges of the model**

Not everyone is represented in the population health data, for example, people who are homeless or institutionalized at the time of the key surveys, and a large percentage of Indigenous people. Other information must be incorporated to adjust for these data gaps.

There is no one simple formula for treatment system planning, but rather a collection of tools that can be used together to inform treatment gaps and resource allocation. A needs-based planning model is one tool that should be complemented with other information and methods.

## **1.2. Overview of the National NBP Project**

The project involved five overlapping phases of work:

### **Phase I: Literature Reviews, and Establishing of the National Advisory Committee**

- Re-instated and bolstered the mental health expertise of the National Advisory Committee, including a new cadre of research collaborators drawn from mental health services research groups across Canada.
- Established the workgroups of the National Advisory Committee.
- Updated literature on needs-based planning models, conceptual frameworks, comorbidity, and help-seeking for substance use/addiction to include mental health problems and illnesses.
- Undertook a national environmental scan of provincial/territorial strategic plans for mental health and addictions focusing on the status of mental health and substance use/addiction services integration, including opioid treatment services; the use of tiered service frameworks and identification of core services; and system-level, population-based performance indicators (e.g., help-seeking or level of coverage of need by existing treatment and support services).
- Developed the project performance measurement plan.



## Phase II: Methods triangulation

- Reviewed, synthesized, and triangulated the methodologies and data sources used in the BC and previous national Needs-Based Planning projects.
- Derived robust population-based estimates of the numbers of people requiring mental health and substance use/addiction services in each planning region across Canada according to level of severity and need.
- Conducted a comparative analysis of prevalence and need estimates derived from the severity tiers approach based on complexity in the national project and the diagnostic-based approach in the BC project, including opioid use disorders and other 12 substance and mental disorders.
- Investigator team reviewed methodology and potential re-analysis of data, and assessment of the comorbidity and help-seeking literature covering both mental health and substance use/addiction.
- The sub-group of the National Advisory Committee focused on methodology was engaged in the review, assessment, and validation of the approach to reconcile the methodologies and results of the two approaches.

## Phase III: Core services and full system modeling

- Translated the learnings from the Phase II work on the triangulation of the jointly held data with respect to substance use/addiction, to the various mental disorders covered by the BC project and the mental health-related data derived in the recently completed national SUAP- funded project.
- Developed a national consensus-based set of core mental health and substance use/addiction services (built upon the previous work of the BC and national projects).
- Drew upon extant literature and international experience with system design frameworks and evidence-based pathways for specific diagnosis and comorbidity. This involved full engagement of the project's National Advisory Committee to ensure the outputs of the resulting planning model align well with current funding processes and national/provincial/territorial reporting requirements (e.g., functional centres and core services defined by CIHI and in provincial/territorial strategic plans).
- Integrated the information gathered in Phase I (i.e., needs-based planning, conceptual frameworks, comorbidity and help-seeking literature, evidence-based service pathways); Phase

II (i.e., methods triangulation) and the above work on core service and conceptual framework to yield the full integrated mental health and substance use/addiction Needs-Based Planning model and which provides estimation of service capacity requirements (e.g., annual caseload across core services as well as capacity requirements expressed, for example, in FTEs within inter-disciplinary roles and treatment beds).

- At this stage the draft model was developed with significant input from the Working Group on Core Services and vetted through the full National Advisory Committee prior to pilot testing in the next phase of work.

#### **Phase IV: Pilot testing and calibration**

- Developed the criteria for selection of pilot sites, confirmation through the Advisory Committee and design of the pilot site protocol including local/regional context analysis and data requirements for gap analysis.
- Engaged the pilot sites, developed the required Memoranda of Understanding (MOU), and held the initial on-site meeting with key decision-makers and information specialists, followed by a period of data collection and analysis.
- Iterative pilot testing and calibration of the model from Phase III, with three pilot jurisdictions in Year Two of the project and three pilot jurisdictions in Year 3.
- Ongoing meetings with the pilot sites for discussion and interpretation of results followed by preparation of a case study report.

#### **Phase V: Reporting and knowledge exchange (KE)**

- Project reports and other KE activities.
- In addition to the Health Canada reporting requirements, other reporting includes:
  - Project Technical report with sustainability plan
  - Project Evaluation report
  - Final Case Study reports
  - Implementation manual with required statistical tool

### **1.3. Pilot sites involved in the project**

- There were a total of six pilot sites in the project:

- Prairie Mountain Health Authority in Manitoba
- North Bay-Nipissing in Ontario
- Province of New Brunswick
- Niagara Region in Ontario
- Province of Nova Scotia
- North Zone in Alberta

## 2.0 Niagara Region Pilot Project

The Needs-based Planning model is comprised of the following elements and steps for implementation:

**Table 1: Steps involved in implementation of the NBP model**

<b>Step 1</b>	<b>Engagement</b> - With funders and other key stakeholders
<b>Step 2</b>	<b>Establishing the geographic boundaries, social indicators and community nuances</b> - Gathering population data and context description of local nuances.
<b>Step 3:</b>	<b>Estimating population level of need by severity</b>
<b>Step 4:</b>	<b>Mapping the system by core services</b> – Who is currently doing what and for whom?
<b>Step 5</b>	<b>Sizing:</b> Estimating level of need for core services
<b>Step 6:</b>	<b>Estimating <u>current</u> core service supply and utilization</b> - (number of individuals, FTE's, beds)
<b>Step 7:</b>	<b>Gap analysis</b> - by core service category (number of individuals, FTE's, beds)
<b>Step 8:</b>	<b>Interpretation</b> - Implications for the gap analysis

### Step 1: Engagement

#### Requirements of a pilot site/clarification of roles and responsibilities

- Attend project meetings/presentations, and contribute to the group discussions
- Update the larger working group of the ongoing activities of the smaller working group
- Complete the baseline evaluation survey
- Provide input into project materials
- Provide any relevant documents about their services and/or evolving community context

- Provide feedback on areas of the NBP model that may require adaptations or flexibility depending on local/regional context
- Contribute to the system mapping process for their organization(s)
- Provide required information for gap analyses according to the core services (individuals served, FTEs by categories, # beds etc.)
- Assist in interpretation of the gap analyses and implications for the treatment and support system
- Provide feedback on strengths and limitations of the Needs-based Planning process, including participation in the follow-up evaluation

**‘Large’ group engagement:** NBP team met with the “larger group” 5 times between July 2021 and May 2022. The larger group was comprised of 46 partner organizations that were part of the mental health and addictions working group of the Ontario Health team (OHT) for the Niagara region. Activities included orientation of the working group to the history of the model, work completed in previous projects with the substance use model, the National Core Service Framework; periodic progress updates; and implications of the findings on OHT priorities.

**‘Small’ working group:** NBP team worked closely with the following members who comprised the “small working group”. There were bi-monthly meetings from September 2021 to May 2022, bringing it to a total of 14 meetings.

**Members:**

- Maggie Aronoff, Mental Health & Addictions Project Manager
- Tara Mckendrick, Executive Director, Canadian Mental Health Association Niagara Branch
- Laura Walsh, Advisor, Planning (Mental Health & Addictions) at Ontario Health West
- Bil Helmeczi, Director Mental Health Services, Pathstone Mental Health (Lead Agency in Niagara for Children and Youth Mental Health).
- Lisa Panetta, Associate Director, Mental Health, Regional Municipality of Niagara
- Mike Lambert, Community Support Worker, Arid Recovery Homes
- Sydney Garvin, Individual with lived experience
- Ryan Blodgett, Clinical Supervisor, Addiction Recovery Services, Niagara Health

Initial meetings were to provide orientation to the history of the model, learnings from the past projects and orientation to the National Core Service Framework. Follow-up meetings included establishing the geographic boundaries; gathering population data and context description; mapping the system by core services – who is doing what and for whom; estimating current core service supply and utilization - (number of individuals, FTE's, beds); and processing the results of the gap analysis (comparing the current core service supply against the estimates projected by the model by core service category (number of individuals, FTE's, beds)

### **Limitations of the work**

It was made clear to the pilot site representatives that the model had the following limitations regarding what it can or not project:

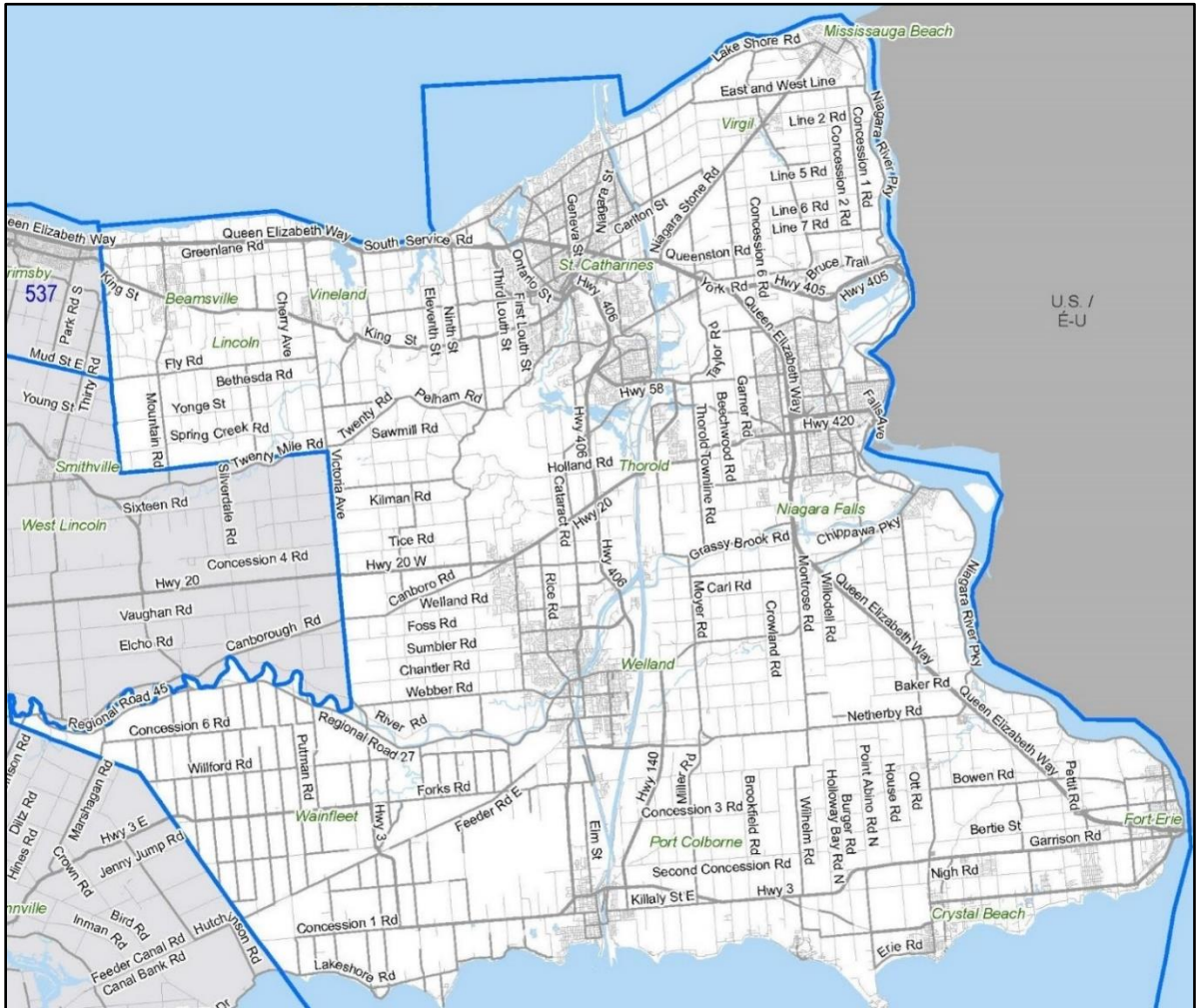
- Services targeted towards youth - model can't project needs for sub-15 aged population
- MH/SU diagnoses that were not included the 2012 Canadian Community Health Survey (CCHS) Mental Health (e.g., gambling, forensic populations)
- Core Service Platforms that fall outside of the model's scope or where there was no available data to compute a projection (e.g., Crisis Lines, Safe consumption sites)
- Collaborating Partner services that are serviced by other ministries/departments (e.g., schools, justice)
- Exclusions within the population health information – not everyone included in the underlying population health data – homeless, (process must be supplemented with other community needs assessment information homeless) First Nations on reserve, institutionalized populations
- Drilling down e.g., newcomers/refugees; rural/ remote, individual community level.
- Not a dynamic model, so it is not able to reflect individual, often complex treatment trajectories over time (e.g., natural recovery, recovery/ relapse).
- Not all local context can be taken into account

### **Step 2: Establishing the geographic boundaries, population, and community nuances**

**Geographic Boundaries:** Selection of the geographic boundaries for developing the mental health and substance use service capacity requirements, which were essentially the health planning regions across the country (typically regional health authorities or planning zones of a provincial health authority or

Ministry of Health). In this case, the planning area was St Catharine's-Niagara Census Metropolitan Area, which is the area the Niagara Ontario Health Team is planning for.

