



d'information sur la santé

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How to cite this document: Canadian Institute for Health Information. *2019–2020 Corporate Performance Measurement Framework Indicators*. Ottawa, ON: CIHI; 2020.

Cette publication est aussi disponible en français sous le titre *Résultats des indicateurs du Cadre de mesure de la performance de l'ICIS pour 2019-2020.*

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2019–2020 PMF indicators

CIHI's Performance Measurement Framework (PMF) and logic model were designed to guide the measurement of CIHI's progress in achieving its strategic plan for 2016 to 2021. The logic model (<u>Appendix A</u>) identifies the causal or logical relationships between activities, outputs and outcomes. To help measure these outputs and outcomes, CIHI developed a set of 19 performance measurement indicators, reported at various frequencies over the course of the 5-year plan.

Overall, CIHI has met or surpassed 2019–2020 targets and baselines for 6 out of 12 applicable PMF indicators. The main drivers for not achieving targets were unforeseen delays by external stakeholders, internal shifting and reprioritizing of deliverables, higher-than-anticipated resource needs and changes to indicator methodology.

At this time, we are able to report on the following 5 indicators:

Outputs

- 1. Increase of coverage of data collection in priority areas
- 2. Percentage of analyses released that align with priority population themes

Immediate outcomes

- 3. Increase in access to CIHI's public data
- 4. Number of linked data files available through third parties
- 5. Increase in total number of users of CIHI's private online tools/products

The following 4 indicators, which require stakeholder feedback, are reported on every 3 years:

- · Level of stakeholder satisfaction with access to and usefulness of tools and products
- Percentage of stakeholders (target group) reporting increased knowledge (awareness) of CIHI products and services in their setting
- Percentage of stakeholders (target group) reporting increased capability to use CIHI products and services in their setting
- Percentage of stakeholders who report using evidence from a CIHI knowledge product or service to support decision-making in their setting

For 2019–2020, it was not feasible to reach out to stakeholders to collect further information and to validate impact stories between March and May due to the COVID-19 pandemic. Therefore, it is not possible to report on the following 2 indicators:

- Extent to which CIHI has contributed to pan-Canadian population health improvements (being monitored and will be reported on in future reports)
- Extent to which CIHI has contributed to health system improvements (being monitored and will be reported on in future reports)

For further reference, <u>Appendix B</u> provides a complete list of indicators by performance area. <u>Appendix C</u> provides further details on the activities being done to increase coverage of priority areas in existing data holdings by jurisdiction (indicator 1) for 2019–2020.

The next sections of this report detail the 2019–2020 results for each of the year's reported indicators.

Outputs: Data and standards

Indicator 1: Increase of coverage of data collection in priority areas

Target not met

Definition: Percentage of activities achieved to increase geographic coverage of priority areas in existing data holdings that have been identified in the operational plan

Baseline (2016-2017): 19

Target: 70% of 47 planned activities

Actual: 51%

CIHI continues to expand the breadth of current data and standards through a variety of activities that are driven by jurisdictional needs and by emerging information needs, such as our support of *A Common Statement of Principles on Shared Health Priorities*.

Activities to increase geographic coverage in priority areas for existing data holdings include the following:

- Acquire data in a new jurisdiction;
- Expand coverage (existing/new facilities/programs);
- Obtain more detailed information (linkable data);
- Secure an ongoing feed of data for use without restriction;
- Obtain agreement to work with the data without restriction;
- Support the jurisdiction in adapting its own standard to better align with CIHI's standard;
- Engage and consult; and
- Secure commitment to adopt a national standard.

CIHI completed 51% of the planned activities (24 out of 47) for 2019–2020 (Table 1). See <u>Appendix C</u> for activities undertaken to increase coverage of priority areas in existing data holdings for 2019–2020 by jurisdiction. The jurisdictional data advancement plans were affected in Q4 by COVID-19 as jurisdictions' attention was diverted toward responding to the pandemic. Of note, 23 ad hoc engagement and consultation activities were completed, as noted in Table 1.

