



Canada's Drug and
Health Technology Agency

CADTH Health Technology Review

Emergency Department Overcrowding: Utilization Analysis

What Is the Issue?

Emergency departments (EDs) across Canada are under strain and experiencing an increase in overcrowding, a situation in which **the demand for health services in the ED exceeds the capacity of the ED, hospital, or community** to deliver quality care in a reasonable amount of time.¹

Between April 2022 and March 2023, approximately **15.1 million patients visited EDs in Canada.**² Recent evidence suggests that ED overcrowding is worsening in jurisdictions across Canada,³ and there has been an increasing trend of unexpected temporary ED closures or reduction of services across the country.^{4,5}

The causes and consequences of ED overcrowding are **complex and varied and extend beyond the ED.**^{1,6,7}

Left unchecked, ED overcrowding:

- contributes to a **deteriorating standard of care** as staff become overworked and burned out⁶
- **puts patients' lives and health at risk** when treatment needs within the ED exceed the resources required to address them¹
- places additional strain on an already **overwhelmed health care system.**⁵

What Did CADTH Do?

- This utilization analysis provides a summary of how **ED utilization and overcrowding**, certain **patient subgroups'** access to care in EDs, and the **common reasons** for people to access **care** in EDs have changed over time in Canada.
- The analysis is primarily based on data from the **National Ambulatory Care Reporting System (NACRS)**, which collects data from hospital-based and community-based ambulatory care, including day surgery, outpatient and community-based clinics, and EDs.²
- Other data sources for the utilization analysis included the Commonwealth Fund's **International Health Policy Survey (IHPS)**,⁸ the Canadian Institute for Health Information (CIHI) **Your Health System** database,⁹ and the **Organisation for Economic Co-operation and Development (OECD)** database.¹⁰
- Details about the methods used and descriptions of the data elements and indicators can be found in the published methods document.¹⁰
- The [interactive companion tool](#) contains data from these sources and allows users to filter data by specific years and jurisdictions.

Why Did We Do This?

Canadian jurisdictions have identified a need for objective, impartial, and trusted guidance about the causes and consequences of ED overcrowding and which interventions are most effective for alleviating ED overcrowding in Canada.

This pan-Canadian issue calls for real solutions. To help inform the development of pan-Canadian guidance, CADTH conducted an analysis of real-world data on demographic and utilization patterns of ED patients in Canadian jurisdictions where data were available.

How Did We Organize Our Utilization Findings?

This report organizes utilization findings in the following categories:

Intake Data



ED visits and patient characteristics

Process Data



Inside the ED and hospital

Output Data



Stage at which patient disposition is determined
(i.e., destination of the patient after discharge)

System-Level Data



Broader health care system level or
beyond the health care system

Key Messages

- NACRS is the **primary data source** for this utilization review. Five of 9 reporting jurisdictions do not mandate data submission to NACRS. Numerous data elements are optional to report even for those jurisdictions that do mandate data submission.
- The 2006 CADTH reports on ED overcrowding¹¹⁻¹⁴ recommended adopting comprehensive and consistent strategies to collect ED utilization data; however, considerable knowledge gaps remain.
- The majority of analyses in this review are based on findings from Alberta, Ontario, and Yukon, the 3 jurisdictions that reported all ED visits to NACRS in recent years. Quebec also reported all ED visits to NACRS; however, the data were not made available for this report.

Intake Data

- In Alberta, Ontario, and Yukon, the **number of ED visits** was stable from 2016–2017 to 2019–2020 followed by a reduction in visits in 2020–2021. After 2021–2022, there was a return toward 2019–2020 levels in the number of ED visits in both **urban and rural or remote** EDs.
- The number of ED visits by adults aged 65 years and older increased from 2016–2017 to 2020–2021 in these 3 jurisdictions. These numbers decreased after a spike observed in 2020–2021.

Process Data

- Median and 90th percentile **lengths of stay** in EDs have increased since 2016–2017 in Alberta, Ontario, Quebec, and Yukon. Median and 90th percentile refers to the maximum length of time that 50% and 90% of patients stay in the ED, respectively.
 - In Alberta, Ontario, and Yukon, patients **admitted** to hospital and those assigned **Canadian Triage and Acuity Scale (CTAS)** Levels 1 and 2 experienced longer lengths of stay in EDs (90th percentile) compared with those assigned CTAS Levels 3, 4, and 5.
- **Median wait time for a physician initial assessment (PIA)** decreased in 2020–2021 from prior years, then increased more than 56% in Alberta (2020–2021: 0.9 hours; 2022–2023: 1.6 hours) and Ontario (2020–2021: 0.9 hours; 2022–2023: 1.4 hours). In Yukon, median wait times have increased steadily since 2020–2021 (2020–2021: 0.7 hours; 2022–2023: 1.0 hours).
 - Patients visiting **rural or remote** EDs might not wait as long for a PIA as those visiting **urban** EDs in Alberta, Ontario, and Yukon.