**Figure 1: Geographic boundaries for implementation of the NBP model**



**Population: 376,532 (aged 15 +)**

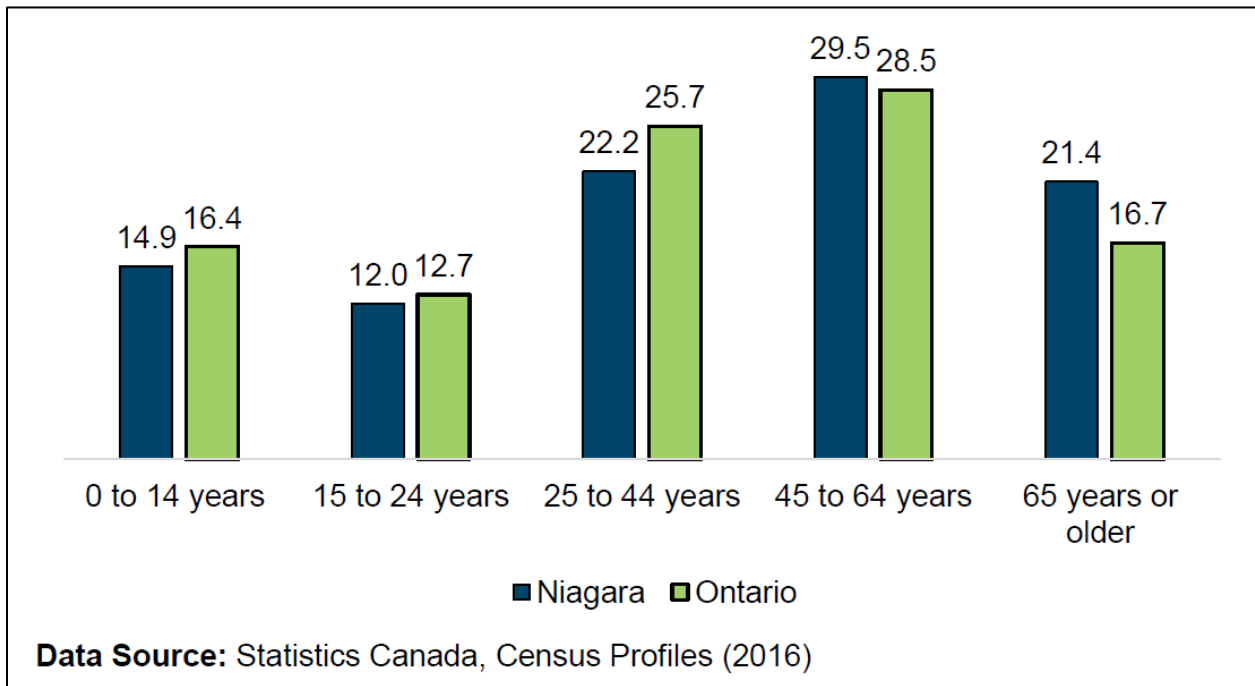
The population data was collected from Table 17-10-0135-01 - Population estimates, July 1, by census metropolitan area and census agglomeration, 2016 boundaries from Statistics Canada. The population used when calculating projections was for 2020.

**Local Context:**

**Population and Age and Predicted Growth**

- The median age in Niagara is 45.7 years, compared to Ontario’s median age of 41.3 years (2016) (Statistics Canada, Census Profiles)

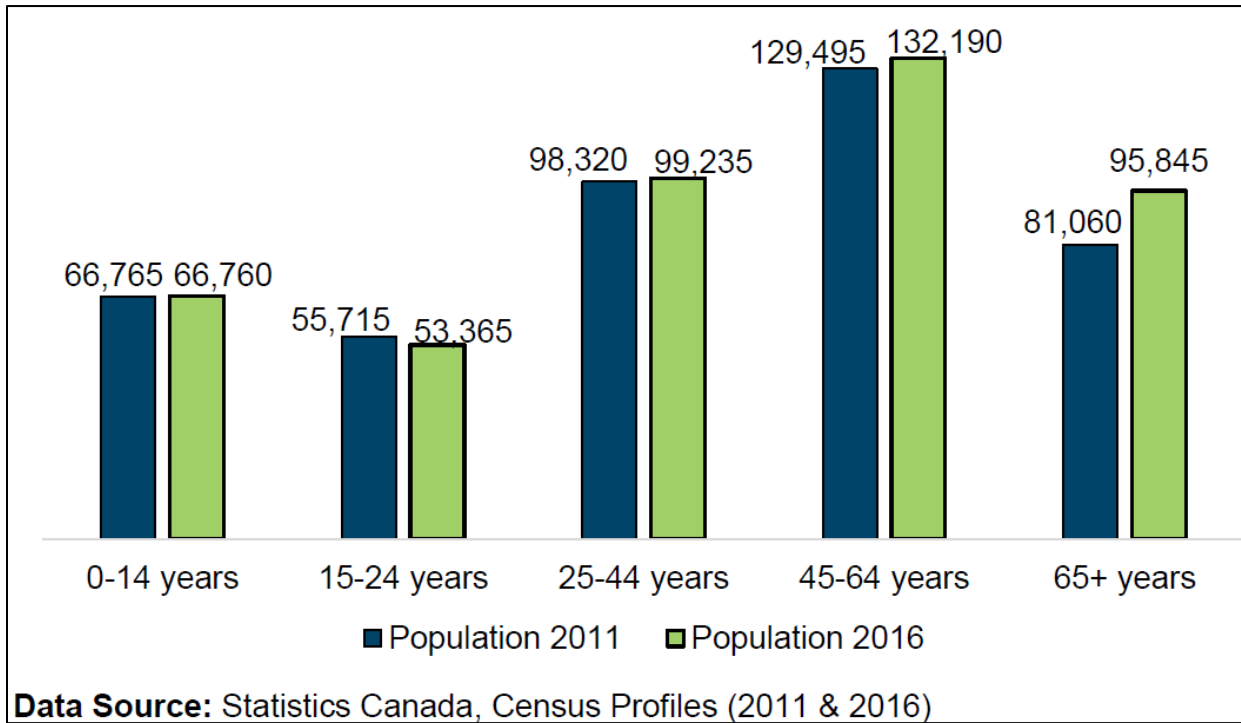
**Figure 2: Proportion of the population in Niagara in each age group compared to Ontario (2016)**



**Population Trends**

- From 2006 to 2016, the population of Niagara that is 65 and older has continued to increase compared to the population that is 0 to 14 years old (Statistics Canada Census Profiles) (2006, 2011, 2016)
- In 2006, the population aged 65+ in Niagara was 3.1% larger than the population aged 0-14 years (2006)
- In 2011, this gap increased to 21.4% (2011)
- In 2016, this gap increased to 43.6% (2016)

**Figure 3: Population growth in Niagara by age categories from 2011-2016**

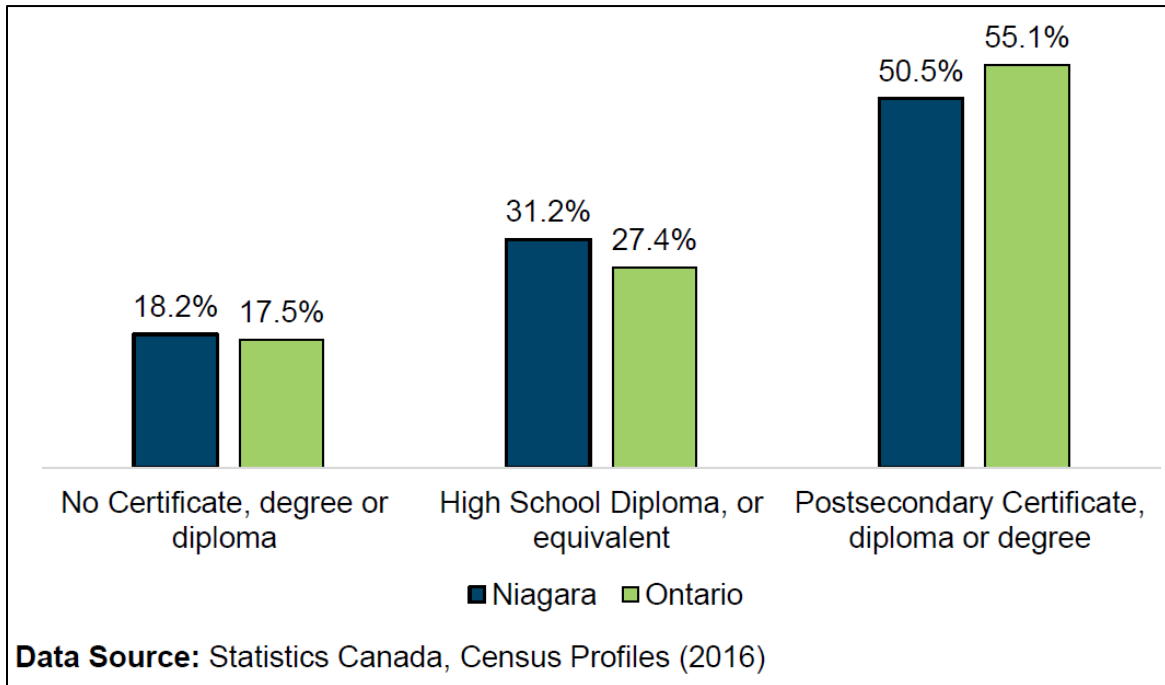


### Education Level

- 18.2% of Niagara residents aged 15 years and older have no certificate, diploma, or degree as their highest level of education, while 31.2% have their high school diploma, and 50.5% have a post-secondary certificate, diploma or degree
- Compared to Ontario, there is a smaller proportion of the population of Niagara who have a postsecondary certificate, diploma, or degree



**Figure 4: Highest level of education, Niagara and Ontario (2016)**



**Immigration Status in Niagara and Ontario**

- Compared to Ontario (69.4%), a higher proportion of the population of Niagara is born in Canada (82.3%)

**Table 2: Canadian-born residents and non-Canadian born residents in Niagara and Ontario (2016)**

Immigration status	Niagara		Ontario	
	Number of People	% of Total Population	Number of People	% of Total Population
Canadian Born	360,675	82.3%	9,188,815	69.4%
Overall, non-Canadian born:	77,485	17.7%	4,053,345	30.6%
Non-permanent Resident	4,630	1.1%	201,200	1.5%
Immigrant	72,855	16.6%	3,852,145	29.1%

**Data Source:** Statistics Canada, Census Profiles (2016)

## Refugees

- Refugees make up 17.0% of all recent immigrants in Niagara

## Visible Minorities

- The most common visible minorities in Niagara are Black (1.82%), South Asian (1.41%), and Chinese (1.38%)

*Table 3: Number and proportion of Niagara vs. Ontario residents who identify as a visible minority*

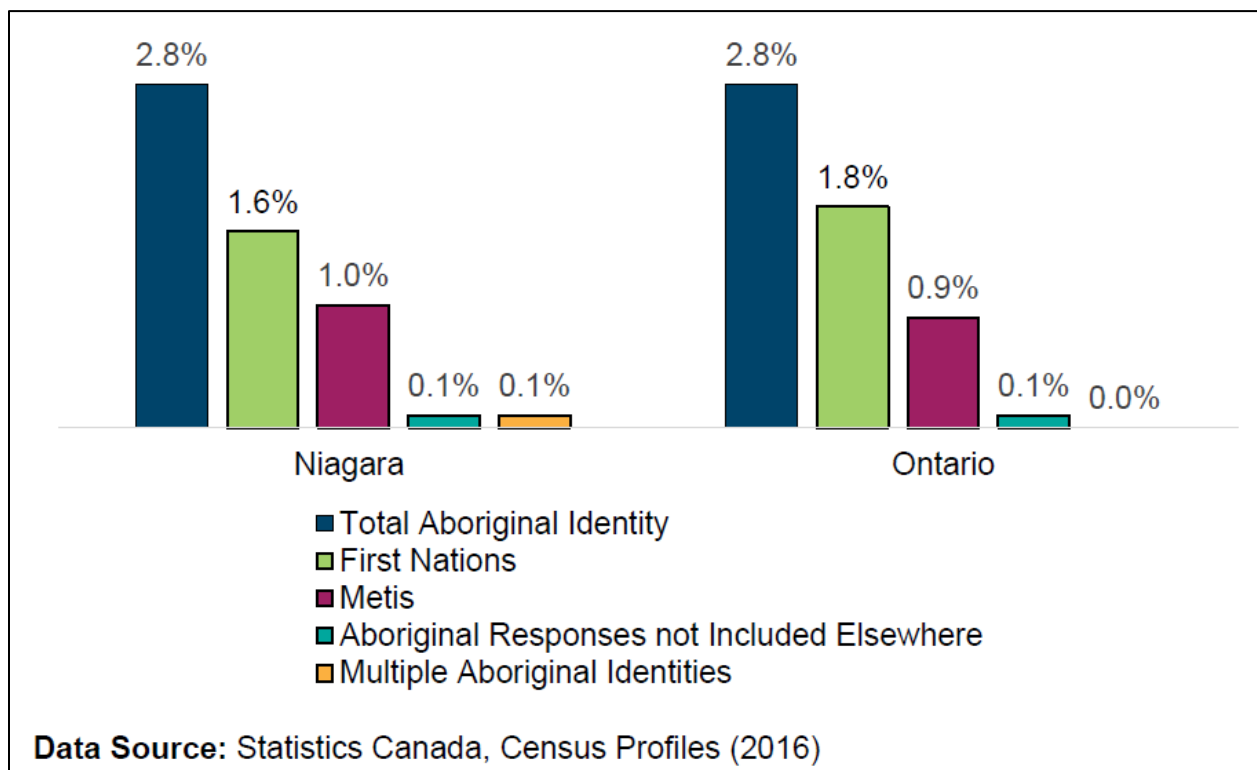
Visible Minority Category	Niagara		Ontario	
	Number of People	% of Population Identifying as Minority	Number of People	% of Population Identifying as Minority
Total Population	438,160		13,242,160	
Black	7,970	1.82%	627,715	4.74%
South Asian	6,170	1.41%	1,150,415	8.69%
Chinese	6,055	1.38%	754,550	5.70%
Latin American	4,620	1.05%	195,950	1.48%
Filipino	3,900	0.89%	311,675	2.35%
Arab	2,570	0.59%	210,435	1.59%
Southeast Asian	2,050	0.47%	133,855	1.01%
Multiple Visible Minorities [individuals belonging to two or more ethnic minority categories]	1,765	0.40%	128,585	0.97%
Korean	1,445	0.33%	88,935	0.67%
West Asian	860	0.20%	154,670	1.17%
Japanese	730	0.17%	30,830	0.23%
Visible Minority not Included Elsewhere	690	0.16%	97,970	0.74%