Achievements for 2019–2020

Table 1Number of activities to increase coverage of priority areas
in existing data holdings, 2019–2020

Data holding	Number of activities planned	Number of activities completed
Inpatient mental health (clinical)	1	1
Child and youth mental health	1	0
•	•	
Home care	8 (1)	1 (1)
Primary health care electronic medical record	1	1 (4)
Prescription drugs (claims data)	4	1 (2)
Medication incidents	1	2
Patient experience (acute care)	4	2
Patient-reported outcome measures (hip/knee)	1	1
Long-term care (clinical)	3	1
Emergency department	6	1
Hip/knee replacement prostheses	7	5
Organ failure and replacement	1	1
Hospitals and health regions MIS	1	1
Patient-level physician billing	5	2 (3)
Patient costs: Acute	3	3
Patient costs: Long-term care	0	1
Workforce (record-level: physiotherapists, occupational therapists, pharmacists, nurse practitioners, registered nurses, registered psychiatric nurses, licensed practical nurses)	0	(13)
Total	47	24
	(+ 1 engagement/ consultation)	(+ 23 engagements/ consultations)

Note

Parentheses denote engagement and consultation activities excluded from total numbers.

Outputs: Analytical products

Indicator 2: Percentage of analyses released that align with priority population themes

Target met/exceeded

Definition: Percentage of ad hoc or analytical plan products released that align with priority populations

Baseline (2016-2017): 17%

Target: 64%

Actual: 67%

CIHI introduced a focus on priority populations with the launch of its strategic plan for 2016 to 2021. The priority populations are

- Seniors and aging;
- Mental health and addictions;
- First Nations, Inuit and Métis; and
- Children and youth.

Priority population analytical products listed in Table 2 represent 67% (8 out of 12) of planned analytical products released in 2019–2020. This slightly exceeds the target of 64% and demonstrates ongoing progress toward meeting stakeholder needs identified in the 2016 to 2021 strategic plan to produce actionable analysis concerning CIHI's priority populations. The 4 analytical releases outside of the population themes addressed other important strategic priorities, including health system performance and international comparisons.

Achievements for 2019–2020

Table 2Analytical products by priority population

Analytical product	Priority population		
Hospital Stays for Harm Caused by Substance Use (SHP MHA indicator)	Mental health and addictions		
Frequent Emergency Room Visits for Help With Mental Health and/or Addictions (SHP MHA indicator)	Mental health and addictions		
Hospital Stay Extended Until Home Care Services or Supports Ready (SHP HCC indicator)	Seniors and aging		
Common Challenges, Shared Priorities: Measuring Access to Home and Community Care and to Mental Health and Addictions Services in Canada (SHP companion report)	Mental health and addictions, seniors and aging		
Opioid Prescribing in Canada: How Are Practices Changing?	Mental health and addictions		
Health System Resources for Mental Health and Addictions Care in Canada	Mental health and addictions		
Care for Children and Youth With Mental Disorders: 2019 updates	Mental health and addictions		
Hospital Stays for Harm Caused by Substance Use Among Youth Age 10 to 24	Children and youth		

Notes

SHP: Shared Health Priorities.

MHA: Mental health and addictions.

HCC: Home and community care.

Immediate outcomes: Increased access to quality, integrated data

Indicator 3: Increase in access to CIHI's public data

Target met/exceeded

Definition: Percentage annual increase in access to publicly accessible data

CIHI has a range of online tools in which aggregate data is publicly available. For this indicator, we are monitoring 3 tools: the Patient Cost Estimator (PCE), the Wait Times tool and Your Health System (YHS), which has 2 public sections (In Brief and In Depth); these are key analytical tools that we will continue to enhance to ensure increased public availability of quality, integrated data.

Change in reporting and methodology

In 2018–2019, CIHI focused on improving the internal digital analytics function and the technologies used to collect data, build reports and conduct analysis (i.e., the technology stack). In order to take advantage of industry-standard technology and build in-depth reporting, CIHI implemented Google Analytics as its primary reporting platform and retired WebTrends, the previous platform.

