

Supplementary Appendix**Consortium on Analytics for Data-Driven Decision-Making & New Brunswick Department of Health
Health Analytics Capacity Scoping Survey 2022**

The following questions are intended to help monitor and evaluate our health analytics capacity and needs.

These questions are a follow-up to a national 2016 baseline survey. They are intended to help us prioritize where to focus our efforts for better leveraging opportunities and addressing challenges facing producers and users of health information.

Submitted by: Name: [Click here to enter text.](#)
 Title/Unit: [Manager, Click here to enter text.](#)
 Date: [Date December 2022](#)

I. DEFINITION AND SCOPE

There are many ways to define the scope of “health analytics capacity” in each jurisdiction. One way to look at capacity is to consider all human resources in the public service responsible for the analytics processes used to drive evidence-informed decisions to improve health system performance and outcomes (e.g., planning, managing or implementing the health information system; statistical and econometric analyses; disease surveillance; drug information system; health workforce information system). Please answer **all** the following questions to help provide focus areas for benchmarking analytics capabilities and identifying specific actions that might be undertaken to improve analytical maturity.

	Response
1. With the goal of coming to a common understanding of the scope of health analytics capacity, how do you define the current range of health analytics products and services (key responsibility areas) undertaken within the NB Department of Health? <i>Please check all that apply.</i>	☐ Health information and analytics governance ☐ Data acquisition, management and standards ☐ Performance measures / indicators reporting ☐ Methods development / analytics ☐ Secondary data access / Open Data ☐ IT enablers / infrastructure ☐ Other key activities – describe: Click here to enter text.
2. What do you define as the current approximate breakdown of health analytics activities in New Brunswick? <i>Please ensure percentages sum to 100%.</i>	% of analytics work done in-house within the Department of Health % of analytics work done by other public agencies mandated by the gov't % of analytics work done at the health regional/facility level % of analytics work contracted to academic or other consultants
3. Number of health analytics positions (FTEs) within your unit as of today:	health analytics positions filled health analytics vacancies hard-to-recruit vacancies – describe: Click here to enter text.

II. CURRENT STATE

Please **rate** the following statements by placing a check mark in the most appropriate box as you define them to apply to New Brunswick. Note any additional information, specific initiatives or lessons learned in the space provided.

	(1) Highly adequate	(2) Adequate	(3) Present but not adequate	(4) Not adequate at all
1. There is a written strategic plan in active use providing oversight and direction for health analytics objectives and functions linked to overall health system goals.	☐ Yes, comprehensive strategic plan exists and is implemented	☐ Comprehensive strategic plan exists, but the resources to implement it are not available	☐ Strategic plan exists or under development, but is not yet in use or does not emphasize integration	☐ There is no strategic plan for health analytics
Notes: Click here to enter text.				

	(1) Highly adequate	(2) Adequate	(3) Present but not adequate	(4) Not adequate at all
2. The Department of Health has adequate numbers and skilled human resources in core health analytics and data sciences (e.g. epidemiology, demography, biostatistics, information management, machine learning).	☐ Highly sufficient and skilled human resources	☐ Adequate	☐ Partially adequate	☐ Not adequate
Notes: Click here to enter text.				
3. There is an acceptable rate of turnover among health analytics staff within the Department of Health.	☐ Low turnover, not a problem	☐ Moderate turnover rate but manageable	☐ Turnover rate is problematic	☐ Turnover rate is unacceptably high
Notes: Click here to enter text.				
4. The public service systematically monitors trends in the supply and demand for professionals in health analytics.	☐ Yes, post-secondary analytics graduation trends and altering skill requirements are systematically tracked	☐ Estimates for hiring requirements for health analytics staff are updated regularly, identifying where there are risks of skills shortages	☐ Supply of analytics skills is assessed only when jobs are posted on a public agency website as a position becomes available	☐ No
Notes: Click here to enter text.				
5. Capacity-building activities have taken place over the past year for health analytics staff in the Department of Health (e.g. data management, analysis and presentation).	☐ Sufficient capacity-building has taken place as part of a long-term government-driven human resources development plan	☐ Adequate capacity-building has taken place, but occasional in nature	☐ Limited capacity-building	☐ No
Notes: Click here to enter text.				
6. Job classification system for health analytics staff identifies distinct skills and career path progression.	☐ Yes, job classification system identifies distinct skills and evolution of promotion, and is used for personnel management	☐ Job classification system identifies distinct skills, but is only used for approving recruitment and transfer	☐ Guidelines for human resources recruitment, promotion and transfer exist only for families of jobs across the public sector	☐ No clearly documented, up-to-date job descriptions
Notes: Click here to enter text.				
7. The Department of Health has adequate capacity to conduct predictive modelling for the estimation of future healthcare needs and planning of health services delivery.	☐ Yes, predictive analyses are conducted regularly for most health program/service areas	☐ Predictive analyses conducted for some priority areas	☐ Predictive analyses conducted on a limited/ad-hoc basis or not updated within the last 5 years	☐ Predictive analyses not used for health
Notes: Click here to enter text.				
8. The Department of Health has adequate capacity for mapping of health indicators and related factors to address various types of health analytics requests (e.g. centralized approach to GIS methods and software).	☐ Yes, maps are up-to-date and comprehensive, and there is capacity to promptly add new features	☐ Maps are up-to-date and reasonably comprehensive	☐ Mapping of only a few health indicators	☐ No mapping
Notes: Click here to enter text.				