**Source Data:** Statistics Canada. Census Profiles (2016)

## Indigenous Population: Demographic Information

- In 2016, the Indigenous population for Niagara (12,250 people) represents 2.8% of total population. Within Ontario, the Indigenous population (374,395 people), also represents 2.8% of total population
- From the year 2006 to 2016 in Ontario, there has been an increase in the Indigenous population by 50.3%, increasing from 242,490 in 2006 to 364,395 in 2016

**Figure 5: Percent of individuals with Aboriginal identity in Niagara and Ontario (2016)**



- Of those who identify as Indigenous in Niagara, most individuals identify as First Nations. However, the proportion of individuals identifying as First Nations is lower in Niagara compared to Ontario
- Compared to Ontario, more individuals in Niagara identify as Metis

**Table 4: Aboriginal identity in Niagara and Ontario (count and percent), 2016**

Indigenous Identity	Niagara		Ontario	
	Number of People Identifying as Aboriginal by Indigenous Identity	% of Population Identifying as Aboriginal by Indigenous Identity	Number of People Identifying as Aboriginal by Indigenous Identity	% of Population Identifying as Aboriginal by Indigenous Identity
Total Population	12,250		374,395	
First Nations	7,200	58.8%	236,680	63.2%
Metis	4,340	35.4%	120,585	32.2%
Inuk (Inuit)	105	0.9%	3,860	1.0%
Multiple Aboriginal Responses	270	2.2%	5,730	1.5%
Aboriginal responses not included elsewhere	335	2.7%	7,540	2.0%

**Data Source:** Statistics Canada, Census Profiles (2016)

### Francophones

- In Niagara, Francophones make up 3.2% of the population (2016)
- The cities of Port Colborne and Welland are designated areas under the Ontario French Language Services Act
- 55,770 residents (12.4%) in Niagara have French origin
- Welland has the largest percentage of people that are Francophones (10.3%), while West Lincoln has the lowest at 1.0%

### Rural and Urban: Demographic Information

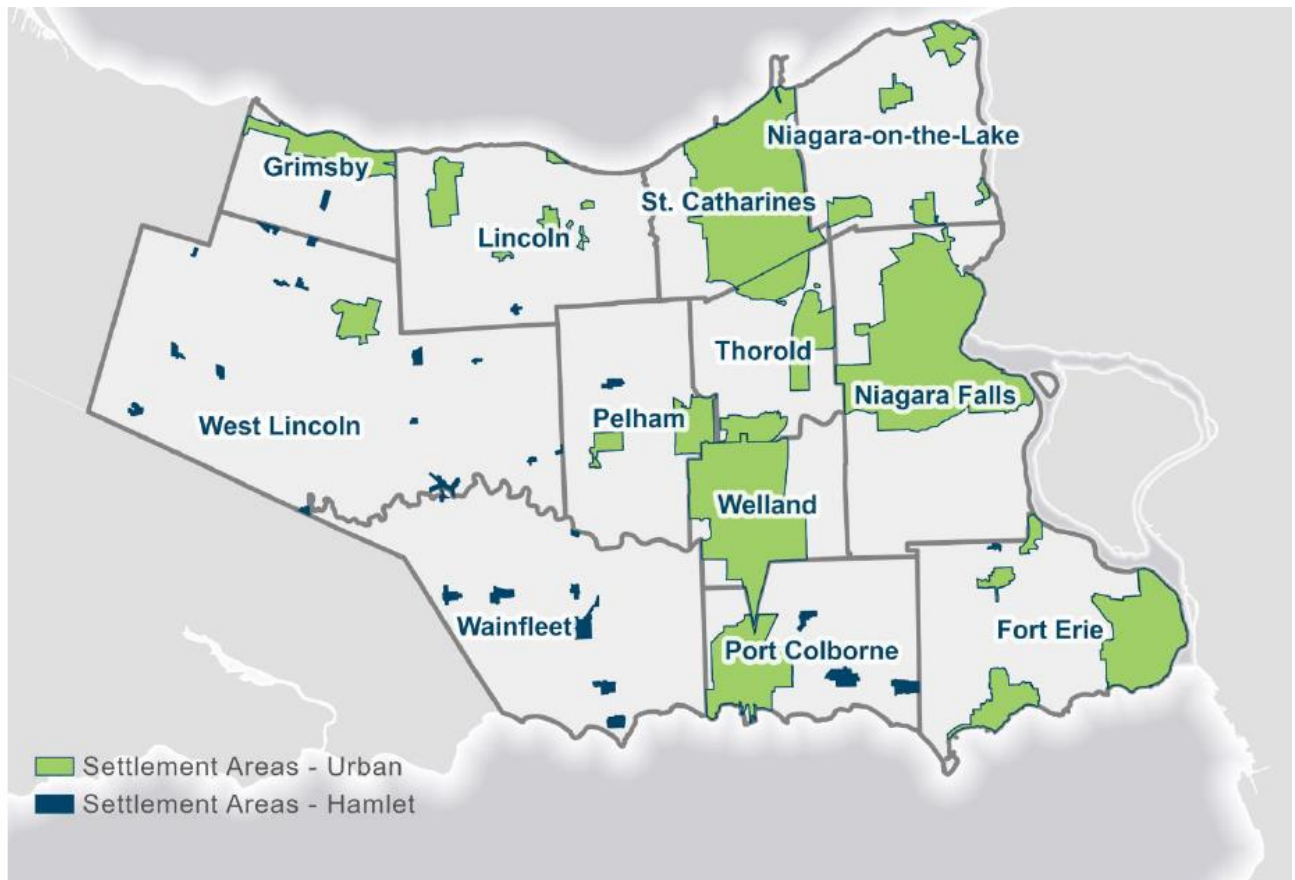
#### Population Density

- According to the 2016 census, Niagara covers 1,854 sq. km with a total population of 447,888 people and has a population density of 241.5 people / sq. km (Statistics Canada, Census Profiles)
- St. Catharines has the largest population density at 1384.8 people/sq.km
- Wainfleet has the lowest population density at 29.3 people/sq.km

Figure 6 depicts urban and rural land mix within the Niagara Region, utilizing the following definitions:

- Urban – lands located within an urban area settlement boundary where development is concentrated and which have a mix of land uses (residential, commercial, employment, institutional, etc.)
- Rural – lands that are located outside of an urban area settlement boundary which include agricultural lands, natural heritage features, and limited development options (hamlets, farming operations)
- Within the map, the grey areas represent urban settlements, which are considered urban land
- The remainder of the map is considered rural, including the orange areas, which represent existing hamlets in rural areas

*Figure 6: Niagara region rural and urban map*



\*Note this map includes Grimsby and West Lincoln which are part of the Regional Municipality of Niagara but not part of the St. Catharine's Niagara Census Metropolitan Area

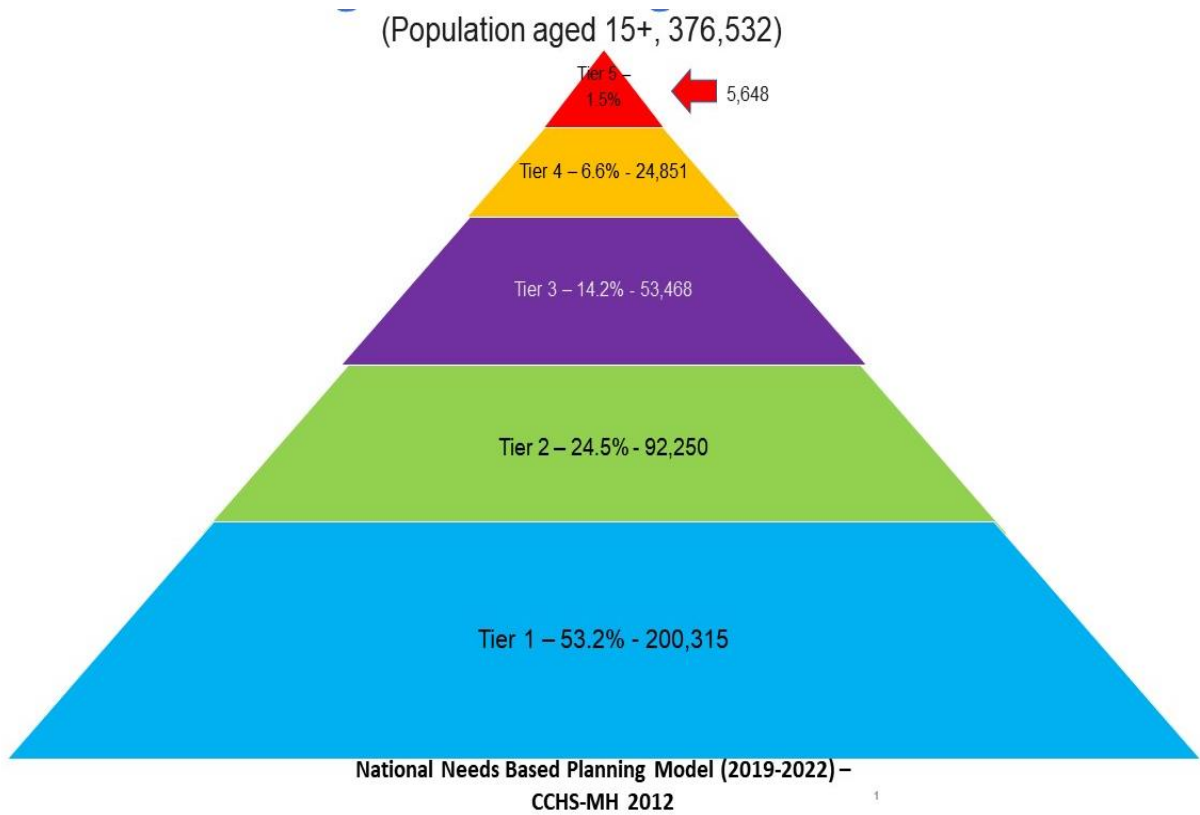
Source: Niagara Region Public Health (2021). Niagara Priority Profile: Rural and Urban, Version 1.  
<https://www.niagararegion.ca/health/equity/priority-profiles.aspx>

### **Step 3: Estimating level of need**

Figure 7 shows the results of the analysis of the mental health and substance use severity population pyramid for the St. Catharine's-Niagara region area. Combining tiers 2-5, a total of 46.8% of the population are at some level of risk and need for mental health and substance use services – the large majority in Tier 2 where these needs can perhaps be met with relatively brief and low intensity advice and consultation. While a comparatively small percentage of the area's population are classified in the upper Tiers 4 and 5 (6.6% and 1.5% respectively), together they represent a considerably large number of people with significant and complex needs, including the need for integrated/collaborative mental health and/or primary health services for those with concurrent mental illnesses and other health issues.

It is important to keep in mind that these data will under-represent the overall level of need for mental health and substance use services, given the exclusion criteria for the Canadian Community Mental Health population survey (e.g., Indigenous populations on reserve, homeless, institutionalized). Although excluded from the survey population, they are somewhat represented in the population pyramid below since they are included in the region's population statistics. Although represented in absolute numbers, their level of need will, however, be under-estimated because the unique population pyramids for these populations could not be estimated with existing data.

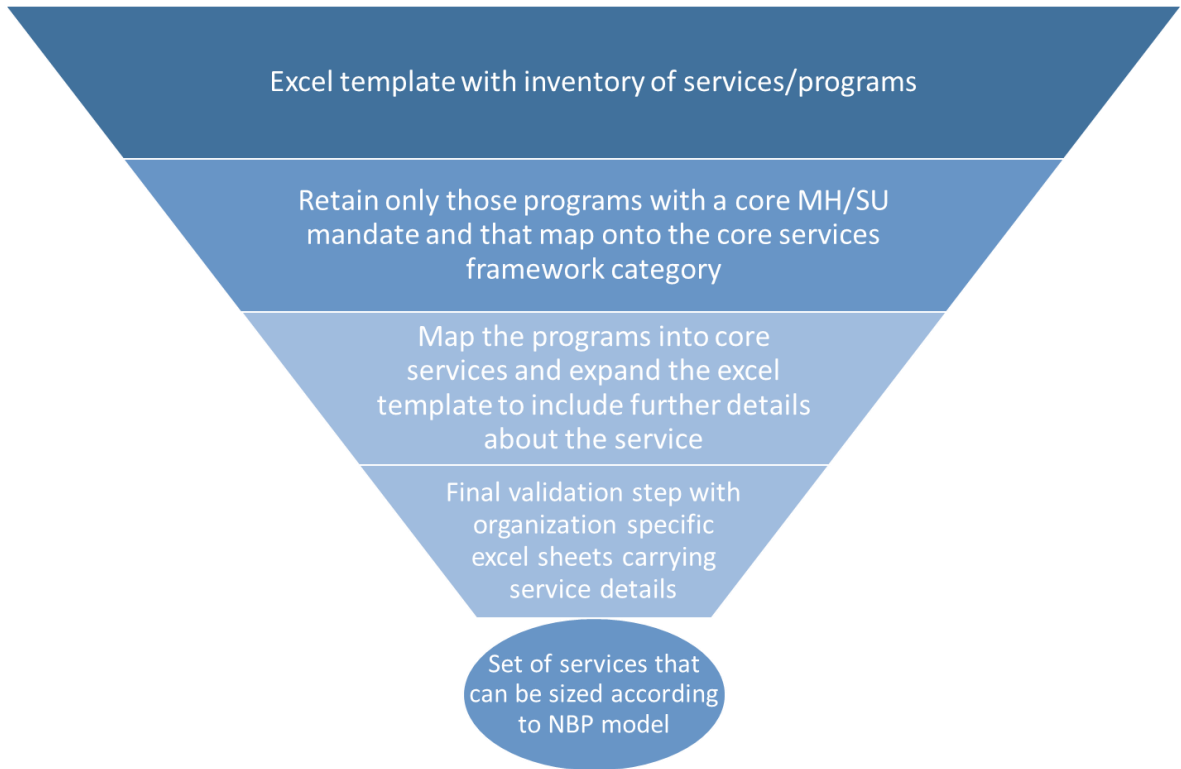
Figure 7: CCHS Severity Tiers



#### Step 4: Mapping the system

Figure 8 summarizes the system mapping methodology that was used to create an inventory of services that can be sized according to the NBP model.