As part of an improved reporting methodology, CIHI will no longer be reporting on PMF indicators using the page views metric. We will now use the session metric.ⁱ

Results

Patient Cost Estimator

In 2019–2020, the PCE had a 16% increase (1,512 sessions) in overall traffic (Table 3). 95% of the overall traffic increase was the result of being an established tool, as well as of improved website search, search engine optimization and offline promotion of the tool. The remaining 5% of the traffic increase was due to promotional efforts such as social media and email.

i. A session is considered the standard metric for high-level reporting and is a more accurate measure of traffic and usage of a site or group of pages on a site. The definition of a session is a set of user interactions on a website within a given time frame. For example, a single session can contain multiple page views, events and interactions, making it a more accurate metric to measure access to a tool/product.

Wait Times tool

The Wait Times tool experienced traffic growth of 13% (4,837 sessions) in 2019–2020 (Table 3). We did not expect such an increase because the tool was not updated in 2019–2020 (as it had been updated twice in 2018–2019). The majority of the traffic increase was due to organic searches or access to the tool through external links.

Your Health System: In Brief and In Depth

YHS had a 28% increase in sessions compared with 2017–2018 (Table 3). We used the typical year 2017–2018 for comparison because there were large multi-platform paid social media campaigns in 2018–2019 but only a small paid social media campaign in 2019–2020. 92% of the traffic increase was due to organic searches or access to the tool through external links. The remaining 8% of the traffic increase was due to promotional efforts such as social media and email.

Achievements for 2019–2020

Table 3 Number of sessions for selected online interactive tools, 2019–2020*

Tool	Actual sessions, 2017–2018	Actual sessions, 2018–2019	Actual sessions, 2019–2020	Annual target, 2019–2020	Actual percentage change, 2019–2020
Patient Cost Estimator	7,942†	9,533	11,058	+5%	+16%
Wait Times	27,044†	36,636	41,473	0%	+13%
Your Health System: In Brief/In Depth	54,260 [†]	196,603‡	69,284	+5% [§]	+28%

Notes

* Excluding CIHI internal traffic.

† Data from 2017–2018 was retrieved from CIHI's previous digital analytics platform, WebTrends.

‡ 131,336 sessions are a direct result of one-time paid campaigns run between January and March 2019.

§ Target adjustment for YHS. A paid social media campaign in 2018–2019 significantly increased web traffic. Given that there was no such campaign in 2019–2020, the target was set as a 5% increase from a typical year, the most recent of which was 2017–2018.

Indicator 4: Number of linked data files available through third parties

Target not met

Definition: Number of linked data files available through third parties

Baseline (2016-2017): 1

Target: 4

Actual: 3

Linking CIHI's data to other data sources enhances access to CIHI's data sets for researchers and other users, and enables health service and policy research questions to be answered. In 2019–2020, 3 of the planned 4 files that link CIHI's data to data from other organizations were included in Statistics Canada's research data centres. The release of the fourth file to the research data centres was delayed by Statistics Canada (Table 4).

Achievements for 2019–2020

Table 4 Linked data files

Linked data file targets, 2019–2020	Linked data files completed, 2019–2020
Canadian Community Health Survey linked to DAD, NACRS and OMHRS	Yes
Canadian Cancer Registry linked to DAD and NACRS	Yes
CVSD linked to DAD, NACRS and OMHRS (all deaths) — end-of-life package of work	Yes
DAD, NACRS and OMHRS linked to CVSD (accessed acute care)	No

Notes

DAD: Discharge Abstract Database.

NACRS: National Ambulatory Care Reporting System.

OMHRS: Ontario Mental Health Reporting System.

CVSD: Canadian Vital Statistics Death Database.