Output Data

- Median wait times in 2022–2023 for an **inpatient bed** for admitted patients in Alberta, Ontario, and Yukon were up from levels in 2010–2011, with greater increases in urban EDs (2022–2023: Alberta: 3.6 hours; Ontario: 7 hours; Yukon: 3.7 hours) than in rural or remote EDs (2022–2023: Alberta: 0.1 hours; Ontario: 1.9 hours; Yukon: 0.1 hours).
 - Prolonged wait times for inpatient beds may impact how quickly ED beds become available.
- There was a greater than 100% increase in the proportion of ED patients who were **not seen or left** the ED between 2020–2021 and 2022–2023 in Alberta (2020–2021: 3.95%; 2022–2023: 8.72%) and Ontario (2020–2021: 3.28%; 2022–2023: 6.64%). There was a 45% increase in Yukon (2020–2021: 3.76%; 2022–2023: 5.44%).
 - This may have negative consequences such as **delayed or missed diagnoses or health deterioration**.
- The percentage of ED patients **discharged from the ED** has decreased from 2010–2011 through 2022–2023 in Alberta (9% reduction from 2010–2011 to 2022–2023), Ontario (6% reduction from 2010–2011 to 2022–2023), and Yukon (6% reduction from 2010–2011 to 2021–2022).
 - These data suggest that a greater proportion of people visiting EDs may be presenting with **complex health care needs** or greater disease severity requiring additional care.

System-Level Data

- Canada had fewer health care resources critical to support ED demand than many countries in the OECD in 2021.
 - Among 31 OECD countries, Canada had the second-highest estimated curative (acute) care bed occupancy rate of 86.7% in 2021. This **occupancy rate** was 91% or higher from 2011 to 2019, with a temporary reduction in 2020 to 82.7%.
 - Canada had the fourth-longest curative (acute) care **average length of stay** among 38 OECD countries, with an average length of stay in hospital of 7.8 days in 2021.
 - Canada was lower-ranking (i.e., 35th among 47 OECD countries) in terms of the **total number of hospital beds per 1,000 population**.

Intake Data Findings

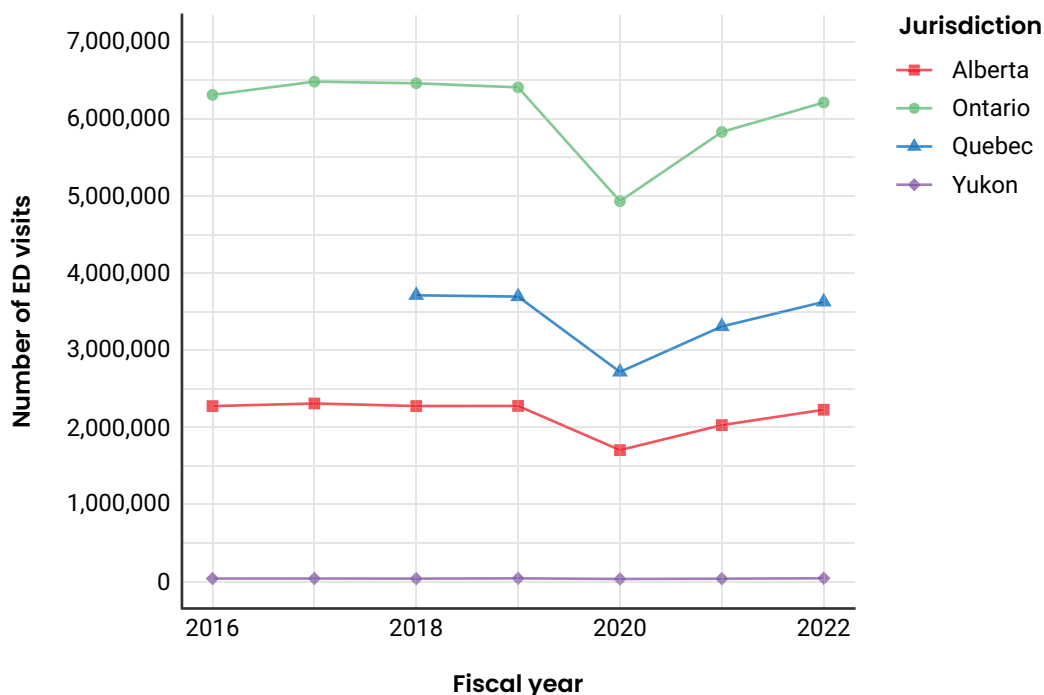
What Are the Data Trends for ED Visits?

The number of ED visits increased in the jurisdictions that reported all ED visits to the NACRS after 2020–2021.