**Figure 8: Graphic representation of the system mapping methodology**



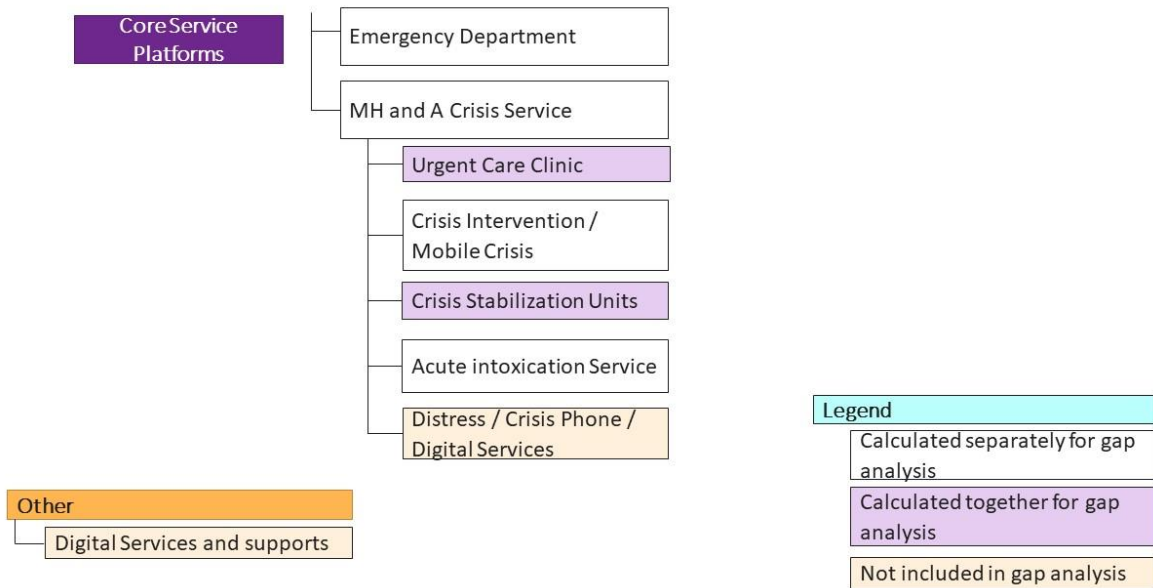


## Step 5: Sizing

The charts below graphically depict the core service categories that were mapped on to the services available in the Niagara region. A brief description of these categories is included in the sections below.

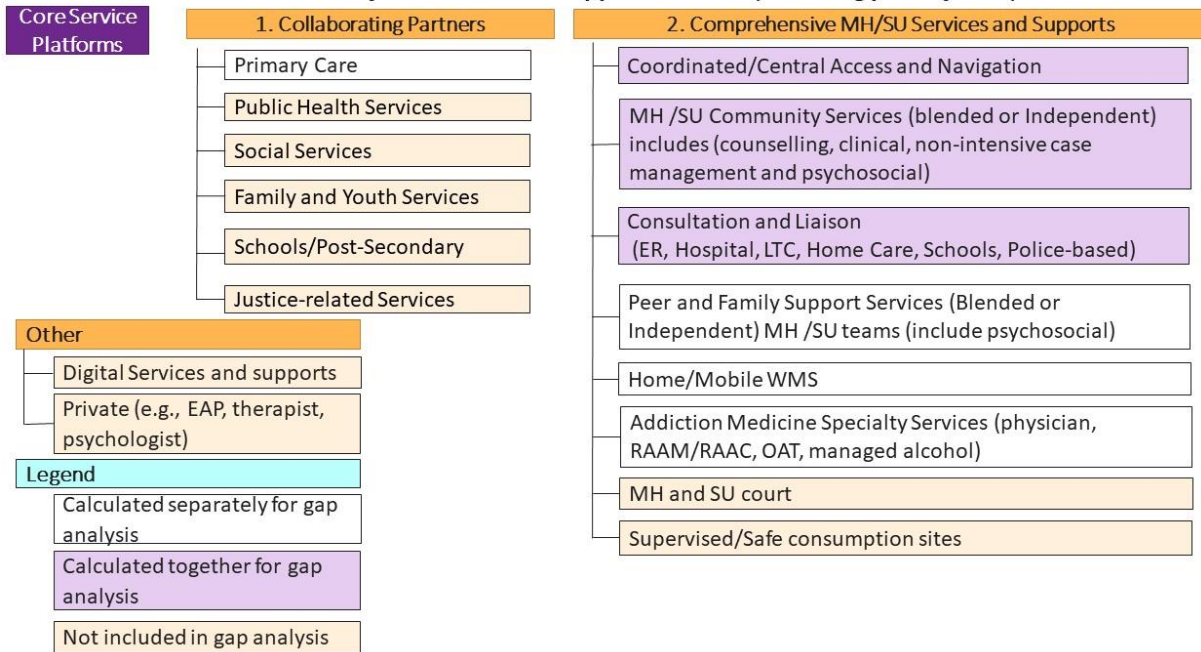
### *Emergency and Crisis Response*

## Function A. Emergency and Crisis Response

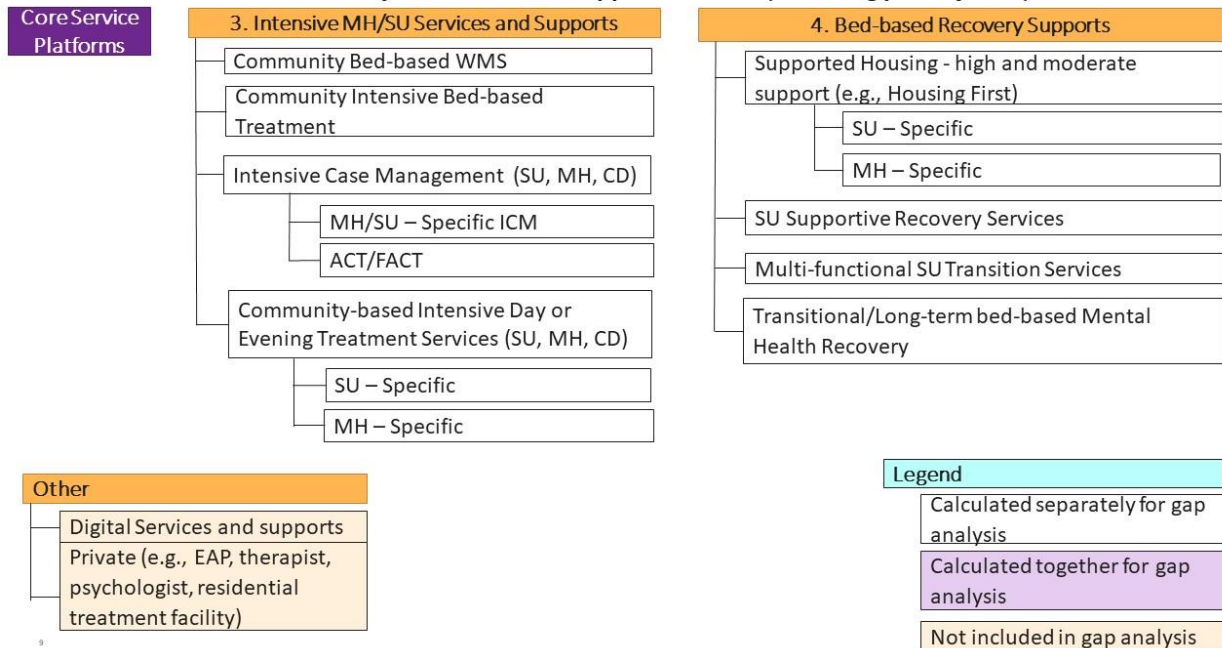


Overview of Community Treatment and Support Services

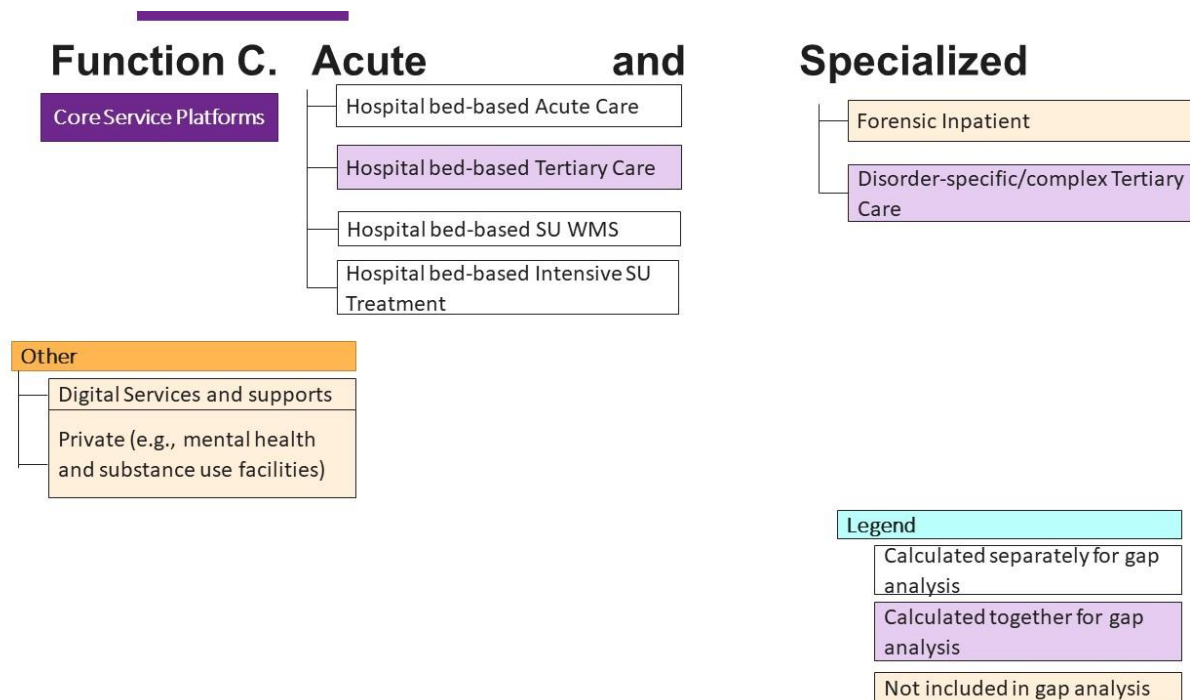
**Function: B. Community Treatment and Support Services (including primary care) – Part 1**



**Function: B. Community Treatment and Support Services (including primary care) – Part 2**



## Overview of Acute and Specialized Services



### Step 6: Estimating current core services supply and utilization

In this step, the NBP team worked to estimate the current core services supply and utilization by identifying where there are gaps (and potential surpluses) in each of the Core Services.

### Step 7: Gap Analysis – by Core Service Category (number of individuals, FTE’s or Beds)

In this step, several meetings were organized with a focus on validating the initial findings. It included:

- identifying areas that the small working group found to be inaccurate or odd,
- following up with contributing stakeholders to review data submissions,
- re-examining the excel spreadsheets for errors or omissions, and
- presenting data findings to the larger Niagara stakeholder group, responding to questions and verifying the data.

## Step 8: Interpretation - Implications of the Gap Analysis

In this step, the NBP team worked closely with the Niagara working group to review the executive summary document and the key findings document. The team received and incorporated feedback on these documents, and provided additional details where requested. A power point presentation was made to the larger Niagara stakeholder group. This presentation included key findings from the gap analysis and also provided context to interpret the findings.

### *Key Considerations for interpretation of findings:*

When reviewing the following information, it will be important to keep the following points in mind:

- The term core service typically implies “universal” access within a given geographic jurisdiction, including concrete provision, and accountability for ensuring that access is possible in another jurisdiction if not available geographically (e.g., given economies of scale some specialized services cannot realistically be available in all local areas). Core services should also be available to all residents – that is, that the funder should ensure there is adequate capacity of services for individuals who need this type and level of support, while also maintaining service quality.
- The results of Needs-Based Planning are intended to complement other information at hand and the experience of the members of the Working Group. It will, however, bring an evidence-based approach to the decision-making process that others have found helpful.
- Some of the gaps that may be identified may well be best filled through resources dedicated to larger regions or even the province as a whole. Examples would include some intensive bed-based services such as hospital-based medical withdrawal management, or specialized mental health tertiary care.
- For people with mild to moderate Mental Health and Addiction challenges (E.g., Tier 2 and part of Tier 3) the model estimates the need for primary care and some other services such as peer and family support. This is important because of the significant size of the population at that level of severity and highlights the important role of these services.
- Addressing some of the identified gaps may help move the needle on already identified OHT-level performance metrics more so than others. As an example, the OHTs are using “repeat ED visits for MHA within 30 days” as one of their indicators. Investing in community services (where

a large gap is identified) will keep people healthy and well supported in the community thereby reducing pressure on the ED.