Indicator 5: Increase in total number of users of CIHI's private online tools/products

Target met/exceeded

Definition: Semi-annual increase in total number of users of YHS: Insight

Baseline (2016-2017): 176

Target: 100

Actual: 179

YHS: Insight is a secure online tool that provides authorized users with a deeper look at various standardized indicators and summary measures of health system performance. The information provided in Insight helps health system stakeholders explore their indicator results by allowing them to access and drill down to the underlying patient record-level data.

From April to September 2019, there were 90 new registered users of Insight, compared with 100 new users in the same time period the year before (Table 6). From October 2019 to March 2020, there were 89 new registered users, compared with 108 new registered users in the same time period the year before. The total number of new registered users (179) exceeded the target (100) (Table 5); over 50% of new registered users are in Ontario. This increase could be attributed to the promotion work carried out by the regional client affairs offices.

The percentage of active users in a 6-month period is between 40% and 50%. 40% of registered users were active from April to September 2019; 47% were active from October 2019 to March 2020 (Table 7). The percentage of active users in a 12-month period increased to 60% from last year's 55% but did not reach the target of 65% (Table 5). A survey is planned in 2020–2021 to better understand users' needs and to identify training opportunities. This will support the efforts to increase the number of active users.

Table 5 New registered users and active users of YHS: Insight

Metric	Baseline, 2016–2017	Annual target, 2019–2020	Annual actual, 2019–2020
New registered users	176	100	179
Percentage of active users*	44%	65%	60%

Note

* Active users accessed Insight 2 or more times during a 6-month period (April to September or October to March).

Achievements for 2019–2020

Table 6Number of new registered YHS: Insight users

Annual baseline,	Annual target,	Actual, April to	Actual, October 2019 to		
2016–2017	2019–2020	September 2019	March 2020		
176	100	90	89		

Table 7 Percentage of active* YHS: Insight users

Annual baseline,	Annual target,	Actual, April to	Actual, October 2019 to		
2016–2017	2019–2020	September 2019	March 2020		
45%	65%	40%	47%		

Note

* Active users accessed Insight 2 or more times during a 6-month period (April to September or October to March).

Intermediate outcomes: Increased use of CIHI's products and services to support decision-making

4 PMF indicators require stakeholder feedback and are reported on every 3 years as part of CIHI's survey cycle. Data was last collected for and reported on in 2017–2018. In the interim years, CIHI collects impact stories to demonstrate how stakeholders are using evidence from a CIHI knowledge product or service to support decision-making in their setting.

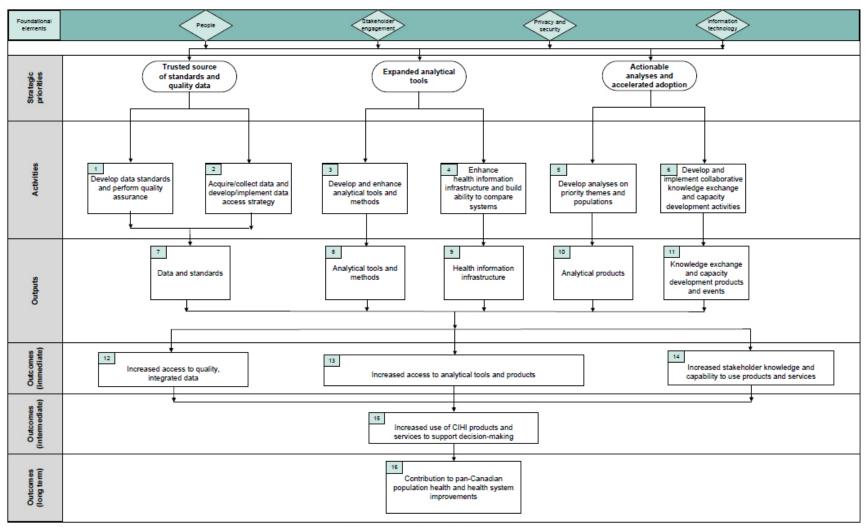
For 2019–2020, it was not feasible to reach out to stakeholders to collect further information and to validate impact stories between March and May due to the COVID-19 pandemic.

