Needs-Based Planning for Mental Health and Substance Use Services: Application in British Columbia

Angel Y. Wang1, Jonathan Ramirez-Lara2, Birpreet Saini3, Lonna Munro1, Haroon Ahmad1, Brian Rush4, Daniel V. Vigo1,5

1 Department of Psychiatry, University of British Columbia; 2 Factor Inwentash School Of Social Work University of Toronto; 3 Independent Contractor; 4 Centre for Addiction and Mental Health; 5 School of Population and Public Health, University of British Columbia; 6 UBC

Introduction

• A large gap in mental health and substance use (MHSU) treatment services exists in BC, as the high percentage of people in need of services surpasses current resource capacity [1].
• In Canada, the disease burden of mental and substance use disorders is usually underestimated [2].
• Health system and services planning has traditionally followed utilization-based approaches that rely on previous utilization trends to estimate future requirements [2].
• Needs-Based Planning (NBP) is a systematic, quantitative planning approach for MHSU services and supports that estimates required capacity based on the needs of the whole population and considers all levels of severity and complexity of need, adjusting for comorbidity.
• Application of the NBP model to British Columbia (BC) aims to not only build a picture of existing services (i.e., capacity, location) but also facilitate the subsequent development and implementation of key care pathways through the system, as well as perform a gap analysis.

Objective

• Partner with the BC Ministry of Mental Health and Addictions Authorities across BC to:
  • Map local services (all Health Authorities)
  • Estimate the level of need in the population (all Health Authorities)
  • Perform a gap analysis (Interior Health, First Nations)

Methods

• Utilized an NBP model that combined a BC-specific NBP model with the national substance use model
  • Expansion of the National Advisory Committee
  • Estimation of disorder-specific 12-month prevalence through a meta-analysis of representative community-based international data and sub-threshold mental health needs derived from Canadian data [3]
  • Development of a national core service framework building upon the BC model [2] and previous national work [4]
• Identification of ideal resource requirements for each disorder and severity level, utilizing expert consensus through a Delphi-like process [4]
• Structured process for estimating population level of need and mapping local services according to the Core Services Framework was undertaken for all Health Authorities
• Gap analysis was conducted to quantify supply and service gaps (number of individuals in need, required FTEs and beds) for Interior Health Authorities

Results

Steps for Implementation of NBP Model

Step 1: Engagement

Step 2: Establish geographic boundaries, population and community nuances

Step 3: Estimating population level of need by severity

Step 4: Estimating level of need for core services

Step 5: Mapping the system by core services

Step 6: Estimating current core service supply and utilization

Step 7: Gap Analysis

Step 8: Report

Output of Step 5

Inventory of Services Mapped onto Core Service Categories

Steps for Implementation of NBP Model

Objective

Steps for Implementation of NBP Model

• Gap analysis can identify significant gaps in the treatment continuum with a stronger evidence-base that facilitates planning and resourcing a more equitable balance of resources.

Discussion

• NBP allows for the needs of the whole population to be addressed in an integrated manner, bringing mental health and substance use issues together while remaining data-driven and going beyond previous service utilization trends.
• Analysis of the current system of services conducted through service mapping can inform development and implementation of key care pathways through the system by describing not only types of existent services but also distribution across other required core service categories.
• Mapping out and understanding what services exist, their capacity, location, and any other relevant information required to complete the other work streams creates a ‘living tool’ that can be used to track and evaluate the system on an ongoing basis and support future investment and policymaking.
• Process of bringing key stakeholders together allows for common definitions, sharing of information, set the stage for creating more consistent frameworks within and across Health Authorities for service planning and delivery.

Limitations of the NBP Model

• NBP should be supplemented with other community input and needs assessment information.
• Those living in homelessness, First Nations populations living on reserve, and institutionalized populations are inconsistently included in the population health data (but are represented in the final required treatment capacity estimates as these are projected for the total population of the region).
• The survey data do not reflect the needs of children and youth under the age of 15.
• Limitations in gap analysis projections due to unknown access to private substance use and mental health services.

First Nations Community Engagement

Challenges

• NBP model was not built from an Indigenous perspective, e.g. core services, level of need, perspective on strengths and solutions

Planning Approach and Objectives

• Inclusive engagement process including, local service providers, planners, community leaders, elders, and individuals/families affected by mental health and substance use health challenges
• Conduct community consultations (in-person and virtual) to:
  • Gain insight and co-produce knowledge focusing on First Nations priorities for mental health and substance use health needs and strengths
  • Understand community members’ experience with existing services and focus on enhancing service accessibility and delivery

References

5. Angel Y. Wang1, Jonathan Ramirez-Lara2, Birpreet Saini3, Lonna Munro1, Haroon Ahmad1, Brian Rush4, Daniel V. Vigo1,5

This work was generously funded by Health Canada. The views expressed herein do not necessarily represent the views of Health Canada.

angel.wang@ubc.ca