- It will be important to keep in mind that, at the present time, final funding decisions remain with Ontario Health and not the provincial OHT's and that several provincial priorities have been established at least for the immediate future. To that end the results from the pilot work nearing completion may triangulate with some of those declared priorities and also identify opportunities for future sequencing to fill identified gaps.
- The estimated need is based on 100% help seeking, meaning that we are estimating that 100% of people that need help will actually seek the help they require. Based on this assumption the resulting gap is often quite large, and unrealistic to fully address in the immediate term, but it does show the overall level of population need as well as the importance of sequencing system enhancements through careful planning.
- The population survey data upon which the community needs are estimated typically exclude certain groups. For example, people who are homeless or institutionalized (e.g., hospital or correctional facility) are not represented in underlying survey data. In addition, First Nations people living on-reserve are typically involved in other surveys. Further, problem gambling is not represented in the needs-based planning model as this is also not included in the population survey data. To compensate for some of these omissions, administrative health data have been used to supplement the community survey data.
- Given the changes in service delivery and the manner in which individuals have sought service during the pandemic, pre-covid service numbers were utilized for this pilot site.
- FTE estimates reflects the number of staff required to carry out the clinical work. Estimates have not been made for administrative FTEs that may be required to support.
- Lastly, when the Needs-based Planning process identifies a gap in a particular core service category there will still be work needed to identify the specific ways, means and service pathways to deliver that core service in the Niagara regional context. Further, it will be important to ensure that identified service delivery models will be planned and implemented according to accepted standards. In short, this is where Need-Based Planning ends and implementation of evidence-based and high-quality service improvements begins.

The following sections of the report are organized around the core services included in the Needs-Based Planning process, and sometimes bundling this together to assist in presenting the gaps and

interpretation to date. As an immediate next step, we hope this approach will help the smaller working group align the results with other work of the larger Working Group as well as provincial priorities. This should maximize success in aligning recommendations with existing and future opportunities.

For each core service (or sub-group of core services) we summarize things according to four sub-heading

- What do we mean by this core service?
- What did the gap analysis show?
- How should we interpret this result and what are the implications?

### *Mental Health/Substance Use Community Services*

#### **What do we mean by this core service?**

This is a broad category of community-based services that provide screening, assessment and implementation of individualized treatment and support plans to people with mental health and/or substance use challenges that do not require the level of treatment and supports provided through bed-based services, including hospital services. Some services in this category may be focused primarily on mental health, others on substance use and, increasingly in many jurisdictions, blended services are offered. While there are many variations within this service category, this typically involves a scheduled course of one – two-hour sessions for mental health, substance use and related problems - in group sessions or individual formats.

One challenging aspect for this community service category concerns case coordination and case management since activities and supports for these important functions vary widely in scope and intensity. Included are case coordination activities as well as case management that is typically provided by individual staff members are included. However, more intensive, team-based case management such as provided through Substance Use or Mental Health Intensive Case Management Teams and interdisciplinary Assertive Community Treatment (ACT) teams are identified as a separate core service.

Since many hospital-based mental health outpatient services provide services off-site in the community, often with strong collaborative arrangements with community mental health and substance use services, these outpatient services are also included in this category. Some of these outpatient services are population or diagnosis-specific (e.g., PTSD, Borderline Personality Disorders, Mood Disorders; Early

Intervention for Psychosis, Community Geriatric Services) although the NBP model does not project capacity requirements for these diagnosis-specific challenges at the present time.

Importantly, in the NBP model, two additional core services fall in this broad category, but which also cannot be separated out for gap analysis. This includes:

- Coordinated/Central Access and Navigation Supports: *Centralized access* typically describes a one-stop shop or a “hub and spoke” model where clients go through a central intake and assessment process after which they are referred to the level of treatment and support that best matches their strengths and challenges. The model offers a single, central point of contact to access services offered by multiple providers. *Coordinated access*, in contrast, focuses on ensuring commonality in key intake, screening and assessment processes across the participating service providers, as well as agreements on pathways and protocols for referral and transitions among the providers and beyond. The general aim of a centralized/coordinated access model is to minimize the barriers people confront in locating and accessing the help they need. Specific features of centralized/coordinated models may include multiple means of access including web-based technology and direct walk-in services; structured, validated screening and assessment tools and processes; clear and consistent processes for referrals or authority for direct admission into required services; and system navigation supports in making transitions which may include the use of peer-support workers.
- Consultation and Liaison Services which are comprised of professionals designated specifically to work as a liaison between a specialized mental health, substance use or concurrent disorder service and a community or hospital service which is frequently accessed by people with mental health or substance use challenges, including concurrent disorders. This may include consultation to one or more hospital departments, including but not limited to the ED, long-term care homes, housing services and secondary and post-secondary educational institutions

**What did the gap analysis show?** The gap analysis showed a large and significant gap in community mental health and substance use services, particularly with respect to the staff complement (Level 2) that are trained and certified to deliver evidence-based psychotherapy, and staff complement (Level 3), which presents challenges for those who require support with the planning of and referrals to

community MHA services; assistance with resolving personal or social difficulties; or general help to live independently, and healthily in the community.

### **How should we interpret this and what are the implications?**

This gap in Level 2 presents significant challenges for supporting people requiring specialized treatment such as Cognitive Behaviour Therapy (CBT); Dialectical Behaviour Therapy (DBT); and/or Mindfulness Cognitive behaviour Therapy (MCBT). However, it is important to note that this gap is based on 100% help seeking, meaning that this gap identifies the number of FTE's at this staffing level required if everyone who required help, presented for help. While this level of expertise is available through private therapists in the region, of which there are many, access to these private therapists is by no means equitable given the fee-for-service model and cost. There are also challenges with retention of therapists at this level given pay differences in other public sector services in which their skills are in demand (e.g., education). The staff complement gap in Level 3 presents challenges for those who require support with the planning of and referrals to community MHA services; assistance with resolving personal or social difficulties; or general help to live independently, and healthily in the community. While the NBP model does not tease out the resource requirements within sub-categories of this large category of community mental health and substances use services, no doubt some of the identified gap in staff complement Level 3 for community mental health and substance use services could also be directed to a Coordinated Access Service which is foundational for access to Mental Health and Addiction services and supports.

It is important to note the following about the size of this gap:

- The province has invested in the Ontario Structured Psychotherapy program, and it is anticipated that this investment will have a positive impact in filling some of this gap.
- The province of Ontario has also invested in virtual, on-line services that are available to all Ontarians, but not included in this estimate of current capacity.
- The NBP model does not tease out the resource requirements within sub-categories of this large category of community mental health and substances use services, and some additional planning work to determine the specific needs in sub- categories such as Eating Disorders, Early Psychosis Intervention and/or Psycho-geriatric services would be helpful.



<b>MH/SU Community Services (blended or Independent) includes (counselling, clinical, psychosocial)</b>	<b>Current Capacity</b>	<b>GAP</b>
<b>Level 1</b> - Physicians (Community Psychiatry)	25 Full Time Equivalents	63 Full Time Equivalents
<b>Level 2</b> - Clinicians with competencies and credentialing for highly specialized assessment and therapy	123 Full Time Equivalents  *Does not include clinicians working in private practice, education or those providing services virtually through a provincial program.	146 Full Time Equivalents
<b>Level 3</b> - Professionals with providing counselling, case coordination/management, transitional supports, medication supports, and psychosocial rehabilitation	110 Full Time Equivalents	54 Full Time Equivalents
<b>Level 4</b> - Professionals providing psychoeducation and psychosocial supports	5 Full Time Equivalents	8 Full Time Equivalents
<b>Level 5</b> - Workers with lived experience providing peer/family support or healthy living activities	9 Full Time Equivalents	106 Full Time Equivalents

*Mental Health and Substance Community Services – Peer Support*

**What do we mean by this core service?**

Peer and family support is a supportive relationship between people who have a lived experience in common. Some peer and family support services are focused on substance use, others on mental health and other in a blended service model. They have in common a shared experience with respect to mental health and/or substance use-related challenges.

Peer and family support is characterized by a set of values and processes of peer support—among them, recovery, empowerment, and hope. The most common form of peer and family support is self-help support groups where peers or family meet regularly to provide mutual support, without the involvement of professionals, and one-to-one peer and family support such as co-counseling, mentoring, or befriending. With increasing levels of recognition and government investment, there are also many types of peer and family support services that are more specialized, many of which are delivered through, or in collaboration, mainstream providers. Examples include support in housing, education, and employment; support in crisis (e.g., emergency department, and crisis services); traditional healing, especially with Indigenous people; system navigation (e.g., case management); and material support (e.g., food, clothing, storage, internet, transportation);

### **What did the gap analysis show?**

The gap analysis showed a large and significant gap with respect to peer and family support services.

### **How should we interpret this and what are the implications?**

While additional peer and family support services are clearly under-developed in the region further work is needed to assess what peer and family supports are available in local community services but not separated out for the gap analysis (e.g., intensive case management, supported housing).

Consideration should be given to the variety of ways and means to further incorporate peer and family support across the mental health and substance use treatment and support services, expanding upon the recent investment of 1.6 FTE Peer Support Worker. For example, peer and family supports, can be offered through stand-alone peer-run organizations; embedding peer and family support workers within multi-disciplinary teams; and also co-locating such workers in strategic locations including psychiatric inpatient units to assist in discharge planning or in emergency department and crisis services to assist with follow-up services. The latter model is currently being applied in Manitoba and with apparent success in transitioning those in emergency or crisis situations to peer, family, and other community-based services.

<b>MH/SU Community Services (blended or Independent) includes (counselling, clinical, psychosocial)</b>	<b>Current Capacity</b>	<b>GAP</b>
<b>Level 5</b> - Workers with lived experience providing peer/family support or healthy living activities	9 Full Time Equivalents	106 Full Time Equivalents

\*Currently in the process of hiring 1.6 FTE for the RAAM Clinic.

*Intensive Case Management/Assertive Community Treatment Teams*

**What do we mean by this core service?**

There are two important sub-categories in this category. The first category in Intensive Case Management, which can either be focused specifically on substance use or more broadly on mental health, including concurrent disorders. While this case management model is similar in many ways to the Assertive Community Treatment model (see below) clinicians have larger caseloads (20-1 client to staff ratio) ; and frequency of visits is less (1-3 times per week), and the range of services are more frequently provided through a collaborative approach with other community providers rather than through one team.

The second model is the well-known Assertive Community Treatment (ACT) team which is distinguished from other models of intensive case management by its focus on adults with serious and persistent mental illness and which challenges the management of many aspects of daily living. Highly integrated interdisciplinary teams provide assertive wraparound coordination, services, and outreach, with low client-to-provider ratio (e.g., 10-1), and high frequency of visits (1-3 times per day).

Both ICM and ACTT are meant to be integrated teams that generally includes access to medical and psychiatric supports varies, staffing generally includes case managers, peer support workers, nurses, housing specialist and access to a psychiatrist.

**What did the gap analysis show?**

The gap analysis showed a large and significant gap with respect to intensive case management services, both substance use and mental health focused.

**How should we interpret this and what are the implications?**

Case management is delivered along a continuum of low to high intensity, the highest level being Assertive Community Treatment Teams. The size of the gap identified here for this more inclusive category intensive case management is likely even larger than the results suggest since several regional services offering less intensive case management may have been included in this category rather than within the above category of community mental health and substance use services.

With this in mind, consideration should be given to:

1. Developing a shared understanding of the different types of case management services along the continuum - 1. Case Management, 2. Intensive Case Management, 3. ACT/FACT.
2. Undergoing a more complete mapping of existing case management services along the full continuum to determine where regional case management services might best be strengthened, identifying characteristics such as:
  - What organization is delivering each case management service and why.
  - How “step-up and step-down” transitions between case management services is addressed.
  - How resources are being optimized and how they may be potentially shifted to address need.

<b>Intensive Case Management Services (ICM)</b>	<b>Current Capacity</b>	<b>GAP</b>
ICM, FACT & ACT for Mental Health and Substance Use	62 Full Time Equivalents	96 Full Time Equivalents

*Community-based Intensive Day or Evening Treatment Services*

**What do we mean by this core service?**

Day/Evening treatment may be focused on either substance use or mental health challenges, the latter sometimes very specific to a grouping of diagnoses, such as PTSD, Mood Disorders, Borderline Personality Disorder or eating disorders.

Day evening treatment is sometimes referred to as “partial hospitalization” or “day hospital” and is an intensive type of non-bed-based services for individuals whose substance use or mental health-related needs are more complex than can be managed through standard outpatient services but yet do not require an inpatient stay. A structured, scheduled program of treatment and support activities is provided for a certain number of days or evenings per week (typically 4-5 days per week) and a certain number of hours per day/evening (typically 3-4 hours per day) while the client resides at home or in another setting such as a multi-functional bed-based service. There is variability in total number of hours of service per week. The distinguishing feature, however, is that there is no live-in component, although arrangements may be made with other services for accommodation while the person participates in the day/evening treatment services and supports.

As with Community Mental Health and Substance Use Services, and depending on organizational size and community context, many hospital-based mental health or substance use services deliver treatment on a day/evening basis off-site from the hospital, perhaps in collaboration with community mental health and/or substance use service, and, therefore, these services are also included in this category. These day or evening programs may be specialized in concurrent disorders.

### **What did the gap analysis show?**

The gap analysis showed a large and significant gap with respect to day/evening treatment services, both substance use and mental health focused.

### **How should we interpret this and what are the implications?**

Consideration ought to be given to the development of this intensive type of non-bed-based services for individuals whose substance use or mental health-related needs are more complex but yet do not require an inpatient stay. Some further analysis of the current regional capacity for day and/or evening treatment is required, although such analysis is unlikely to change the results significantly given the size of the gap. Given that one of the Day/Evening Treatment programs within Niagara is undergoing redevelopment, this would provide a good opportunity for the system to work together to develop a joint Day/Evening Treatment program for both Mental Health, Substance Use and Concurrent Disorders.

Evidenced Based Standards, which include Medical and Psychiatric treatment ought to be incorporated into the redevelopment of any Day/Eve Treatment Program.

<b>Day/Evening (Day Hospital, Partial Hospitalization)</b>	<b>Current Capacity</b>	<b>GAP</b>
Substance Use	300 persons serve  4 FTE	374 persons  * FTEs subject to further analysis through the regional planning process.
Mental Health	352 persons served  7.9 FTE's are at Pathstone and serve individuals 15-18.  3.2 FTE's are at NHS	2,564 persons  *FTEs subject to further analysis through the regional planning process.