Long-term outcomes: Contribution to pan-Canadian population health and health system improvement

To track long-term outcomes on how CIHI's products and services are contributing to population health and health system improvements, we follow up with stakeholders to learn how they've used our products and services to identify an issue and to trigger an implementation plan to improve an outcome.

For 2019–2020, it was not feasible to reach out to stakeholders to collect further information and to validate impact stories between March and May due to the COVID-19 pandemic.

Appendix A: CIHI's logic model



Better data. Better decisions. Healthier Canadians.

Appendix B: List of indicators by performance area

Performance area	Performance indicators	Data sources	Frequency	Board-reported indicator
Outputs	·			
Data and standards (logic model box 7)	Number of planned new and major standards enhancements completed by CIHI	CIHI administrative data	Annually	No
	Number of planned data quality assessments completed by CIHI	CIHI administrative data	Annually	No
	Increase of coverage of data collection in priority areas	CIHI administrative data	Annually	Yes
Analytical tools and methods (logic model box 8)	Percentage of planned new and enhanced analytical tools completed by CIHI	CIHI administrative data	Annually	No
	Percentage of planned new and enhanced methods completed by CIHI	CIHI administrative data	Annually	No
Health information infrastructure (logic model box 9)	Percentage of planned health information infrastructure enhancements completed within the year	CIHI administrative data	Annually	No
	Percentage of data sources included in integrated eReporting against the 2021 target (retired)	n/a	n/a	No
Analytical products (logic model box 10)	Percentage of analyses released that align with priority population themes	Analytical plan	Annually	Yes
Knowledge exchange and capacity- development products and events (logic model box 11)	Number of capacity-development events or activities	CIHI administrative data	Semi-annually	No

Performance area	Performance indicators	Data sources	Frequency	Board-reported indicator
Immediate outcomes				
Increased access to quality, integrated data (logic model box 12)	Increase in access to CIHI's public data	CIHI administrative data	Semi-annually (annual targets)	Yes
	Percentage improvement in the quality of the data accessed	CIHI administrative data	Annually	No
	Number of linked data files available through third parties	CIHI administrative data	Annually	Yes
Increased access to analytical tools and products (logic model box 13)	Level of stakeholder satisfaction with access to and usefulness of tools and products	Surveys Evaluations	Stakeholder survey every 3 years, and other activities in between survey years	Yes
	Increase in total number of users of CIHI's private online tools/products	CIHI administrative data	Semi-annually (annual targets)	Yes
Increased stakeholder knowledge and capability to use products and services	Percentage of stakeholders (target group) reporting increased knowledge (awareness) of CIHI products and services in their setting	Surveys Evaluations	Stakeholder survey every 3 years, and other activities in between survey years	Yes
(logic model box 14)	Percentage of stakeholders (target group) reporting increased capability to use CIHI products and services in their setting	Surveys Evaluations	Stakeholder survey every 3 years, and other activities in between survey years	Yes
Intermediate outcomes				
Increased use of CIHI products and services to support decision-making (logic model box 15)	Percentage of stakeholders who report using evidence from a CIHI knowledge product or service to support decision-making in their setting	Surveys Evaluations	Stakeholder survey every 3 years, and other activities in between survey years	Yes
Long-term outcomes				
Contribution to pan-Canadian population health and	Extent to which CIHI has contributed to pan-Canadian population health improvements	Vignettes External evaluations	Annually	Yes
health system improvements (logic model box 16)	Extent to which CIHI has contributed to health system improvements	Vignettes External evaluations	Annually	Yes

Note

n/a: Not applicable.