	(1) Highly adequate	(2) Adequate	(3) Present but not adequate	(4) Not adequate at all
9. Managers of provincial health programs/services commonly use findings from analytics as basis for policy formulation and resource allocation.	☐ Yes, analytics always used in planning and budgeting	☐ At least some findings from analytics have been used in planning and budgeting	☐ Managers are aware of the value of analytics but there is no evidence that these findings have shaped policy and planning	☐ No evidence managers are aware of analytics findings
Notes: Click here to enter text.				
10. Managers of provincial health programs/services commonly use findings from analytics as basis for improvement of existing programs/services.	☐ Yes, analytics always used in process improvement	☐ At least some findings from analytics have been used in process improvement	☐ Managers are aware of the value of analytics but there is no evidence that these findings have shaped improvements	☐ No evidence managers are aware of analytics findings
Notes: Click here to enter text.				
11. The Department of Health has adequate capacity for identifying low-income patients in administrative health data to support poverty-reduction strategies and reduce health inequalities.	☐ Yes, data on patients in low-income households are routinely collected and used in equity-oriented processes	☐ At least some data on low-income patients are available in administrative sources and used in equity-oriented processes	☐ Limited/ad-hoc availability and/or use of administrative data on low-income populations	☐ No availability or use of administrative health data on low-income populations
Notes: Click here to enter text.				
12. The Department of Health has adequate capacity for identifying gender-diverse patients (trans/non-binary) in administrative health data to support inclusive access to health programs/services.	☐ Yes, data on patients identifying as a gender minority are routinely collected and used in inclusive-oriented processes	☐ At least some data on patients identifying as a gender minority are available in administrative sources and used in inclusive-oriented processes	☐ Limited/ad-hoc availability and use of administrative health data on gender-diverse populations	☐ No availability or use of administrative health data on gender-diverse populations
Notes: Click here to enter text.				

III. PRIORITY SETTING

Please **rank** what you consider should be the province's short-term priorities for capacity building in health analytics to achieve success.

	Item	Details on your selection: specification, pressure points, benchmarks, etc.
1 st priority	Choose an item.	
2 nd priority	Choose an item.	
3 rd priority	Choose an item.	

Please **rank** what you consider should be the province's long-term priorities for capacity building in health analytics to achieve success.

	Item	Details on your selection: specification, pressure points, benchmarks, etc.
1 st priority	Choose an item.	
2 nd priority	Choose an item.	
3 rd priority	Choose an item.	

IV. LOOKING AHEAD

	Description
1. How do you envision the future breakdown of health analytics activities in New Brunswick? <i>Please ensure percentages sum to 100%.</i>	% of analytics work done in-house within the Department of Health % of analytics work done by other public agencies mandated by the gov't % of analytics work done at the health regional/facility level % of analytics work contracted to academic or other consultants
2. What are the types of health analytics positions/skills that the Department of Health would need to develop to achieve this future breakdown?	
3. What are the types of partnerships/collaborations that need to be developed to build health analytics capacity and achieve this future state?	
4. What are the key challenges or barriers for capacity building in health analytics?	
5. How do you measure the value of health analytics in NB, now and in the future?	
6. Any other information, comments, or lessons learned on building health analytics capacity that you would like to share:	

Thank you for completing this survey.