*Addiction Medicine Specialty Services*

**What do we mean by this core service?**

Addiction medicine is a medical sub-specialty that deals with the diagnosis, prevention, evaluation, treatment, and recovery of persons with substance use disorders, and of people who otherwise show unhealthy use of substances including alcohol, nicotine, prescription medicine and other illicit and licit drugs. Addiction specialists may work independently or be part of another core service such as Rapid Access to Addictions Medicine (RAAM) or an Opioid Agonist Treatment (OAT) program.

**What did the gap analysis show?**

The gap analysis showed a significant gap in this category of specialized Addiction Medicine. Also, Niagara region currently has no capacity for a Managed Alcohol Program.

**How should we interpret this and what are the implications?**

While significant, the gap may be smaller than the results indicate due to the exclusion of private Opioid Agonist Treatment programs (e.g., OATC) from the analysis. Any further consideration for investing in

RAAM clinics should include these missing data so as to arrive at a more accurate estimate of the gap for specialized Addiction Medicine Services.

Addiction Medicine	Current Capacity	GAP
Addiction Medicine Specialty Services (Physician, Psychiatrist, RAAM/RAAC, OAT, Managed Alcohol)	8 Full Time Equivalents	23 Full Time Equivalents

*Continuum of Withdrawal Management Services (WMS)*

**What do we mean by this core service?**

This broad service category is comprised of:

- Acute Intoxication Services, sometimes referred to as “sobering centres”, “brief detox” or “acute sobering unit” provide safe, short-term monitoring and management of symptoms of an episode of heavy alcohol and/or other drug use that cannot be managed at home. A core objective is to minimize ED presentations related to acute intoxication. There are two models of acute intoxication services – one community-based and other hospital based, the latter typically connected to the ED itself. These two models exist along a continuum of what could be described as “medically monitored” to “medically managed”. Length of stay is brief, typically less than 24 hours although this will be somewhat longer in hospital-based models for medical management.
- Community home or mobile WMS provide supports in the person’s home or other safe accommodation via on-site visits or via Internet-based supports. It may also involve visits to a central location (e.g., community addictions program, or a “safe home” in the community) during the day, while returning home at night. This is sometimes referred to as “daytox”. Length of services depends on the range of supports offered, included access to low intensity case management after the immediate needs for safe withdrawal have been met.
- Community Bed-based WMS involves withdrawal management supports in a non-hospital, bed-based setting, and although “community-based”, these services are often sponsored or otherwise administratively linked to a hospital to ensure quick access on an as-needed basis for medical emergencies. These community-based services may, however, provide some medical

management and include a medical assessment and regular supports during the withdrawal process by physician, nurse practitioner, other nursing and/or other health care worker. The intensity of the medical management and monitoring varies by setting, and withdrawal may be supported with or without medication management. Length of stay is typically 8 days.

- Hospital Bed-based WMS involves withdrawal management supports in a health care setting for stabilization, withdrawal management and medical and psychosocial supports. While many community bed-based WMS services also offer medical supports, the hospital-based services in this category provide access to a significantly higher level of individualized medical and mental health treatment and support. This may include medication management such as tapering from opioids with a goal being to transition to in-house or externally offered Opioid Agonist Treatment, or other treatment and support depending on client choice for that option. Length of stay is typically less than 7 days but this can be quite variable depending on individual strengths and needs.

### **What did the gap analysis show?**

The gap analysis showed an adequate capacity at present for Community-Bed-based Withdrawal Management Services but no current capacity for the other WMS options within this broad category.

### **How should we interpret this and what are the implications?**

As in many other jurisdictions investments have not been made to diversify the continuum of withdrawal management services. In terms of sequencing investments to address the gaps in this continuum consideration should be given to determining an In- Home/Mobile WMS alternative for the region. There are Ontario examples to draw upon as well as other provinces. Research in BC has shown this model can reduce ED presentations for substance use. Further, it will be important to carefully plan for transitions from the RAAM-based Addiction Medicine Services and any new mobile/home-based WMS services, as well as the existing Community Bed-based WMS.

With respect to a specialized Acute Intoxication Service, while there are also models to draw upon from other jurisdictions further information is needed. For example, it will be important to determine the full nature and scope of involvement of the current Niagara EDs and related medical departments in



provision of short-term services for individuals who are presenting with acute intoxication. There may value in exploring how a more formalized organized model for provision of acute intoxication services could streamline current activities and better meet the needs of people presenting with the full range of acute intoxication challenges, including addressing the concurrent mental health issues. Given that six new psychiatric emergency beds are being planned for a Niagara Falls site, there may be an opportunity to utilize two of these six new beds and create a two bed Acute Intoxication Service in the ED/located in close proximity to the ED.

Although there is no capacity in the Niagara region for a Hospital Bed Based WMS at the present time this is more of an OH West (or even provincial issue). For the current Community bed-based WMS, consideration should be given to assessing the need for additional in-house medical supports.

<b>Continuum of WMS</b>	<b>Current Capacity</b>	<b>GAP</b>
Acute Intoxication Service	0 Beds	3 Beds (projected need, not gap)
In Home/Mobile WMS	0 FTEs	20 Full Time Equivalentents
Community Bed Based WMS	19 Beds	0 Gap
Hospital Bed Based WMS	0 Beds	5 Beds (projected need, not gap)

*Substance Use Bed-based Treatment Continuum*

**What do we mean by this core service?**

This broad service category is comprised of:

- Community Intensive Substance Use Bed-based Treatment whereby clients reside on-site and participate in a structured, scheduled program of interventions and activities with access to 24-hour support. While considerable variability exists within and across jurisdictions in program structure and activities a harm reduction approach is recommended which, among other things, means meeting people where they are at in their recovery journey; accepting people into treatment who are being treated with opioid agonist treatment and acceptance of relapse as part of the recovery journey. Quality of life and well-being are among the criteria for successful outcomes, which may or may not also include complete abstinence, depending on the

individual's treatment goals. Programs generally range from 30-90 days with a variable length of stay recommended based on client strengths and needs.

- Supportive Recovery Services which provide temporary accommodation in a safe supportive, recovery-oriented environment often as a step down from intensive bed-based substance use treatment. These services may also be accessed when there is a high risk of relapse and individuals may simultaneously access outpatient and other community treatment services and supports. Programs generally range from 30-90 days but may be six months or even longer depending on program structure and target populations served.
- Multi-functional Substance Use Transition Services offer a variable length stay up to a maximum of 30 days of support (as a guideline) for physical, social, and psychological stabilization for people with moderate to severe substance use disorders. A key distinguishing characteristic is that there is minimal in-house programming given the focus on rest and stabilization. A focus on rest and stabilization, with minimal in-house programming, allows the individual to plan for entering a residential or non-residential treatment service (e.g., while on a wait list after withdrawal management). These transition beds may also be used to help the person make the transition from a residential service to a community non-residential service, for example after housing in the community has stabilized. In some cases, these beds can be part of a mobile withdrawal management program. (e.g., STAR beds in BC or Manitoba).
- Hospital Bed-based Substance Use Treatment, commonly referred to as “inpatient substance use treatment” or perhaps a “concurrent disorders unit” this involves a number of designated beds for stabilization, assessment, treatment and psychosocial supports for people with severe substance use disorders. This may be preceded by a period of medically supported withdrawal management. The distinguishing characteristic of these bed-based substance use treatment services is their capacity to offer in-house treatment of significant health, mental health, and other complex conditions. A variable length of stay is recommended but is typically over 21 days or longer based on clinical presentation. This core service also includes specialized beds for people with opioid use disorder (typically a 4-5 month stays) who have a high level of mental health and other co-morbidities .

### **What did the gap analysis show?**

The gap analysis showed a significant gap across all components of this continuum for bed-based substance use treatment and support.

### How should we interpret this and what are the implications?

Interpretation of the results is challenged by the fact that Ontarians may access this continuum of bed-based substance use services within or outside their home region. In terms of sequencing any new investments in this continuum, time will be needed to assess impact of recent provincial investments and which Niagara residents may access. Further changes are underway to increase capacity at Newport which will call for a re-assessment of the gap. Lastly, efforts to better support and transition people utilizing hospital-based services such as the EDs and the Psychiatric Emergency beds in Niagara Falls may well change regional demand for bed-based substance use treatment and support.

More immediate consideration should be given investigating potential capacity in the region for Multi-Functional Substance Use Transition Services and for further assessing regional needs for Supportive recovery Services where the gap was large and significant

<b>Continuum of Bed Based Substance Use Services</b>	<b>Current Capacity</b>	<b>GAP</b>
Multi-functional Bed Based Substance Use Services	0 Beds	74 Beds (currently 0 capacity in the system)
Community Bed Based Substance Use Services	35 Beds	61 Beds
Supportive Recovery Bed Based Substance Use Services	57 Beds	108 Beds
Hospital Bed Based Substance Use Services	0 Beds	38 Beds (currently 0 capacity in the system)

### *Primary Care*

#### **What do we mean by this core service?**

People commonly receive primary care services from physicians (general practitioner or family physician) or a nurse practitioner and this can be in solo or group practices or other service delivery models such as a family health team. Such primary care services are critical components of the overall community treatment and support services with mental health and substance use challenges; what are termed core collaborating service providers in the national core services framework.

For people with mild to moderate mental health and/or substance use challenges the primary care service may provide structured screening and brief intervention and referral to specialized services if needed. Primary care practitioners may also provide counselling, and medication management for people across a wide spectrum of severity living in the community.

### **What did the gap analysis show?**

The gap/surplus for Primary Care is unknown as this information was unavailable, though it is projected that almost 170,000 people in the region could benefit from this support from their Primary Care Provider for a Mental Health or Substance Use issue.

### **How should we interpret this and what are the implications?**

There are challenges interpreting this gap analysis for primary care for two important reasons. The first is that current data were not available on the number of people currently accessing these services and secondly, it would be rare indeed for a primary care professional to dedicate all their time to this important population. Without a quantitative estimate of the size of the gap the information is still important and shows:

- the importance of including primary care in the planning process (e.g., discussions about coordinated access);
- identifying the role of primary care in specific service pathways, and for specific populations (e.g., medication management for substance use or specific mental health challenges after specialized stabilization and treatment);
- advocating for continuing and perhaps enhanced training for primary care professionals in mental health and substance use, especially in the areas of screening and brief intervention;
- support for primary care professionals to be a part of a team that are able to support those individuals with complex needs, those who are marginalized and/or those who experience homelessness;
- the need for primary care providers to be attached to community mental health and addiction programs (e.g., ACTT); and
- the need for primary care providers to be involved with those individuals who are experiencing less severe symptoms, but where consultation would prove beneficial.

Given the large number of individuals requiring some form of mental health and/or addiction support from their primary care providers, it is imperative that as future system planning is conducted, primary care providers must be active partners and collaborators in the co-design of the Mental Health and Addiction System.

Primary Care	Current Capacity	Projected Need
Physicians & Nurse Practitioners	Information not available	168,561 people require Mental Health and/or Addiction care from their Primary Care Provider

### *Emergency and crisis*

#### **What do we mean by this core service?**

This broad service category is comprised of:

- Emergency Departments (ED), including those that are specialized in mental health and substance use and which may be affiliated with a specialized mental health facility.
- Urgent Care Clinics, including those specialized in mental health and substance use, and which offer walk-in support to those with less urgent needs than typically requiring support in an ED.
- Crisis Stabilization Units which are 24/7 bed-based services that offer a short-term alternative to acute hospital-based care, providing crisis response and assessment and short-term interventions.
- Crisis Intervention Services which may be delivered through a mix of options including a mobile crisis team, distinguished for its outreach capacity, and sometimes including police officers, and/or located on site at a hospital for walk-in support as well as via telephone and/or Internet-based contact.

The focus of all these options is to support the management of an acute situation with the goal being to transition the individual to the next appropriate level of treatment and support based on individual

strengths and needs, for example, inpatient services in the hospital or follow-up and continuing treatment and support in community-based services.

**What did the gap analysis show?**

The analysis shows a heavy overreliance on crisis services in the region, and no doubt this is as a result of the under supply in community-based resources. Simply put, people are utilizing crisis services because the services they need are not available in the community.

**How should we interpret this and what are the implications?**

Given that local stakeholders report very heavy use of the existing crisis services, and the number of people in receipt of Crisis services is more than triple that of the projected need, the data from the gap analysis should NOT signal a need to reduce current capacity. Rather the data illustrate the inter-connectedness of all the components of a mental health and substance use treatment and support system and signal the need to invest in those community-based resources. When the gap in community services are in place (e.g. Supportive Housing, an adequate number of Level 2 and Level 3 clinicians, a streamlined Coordinated Access Service, a full continuum of Case Management services, a full continuum of Withdrawal Management Services), the reliance on crisis services will be reduced.

<b>Emergency and Crisis</b>	<b>Current Capacity</b>	<b>GAP</b>
Emergency Department	4 Beds	0 Beds
Urgent Care/Stabilization Unit	11 Beds	Over capacity (+9)
Crisis Intervention/Mobile Crisis	4,344 people being served	1,191 people requiring service  (Note: This estimate is provided with the understanding that all other parts of the system would be in place, thereby reducing the reliance on Crisis Services).

*\*Niagara Health has a capital project underway to develop another site in Niagara Falls (the ‘South Niagara Site’). The plan submitted by Niagara Health for this project includes include a second Psychiatric Emergency Service with 6 observation beds and is anticipated to open in 2027. Inpatient acute mental health will remain at the St. Catharine’s Site.*

## *Supportive/Supported Housing - High and Moderate Support*

This core service category includes a large number and variety of service delivery models.