Appendix C: Activities undertaken to increase coverage of priority areas

Data area	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nun.	Number of planned activities	Number of achieved activities
Inpatient mental health (clinical)	2*	_	_	_	_	_	_	_	_	_	-	_	_	1	1
Child and youth mental health	—	_		_	_	_					_	_	_	1	0
Home care	_	8*	_	_	_	_	_	_	_	7*	_	_	_	8 (1)	1 (1)
Primary health care electronic medical record	7†	7†	7†	_	-	2 ^{†, ‡}	—	_		—	_	7†		1	1 (4)
Prescription drugs (claims data)	_	_	7†	3*	_	_	_			_	_	7†		4	1 (2)
Medication incidents	_	_	_	_	_	_	1†	_	_	5 [†]	_	_	_	1	2
Patient experience (acute care)	-	-	1*	_	_	2*	_	—	—	—	_	_	_	4	2
Patient-reported outcome measures (hip/knee)	_			_	_	2*	_	_		_	_	_		1	1
Long-term care (clinical)	_	_	_	2*	_	_	_	_	_	_	_	_	_	3	1
Emergency department	_	_	_	_	_	_	_	2*	_	_	_	_	_	6	1
Hip/knee replacement prostheses	2*	-	2*	_	_		_	2*	2*			2*		7	5
Organ failure and replacement	_	-	_	_	2*	_	_	_	_	_	_	_	_	1	1
Hospitals and health regions MIS	—	—	—	_	6*	_	_	—		—	—	_	—	1	1

Data area	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nun.	Number of planned activities	Number of achieved activities
Patient-level physician billing	5†	7†	_	7†	7†	_	_	_		5†	_	_	_	5	2 (3)
Patient costs: Acute	_	_	_	_	6*	_	_	_	3*, 6*	_	_	_	_	3	3
Patient costs: Long-term care	_	_	_	_	-	1†	_	_		_	_	_	_	0	1
Workforce (record-level: physiotherapists, occupational therapists, pharmacists, nurse practitioners, registered nurses, registered psychiatric nurses, licensed practical nurses)	7†	7†	7†	7†	7†	7†	7†	7†	7†	7†	7†	7†	7†	0	(13)

Notes

* Planned activity completed.

† Unplanned activity completed.

‡ Use with restrictions

— Not applicable.

Parentheses denote engagement and consultation activities.

Legend

1. Acquire data in a new jurisdiction.

2. Expand coverage (existing/new facilities/programs).

- 3. Obtain more detailed information (linkable data).
- 4. Secure an ongoing feed of data for use without restriction.
- 5. Obtain agreement to work with the data without restriction.
- 6. Support the jurisdiction in adapting its own standard to better align with CIHI's standard.
- 7. Engage and consult.
- 8. Secure commitment to adopt a national standard.

Appendix D: Text alternative

Logic model

The logic model describes CIHI's foundational elements, strategic priorities, activities, outputs and outcomes (immediate, intermediate and long term) in a logical flow.

Our foundational elements are people, stakeholder engagement, privacy and security, and information technology.

With these elements, we developed strategic priorities (as mentioned elsewhere in this document). The priorities in this model have been shortened to read "trusted sources of standards and quality data," "expanded analytical tools" and "actionable analyses and accelerated adoption."

In order to achieve our strategic priorities, the following activities are being conducted:

Trusted sources of standards and quality data

- 1. Develop data standards and perform quality assurance
- 2. Acquire/collect data and develop/implement a data access strategy

Expanded analytical tools

- 3. Develop and enhance analytical tools and methods
- 4. Enhance the health information infrastructure and build the ability to compare systems

Actionable analyses and accelerated adoption

- 5. Develop analyses on priority themes and populations
- 6. Develop and implement collaborative knowledge exchange and capacity-development activities

The outputs will result as follows:

- Activities 1 and 2 will produce data and standards.
- Activities 3 and 4 will produce analytical tools and methods, and a health information structure.
- Activities 5 and 6 will produce analytical products, and knowledge exchange and capacity-development products and events.

The aim of all outputs is to produce the immediate outcomes of

- Increased access to quality, integrated data;
- Increased access to analytical tools and products; and
- Increased stakeholder knowledge and capability to use products and services.

The aim of the immediate outcomes is to produce an intermediate outcome of increased use of CIHI products and services to support decision-making, which will ideally produce the long-term outcome of CIHI contributing to pan-Canadian population health and health system improvements.



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