- In Supportive Housing, housing and support are linked, with staff members providing various levels of support within the residences. This type of housing usually features group home settings but can sometimes include low-support, self-contained apartments.
- In Supported Housing, housing and support are separate functions. There are no staff members on-site. Support services are provided from outside the home, usually in the form of case management. Supported housing usually consists of independent apartments, housing co-operatives or other government-funded social housing for people with low income. Important features included social support, good housing quality, privacy, a small number of residents and resident control.
- Some jurisdictions such as Ontario provide Substance Use-Specific Supported Housing and in others (indeed the majority of Canadian jurisdictions) the housing supports are targeted at needs related to both mental health and substance use.
- The “Housing First” model encompasses both a set of key principles (e.g., housing is a basic human right; the separation of housing and services; personal choice and self-determination, recovery orientation and harm reduction) as well as key features such as scattered-site housing and independent apartments and provision of significant supports for mental health and substance use (e.g., an ACT or ICM team). Importantly, housing is provided first and then supports are provided including physical and mental health,
- Supportive and supported housing are similar in many respects (e.g., provision of housing and supports such a medication management when needed), focusing on community integration). Coupled with case management, persons living in supportive or supported housing can also be linked to a wide variety of social services as job training, life skills training, community support services (e.g., childcare, educational and recreational programs, support groups).
- “Low barrier” housing is another approach to supported housing for individuals with substance use challenges who are continually at risk of being homeless, or who are homeless and require a safe place to live. There is no requirement for the person to be abstinent or involved in treatment to access this housing. However, it is important to note that in some jurisdictions an important distinction is drawn between sober housing and other low-barrier housing.

- Importantly, the capacity requirements for Supportive/Supported Housing also includes estimated level of need for financial supports through rent supplements or other means of financial subsidy. Rent supplements are also often included in Supported Housing models, for example in Ontario. The NBP model can separate out supported or supportive housing, inclusive of rent supplements, from subsidized housing.

**What did the gap analysis show?**

The gap analysis showed a large and significant gap with respect to supported /supportive housing, including of rent supplements. Results also showed a large need for subsidized housing for people with mental health and substance use challenges.

**How should we interpret this and what are the implications?**

The need for supported/supportive housing is significant and is no doubt impacting other parts of the system in such as the over reliance on Crisis services or the large and increasing number of people living in homelessness. The necessity of the basic need of a place to live before attending to anything less critical such as obtaining a job or attending to substance use issues must be highlighted here as a system priority. The number of people estimating as needing rent subsidies (n= 11,277) is more challenging to interpret since data are not currently available on the number of people with mental health and substance use challenges currently receiving some form of rent subsidy. This is important information to gather for future planning.

While implications for planning are complicated given that Supportive Housing in Ontario spans many ministries, and all of these different ministries provide some variation of supportive housing to individuals living with Mental Health and Addiction issues, it highlights the need for all parts of the community and all parts of government to work together.

Finally, it is important to note that all of these numbers are distinct from the need for affordable housing for the general population of Niagara.

<b>Supportive Housing</b>	<b>Current Capacity</b>	<b>GAP</b>
Substance Use Supportive Housing	40 Units/Beds	552 Units



Mental Health Supportive Housing	328 Units/Beds	1,618 Units
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### *Mental Health Bed-based Continuum*

#### **What do we mean by this core service?**

This broad service category is comprised of:

- Hospital Bed-based Acute Care commonly referred to as an Acute Inpatient Psychiatry Unit (AIPU), General Psychiatry Unit (GPU) or Mental Health Unit (MHU) or just under the broad umbrella of “acute care inpatient psychiatry” (this category includes Psychiatric Intensive Care Units/Beds – PICU). This involves a number of designated beds for stabilization, assessment, treatment and support for people experiencing an acute mental health condition and who may need safety monitoring, stabilization, assessment, treatment and support, including but not limited to medication management. Length of stay can be variable but often the anticipated duration is 1-2 weeks, and which may complement additional services provided through longer stay inpatient units. The focus is on support in managing an acute situation with the goal being to transition the individual to the next appropriate level of treatment and support based on individual strengths and needs, for example, longer term inpatient or outpatient, community-based services. As such the focus of these services is two-fold – treatment and support as an inpatient but also discharge planning to other appropriate supports.

- Hospital Bed-based Tertiary Care commonly referred to as “a psychiatric or mental health facility”, this involves a number of designated beds for longer-term stays than for the acute care mental health services. That being said, admissions can be quite variable in terms of duration. The focus is on assessment, treatment and support for people experiencing severe and refractory mental illness who have not responded to treatment and/or have difficulty maintaining successful community tenure despite exhausting all available supports and interventions. Where possible, the aim is to transition the individual to outpatient, community-based services for ongoing treatment and psychosocial support. Some of these tertiary care services may have highly specialized units, for example, for people with Acquired Brain Injury, and may be considered in the core service category Disorder-Specific/Complex Tertiary Care (e.g., Psychogeriatrics, Acquired Brain Injury) or Inpatient Forensics.
- Transitional/Long-term Bed-Based Mental Health Recovery, which includes several sub-categories that vary across provinces and territories. In Ontario, the longer-term facilities typically fall under the jurisdiction of Homes for Special Care (HSC), the Ministry of Health and Long-Term Care province-wide residential care program for adults with serious mental illness. The HSC Program offers more than just residential group homes and, depending on location/site, includes a variety of services to assist people to explore and fulfill life expectations beyond psychiatric stabilization and health maintenance. Note: the name of the HSC program has recently changed in Ontario and is now known as Community Homes for Opportunity in Ontario.
- Transitional/Long-term Bed-based Mental Health Recovery – (Respite), this Core Service is the same as described above, except that this service is specifically for individuals living with a Developmental Disability.

Other terms and examples include:

- Licensed Community Residences which provide supervision (24 hours a day, 7 days per week) and with professional staff available to assist residents as needed, including managing the storing and dispensing of patients' medications.
- Supported Living Homes which offer staff support during certain daytime hours and where residents are responsible for taking their own medication.

**What did the gap analysis show?**

The gap analysis showed that there was a gap in the capacity for Hospital-based Acute Care; Hospital-Based Tertiary Care; and Long-term bed-based Mental Health Recovery/Transitional – Homes for Special Care (now known as Community Homes for Opportunity).

**How should we interpret this and what are the implications?**

Based on these data, new investments in Hospital Based Acute Care, and Long-term bed-based Mental Health Recovery/Transitional – Homes for Special Care (now known as Community Homes for Opportunity) are needed. Interpretation and implications of the gap in hospital-based tertiary care is challenged by the need to consider the availability and accessibility of these longer-stay resources outside the region, for example in Hamilton but also beyond.

<b>Mental Health Bed Based Continuum</b>	<b>Current Capacity</b>	<b>GAP</b>
Hospital Based Acute Care	60 Beds	38 Beds
Long-term bed-based Mental Health Recovery/Transitional – Respite  Note: This service is only for people living with a Developmental Disability.	Information not available	129 Beds *Projected Need (not the gap)
Long-term bed-based Mental Health Recovery/Transitional – Homes for Special Care (now known as Community Homes for Opportunity)	56 Beds	30 Beds
Hospital bed-based Tertiary Care OR Disorder-specific/complex hospital bed-based	38 Beds	46 Beds

## 3.0 Summary of Highlights

### Key Findings:

**1. Gap in Community Treatment and Support Services:** The gap analysis showed a large and significant gap in community mental health and substance use services, particularly with respect to the staff complement (Level 2) that are trained and certified to deliver evidence-based psychotherapy. The staff complement gap in Level 3 presents challenges for those who require support with the planning of and referrals to community MHA services; assistance with resolving personal or social difficulties; or general help to live independently, and healthily in the community. While the NBP model does not tease out the resource requirements within sub-categories of this large category of community mental health and substances use services, no doubt some of the identified gap in staff complement Level 3 for community mental health and substance use services could also be directed to a Coordinated Access Service which is foundational for access to Mental Health and Addiction services and supports.

**2. Fulsome Continuum for Withdrawal Management Services (WMS):** The gap analysis showed that there are gaps in the continuum of withdrawal management services. Consideration should be given to developing an In-Home/Mobile WMS alternative for the Niagara region, and how a more formalized organized model for provision of Acute Intoxication Services with Niagara could streamline current Emergency department activities. Further consideration for Hospital Bed Based WMS ought to be viewed in the context of the large OH Region. **Note:** There must be a medical component to both of these new services. There is no need for further investment in Community Bed Based WMS.

**3. Intensive Case Management:** The gap analysis showed a large and significant gap with respect to intensive case management services, both substance use and mental health focused. The size of the gap identified here for intensive case management is likely even larger than the results suggest since several regional services in Niagara offering less intensive case management that may have been included in this category during this pilot work. Consideration should be given to developing a shared understanding of the different types of case management services along the continuum - 1. Case Management, 2. Intensive Case Management, 3. ACT/FACT, and doing a more complete mapping of existing case management services along the full continuum to determine where regional case management services might best be strengthened.

**4. Fulsome Continuum for Bed Based Substance Use Services:** The gap analysis showed a significant gap across all components of this continuum for bed-based substance use treatment and support. In terms of sequencing any new investments in this continuum time will be needed to assess impact of recent provincial investments and which Niagara residents may access. More immediate consideration should be given investigating potential capacity in the region for Multi-Functional Substance Use Transition Services and for further assessing regional needs for Supportive recovery Services where the gap was large and significant. Further consideration for Hospital Bed Based Substance Use services ought to be viewed in the context of the large OH Region.

**5. Supportive Housing:** The gap analysis showed a large and significant gap with respect to supported supportive housing, including of rent supplements. The need for supported/supportive housing is significant and is no doubt impacting other parts of the system in such as the over reliance on Crisis services or the large and increasing number of people living in homelessness. The necessity of the basic need of a place to live before attending to anything less critical such as obtaining a job or attending to substance use issues must be highlighted here as a system priority.

**6. Community Based Day/Evening Treatment Services (SU, MH, or CD):** The gap analysis showed a large and significant gap with respect to the number of individuals being served by intensive Day/Evening treatment services, both substance use and mental health focused. Some further analysis of the current regional capacity for Day and/Evening treatment is required, although such analysis is unlikely to change the results significantly given the size of the gap. Given that one of the Day/Evening Treatment programs within Niagara is undergoing redevelopment, this would provide a good opportunity for the system to work together to develop a joint Day/Evening Treatment program for both Mental Health, Substance Use and Concurrent Disorders. Evidenced Based Standards, which include Medical and Psychiatric treatment ought to be incorporated into the redevelopment of any Day/Eve Treatment Program.

**7. Peer Support:** The gap analysis showed a large and significant gap with respect to peer and family support services. While additional peer and family support services are clearly under-developed in the region further work is needed to assess what peer and family supports are available in local community services but not separated out for the gap analysis.

**8. Addiction Medicine:** The gap analysis showed a significant gap in this category of specialized Addiction Medicine. Also, Niagara region currently has no capacity for a Managed Alcohol Program. While significant, the gap may be smaller than the results indicate due to the exclusion of private Opioid Agonist Treatment programs (e.g., OATC) from the analysis. Further consideration for investing in RAAM clinics should include these missing data so as to arrive at a more accurate estimate of the gap for specialized Addiction Medicine Services.

**9. Emergency and Crisis:** The analysis shows a heavy overreliance on crisis services in the region, and no doubt this is as a result of the under supply in community-based resources. Given that local stakeholders report very heavy use of the existing crisis services, and the number of people in receipt of Crisis services is more than triple that of the projected need, the data from the gap analysis should NOT signal a need to reduce current capacity. Rather the data illustrate the inter-connectedness of all the components of a mental health and substance use treatment and support system and signal the need to invest in those community-based resources. When the gap in community services are in place (e.g. Supportive Housing, an adequate number of Level 2 and Level 3 clinicians, a streamlined Coordinated Access Service, a full continuum of Case Management services, and a full continuum of Withdrawal Management Services), the reliance on crisis services will be reduced.

#### **10. Mental Health Bed Based Continuum:**

Based on these data, new investments in Hospital Based Acute Care, and Long-term bed-based Mental Health Recovery/Transitional – Homes for Special Care (now known as Community Homes for Opportunity) are needed. Interpretation and implications of the gap in hospital-based tertiary care is challenged by the need to consider the availability and accessibility of these longer-stay resources outside the region, for example in Hamilton but also beyond.

#### **11. Primary Care**

While the size of the gap in primary care support for mental health and addictions is unknown, it was estimated, for example, that almost 170,000 people in the region could benefit from this support. There are challenges interpreting this gap analysis for primary care for two important reasons. The first is that current data were not available on the number of people currently accessing these services for MHA issues and secondly, it would be rare indeed for a primary care professional to dedicate all their time to

this important population. Without a quantitative estimate of the size of the gap the information is still important and shows:

- the importance of including primary care in the planning process (e.g., discussions about coordinated access);
- identifying the role of primary care in specific service pathways, and for specific populations (e.g., medication management for substance use or specific mental health challenges after specialized stabilization and treatment);
- advocating for continuing and perhaps enhanced training for primary care professionals in mental health and substance use, especially in the areas of screening and brief intervention.

## 4.0 Recommendations for Niagara Region Planners and Health Service Providers

The recommendations below reflect both the quantitative analysis and the experience and knowledge of the Niagara Working group.

### ***Priority Areas for Investment:***

1. **Mental Health/Substance Use Community Services:** Investment in ***Level 2 clinicians*** who are able to provide specialized treatment.
2. **Continuum of Withdrawal Management Services (WMS):** Diversify the continuum of WMS services with the development of an ***In-Home/Mobile WMS***, and the development of an ***Acute Intoxication Service*** (within or within close proximity of the Hospital Emergency Department). There may be an opportunity here to utilize two of the new psychiatric emergency beds to create two Acute Intoxication beds. **Note:** There must be a medical component to both of these new services.
3. **Substance Use Bed-based Treatment Continuum:** Diversify the continuum of Substance Use Bed-Based Treatment starting with the development of a ***Multi-functional Substance Use Transition Service***.
4. **Supportive Housing:** Investment in ***new supportive housing units*** and rent supplements within the region.

5. **Addiction Medicine Specialty Services:** Consideration should be given to investing in additional Addiction Medicine services such as Rapid Access Addiction Medicine (RAAM) services and Addiction Medicine Consult (AMCS) services, and embedding medical staff (Nurse practitioners, nurses and/or physicians) into existing addiction services.

**Priority areas for System Planning work:**

1. **Community-based Intensive Day or Evening Treatment Service:** The Niagara MHA system to work together to **re-develop a robust Day/Evening Treatment** program using evidence-based standards which includes Medical and Psychiatric treatment.
2. **Intensive Case Management/Assertive Community Treatment Teams:** The Niagara MHA system to work together to develop a **shared understanding of the different types of case management services** along the service continuum, making necessary changes to optimize resources.
3. **Primary Care:** As future system planning is conducted **primary care providers must be active partners and collaborators** in the co-design of the Mental Health and Addiction System.
4. **Coordinated Access:** Focused work ought to be conducted to develop **a Coordinated Access model** that will provide individuals seeking care with seamless, easy-to-navigate, and equitable access to the right MHA service or support, at the right time. People in need will know where to go for help and what services are available.



## Appendices:

### Appendix A: CCHS 2012 Tier Severity Criteria

Level of Need	Definitions for Mental Health and Substance Use	Definitions for Substance Use
Tier 1	<p>No CIDI disorder <b>-and-</b>            No non-cannabis illicit drug use <b>-and-</b>            Prescription drug use only as prescribed <b>-and-</b>            No perceived need for care <b>-and-</b>            Drinking below (<b>our approximation to</b>) the low-risk guidelines:                Men: Up to 15 drinks per week;                    Up to 3 drinks per day most days                Women: Up to 10 drinks per week;                    Up to 2 drinks per day most days <b>-and-</b>            Cannabis use: never, <b>-or-</b> just once (past 12m or lifetime), <b>-or-</b> more than once &gt; 12m ago, <b>-or-</b> more than once in the past 12m <b>and</b> frequency was &lt; once a month.</p>	<p>No CIDI alcohol <b>-or-</b> drug disorder <b>-and-</b>            No non-cannabis illicit drug use <b>-and-</b>            Prescription drug use only as prescribed <b>-and-</b>            No perceived need for care <b>-and-</b>            Drinking below (<b>our approximation to</b>) the low-risk guidelines:                Men: Up to 15 drinks per week;                    Up to 3 drinks per day most days                Women: Up to 10 drinks per week;                    Up to 2 drinks per day most days <b>-and-</b>            Cannabis use: never, <b>-or-</b> just once (past 12m or lifetime), <b>-or-</b> more than once &gt; 12m ago, <b>-or-</b> more than once in the past 12m <b>and</b> frequency was &lt; once a month.</p>
Tier 2	<p>One <u>abuse</u> problem (out of 4) related to alcohol <b>-or-</b> cannabis <b>-or-</b> other drugs excl. cannabis, 12m</p> <p style="text-align: center;"><b>OR</b></p> <p>Binge drinking (5+ drinks on one occasion), <i>once a month -or- 2-3 times a month -or- once a week -or- more than once a week</i></p> <p style="text-align: center;"><b>OR</b></p> <p>Drinking above the LRDG:            Men: (&gt; 3 drinks per day on most days <b>-or-</b> &gt;15 drinks per week)            Women: (&gt;2 drinks per day on most days <b>-or-</b></p>	<p>One <u>abuse</u> problem (out of 4) related to alcohol <b>-or-</b> cannabis <b>-or-</b> other drugs excl. cannabis, 12m</p> <p style="text-align: center;"><b>OR</b></p> <p>Binge drinking (5+ drinks on one occasion), <i>once a month -or- 2-3 times a month -or- once a week -or- more than once a week</i></p> <p style="text-align: center;"><b>OR</b></p> <p>Drinking above the LRDG:            Men: (&gt; 3 drinks per day on most days <b>-or-</b> &gt;15 drinks per week)</p>

Level of Need	Definitions for Mental Health and Substance Use	Definitions for Substance Use
	<p>&gt;10 drinks per week)</p> <p><b>OR</b></p> <p>Any self-reported disorder, current [schz/psychosis/mood/anxiety/PTSD/learning/ADD/eating] <b>-and-</b> (no perceived need <b>-or-</b> all needs met). [PNCONEED in (1,2)]</p> <p><b>OR</b></p> <p>Any drug use, 12m, excl. one-time cannabis use</p> <p><b>OR</b></p> <p>Any prescription drug use not as prescribed</p> <p><b>OR</b></p> <p>Cannabis use more than once in the past 12m, <b>-and-</b> frequency was once a month or more.</p>	<p>Women: (&gt;2 drinks per day on most days</p> <p><b>-or-</b></p> <p>&gt;10 drinks per week)</p> <p><b>OR</b></p> <p>Any drug use, 12m, excl. one-time cannabis use</p> <p><b>OR</b></p> <p>Any prescription drug use not as prescribed</p> <p><b>OR</b></p> <p>Cannabis use more than once in the past 12m, <b>-and-</b> frequency was once a month or more.</p>
Tier 3	<p>(2–4 <u>abuse</u> problems <b>-or-</b> 1–2 <u>dependence</u> problems on any one (or more) of alcohol <b>-or-</b> cannabis <b>-or-</b> other drugs, 12m)</p> <p><b>OR</b></p> <p><b>(One</b> 12m CIDI disorder that is not alcohol, cannabis, other drugs, and bipolar I (counts major depressive episode, bipolar II, hypomania, GAD)</p> <p><b>-and-</b></p> <p>Sheehan Disability Scale &lt;4. MHPFINT=2 (not sig. interference))</p> <p><b>OR</b></p>	<p>(2–4 <u>abuse</u> problems <b>-or-</b> 1–2 <u>dependence</u> problems on any one (or more) of alcohol <b>-or-</b> cannabis <b>-or-</b> other drugs, 12m)</p> <p><b>OR</b></p> <p>Perceived need for care (needs partially met <b>-or-</b> needs not met).</p> <p>(May include some mental health comorbidity)</p>

Level of Need	Definitions for Mental Health and Substance Use	Definitions for Substance Use
	<p>(Any self-reported disorder, current [<i>schiz -or- psychosis -or- mood -or- anxiety -or- PTSD -or- learning -or- ADD -or- eating</i>])  <b>-and-</b>            Perceived needs <i>partially met -or- not met</i>)</p> <p style="text-align: center;"><b>OR</b></p> <p>Perceived need for care (<i>needs partially met -or- needs not met</i>).</p>	
Tier 4	<p>(12m alcohol dependence <b>-or-</b> 12m cannabis dependence <b>-or-</b> 12m drug dependence excl. cannabis) [AUDDYD or SUDDYCD or SUDDYOD]</p> <p style="text-align: center;"><b>OR</b></p> <p><b>(One</b> 12m CIDI disorder that is not alcohol, cannabis, other drugs, or bipolar I (counts major depressive episode, bipolar II, hypomania, GAD)  <b>-and-</b>            Sheehan &gt;=4. MHPFINT=1 (<i>significant intf.</i>.)</p> <p style="text-align: center;"><b>OR</b></p> <p><b>(2+</b> CIDI disorders including alcohol <b>-or-</b> cannabis <b>-or-</b> other drugs, interference not necessary) [alcohol abuse or dep. (12m), cannabis abuse or dep. (12m), drug abuse or dep. (12m), major depressive episode (12m), bipolar II (12m), hypomania (12m), GAD (12m)]</p>	<p>(12m alcohol dependence <b>-or-</b> 12m cannabis dependence <b>-or-</b> 12m drug dependence excl. cannabis) [AUDDYD or SUDDYCD or SUDDYOD]</p> <p><i>(May include some mental health comorbidity, but not meeting criteria for Tier 5)</i></p>

Level of Need	Definitions for Mental Health and Substance Use	Definitions for Substance Use
	<p style="text-align: center;"><b>OR</b></p> <p>(Self-reported schizophrenia <b>-or-</b> self-reported psychosis <b>-or-</b> bipolar I)</p> <p style="text-align: center;"><b>OR</b></p> <p>(Self-reported mood <b>-or-</b> anxiety <b>-or-</b> PTSD <b>-or-</b> ADD <b>-or-</b> learning disability <b>-or-</b> eating disorder)</p> <p style="text-align: center;"><b>-And-</b></p> <p>(Hospitalized overnight for a mental health, alcohol, or drug problem</p> <p style="text-align: center;"><b>-or-</b></p> <p>Had suicidal ideation)</p> <p style="text-align: center;"><b>OR</b></p> <p>K6 &gt;=13. (<i>Serious distress.</i>)</p>	
Tier 5	<p><b>Four stand-alone sets, separated by ‘OR’:</b></p> <p>(12m alcohol dependence <b>-or-</b> 12m cannabis dependence <b>-or-</b> 12m drug dependence excl. cannabis [AUDDYD or SUDDYCD or SUDDYOD]</p> <p style="text-align: center;"><b>-and-</b></p> <p>Sheehan Disability Scale &gt;=4.) (<i>AUDFINT=1 -or- SUDFINT=1 (signif. interference)</i>)</p> <p style="text-align: center;"><b>-And-</b></p> <p>(2+ CIDI disorders, 12m, that are not alcohol or cannabis or drugs (counts major depressive episode, bipolar I, bipolar II, hypomania, GAD)</p> <p style="text-align: center;"><b>-and-</b></p> <p>Sheehan Disability Scale &gt;=4.) (<i>MHPFINT=1 (signif. interference)</i>)</p> <p style="text-align: center;"><b>-And-</b></p> <p>(1+ chronic condition (<i>out of 7</i>))</p>	<p><b>Dependence and interference is required, and then either one of the two sets after AND, separated by -OR-, is required:</b></p> <p>{(12m alcohol dependence <b>-or-</b> 12m cannabis dependence <b>-or-</b> 12m drug dependence excl. cannabis [AUDDYD or SUDDYCD or SUDDYOD]</p> <p style="text-align: center;"><b>-and-</b></p> <p>Sheehan Disability Scale &gt;=4.) (<i>AUDFINT=1 -or- SUDFINT=1 (signif. interference)</i>)</p> <p style="text-align: center;"><b>AND</b></p> <p>(2+ CIDI disorders, 12m, that are not alcohol or cannabis or drugs (counts major depressive episode, bipolar I, bipolar II, hypomania, GAD)</p> <p style="text-align: center;"><b>-and-</b></p>

Level of Need	Definitions for Mental Health and Substance Use	Definitions for Substance Use
Tier 5, contd	<p style="text-align: center;">-or-</p> <p>WHO_DAS=high (90<sup>th</sup> pctile))]]</p> <p style="text-align: center;"><b>OR</b></p> <p>[(2+ CIDI disorders, 12m, that are not alcohol or cannabis or drugs (counts major depressive episode, bipolar I, bipolar II, hypomania, GAD)</p> <p style="text-align: center;">-and-</p> <p>Sheehan Disability Scale &gt;=4]. <i>MHPFINT=1 (signif. interference)</i>)</p> <p style="text-align: center;">-And-</p> <p>(1+ chronic condition (out of 7)</p> <p style="text-align: center;">-or-</p> <p>WHO_DAS=high (90<sup>th</sup> pctile))]]</p> <p style="text-align: center;"><b>OR</b></p> <p>[(Self-reported schizophrenia</p> <p style="text-align: center;">-or-</p> <p>Self-reported psychosis</p> <p style="text-align: center;">-or-</p> <p>CIDI Bipolar I)</p> <p style="text-align: center;">-And-</p> <p>(1+ chronic condition (out of 7)</p> <p style="text-align: center;">-or-</p> <p>WHO_DAS=high (90<sup>th</sup> pctile))]].</p> <p style="text-align: center;"><b>OR</b></p> <p>(12m alcohol dependence -or- 12m cannabis dependence -or- 12m drug dependence excl. cannabis [AUDDYD or SUDDYCD or SUDDYOD]</p> <p style="text-align: center;">-and-</p> <p>Sheehan Disability Scale &gt;=4.) (<i>AUDFINT=1 -or- SUDFINT=1 (signif. interference)</i>)</p> <p style="text-align: center;">-And-</p>	<p>Sheehan Disability Scale &gt;=4). MHPFINT=1 (<i>signif. interference</i>)</p> <p style="text-align: center;">-And-</p> <p>(1+ chronic condition (out of 7)</p> <p style="text-align: center;">-or-</p> <p>WHO_DAS=high (90<sup>th</sup> pctile))</p> <p style="text-align: center;">-OR-</p> <p>[(Self-reported schizophrenia</p> <p style="text-align: center;">-or-</p> <p>Self-reported psychosis</p> <p style="text-align: center;">-or-</p> <p>CIDI Bipolar I)</p> <p style="text-align: center;">-And-</p> <p>(1+ chronic condition (out of 7)</p> <p style="text-align: center;">-or-</p> <p>WHO_DAS=high (90<sup>th</sup> pctile))]].</p>

Level of Need	Definitions for Mental Health and Substance Use	Definitions for Substance Use
	<p>(Self-reported schizophrenia  <b>-or-</b>  Self-reported psychosis  <b>-or-</b>  CIDI Bipolar I)    <b>-And-</b>  (1+ chronic condition (<i>out of 7</i>)  <b>-or-</b>  WHO_DAS=high (<i>90<sup>th</sup> pctile</i>))]</p>	



## References

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<sup>i</sup> Rush, B. and Urbanoski, K. Seven core principles of substance use treatment system design to aid in identifying strengths, gaps, and required enhancements. *J. Stud. Alcohol Drugs, Supplement 18*, 9–21, 2019.

<sup>ii</sup> Rush, B., Tremblay, J. and Brown, D. Development of a Needs-Based Planning Model to Estimate Required Capacity of a Substance Use Treatment System. *J. Stud. Alcohol Drugs, Supplement 18*, 51–63, 2019.

<sup>iii</sup> Tremblay, J., Bertrand, K., et al. Estimation of Needs for Addiction Services: A Youth Model. *J. Stud. Alcohol Drugs, Supplement 18*, 64–75, 2019