- In Alberta, Ontario, and Yukon, the number of ED visits were relatively stable from 2016–2017 to 2019–2020 followed by a decline in 2020–2021 of roughly 19% to 25%.
- From 2021–2022 onward, there was an increase in the number of ED visits toward 2019–2020 levels.
- Data on the main reasons for ED visits by jurisdiction were not requested. However, this information should be considered in future analyses.

Figure 1

Number of ED Visits by Jurisdiction Between 2016–2017 and 2022–2023



ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1). The numbers for Yukon ranged from 33,044 in 2020–2021 to 41,737 in 2022–2023.

Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions. Limited NACRS data for Quebec were available publicly from the Canadian Institute for Health Information.

Data are available in Appendix 1, [Table 9](#).

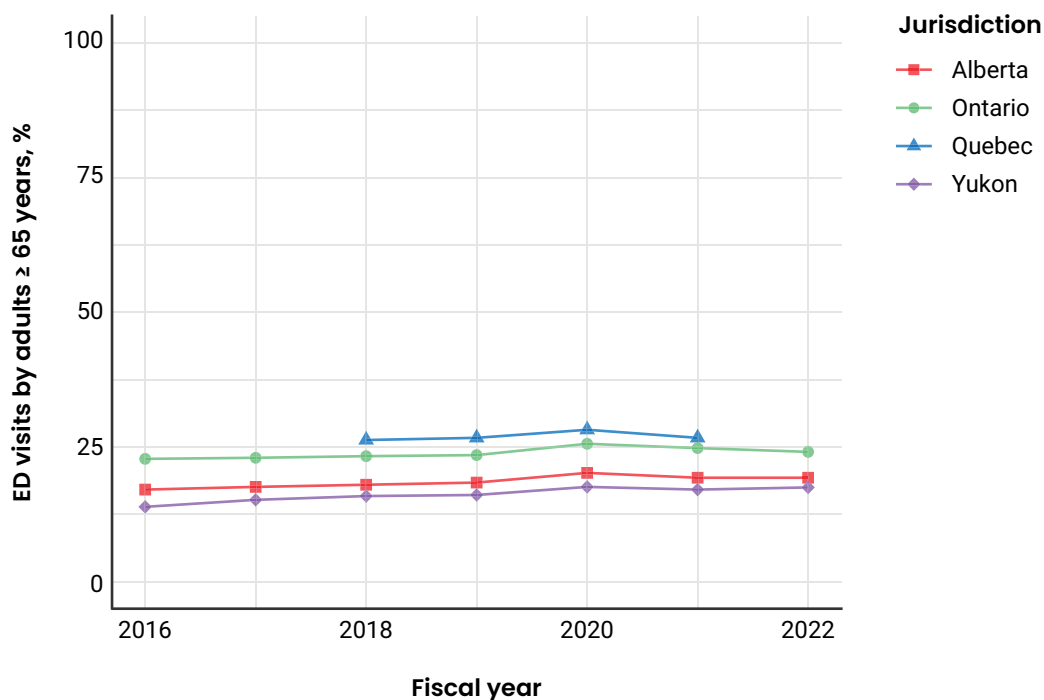
Intake Data Findings

What Are the Data Trends for Percentages of ED Visits by Older Adults?

The percentage of ED visits by adults aged 65 years and older increased from 2016–2017 through 2020–2021 then decreased after 2020–2021 in the 4 jurisdictions that reported all ED visits to NACRS.

Figure 2

Percentage of All ED Visits by Adults Aged 65 Years and Older by Jurisdiction Between 2016–2017 and 2022–2023



ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions. Limited NACRS data for Quebec were available publicly from the Canadian Institute for Health Information.

Data are available in Appendix 1, [Table 10](#).

Intake Data Findings

What Are the Data Trends for ED Visits by Location?

The number of ED visits in both urban and rural or remote EDs fluctuated similarly to the overall number of ED visits.

- In Alberta, Ontario, and Yukon, the number of ED visits increased from 2016–2017 to 2020–2021 then decreased in 2020–2021 regardless of the ED location (rural or remote versus urban). The number of ED visits increased to previous levels after 2020–2021 in all ED locations.

Table 1

Number of ED Visits by ED Locations (Rural or Remote vs. Urban) Between 2016–2017 and 2022–2023

Fiscal year	Number of ED visits by location					
	Alberta		Ontario		Yukon	
	Rural or remote	Urban	Rural or remote	Urban	Rural or remote	Urban
2016	742,401	1,532,871	900,570	5,411,389	5,511	32,961
2017	749,840	1,559,094	910,944	5,573,043	5,320	33,402
2018	713,662	1,562,264	892,850	5,569,839	5,054	32,568
2019	706,187	1,571,373	887,161	5,522,526	5,416	35,385
2020	498,842	1,205,517	638,557	4,294,651	4,687	28,357
2021	596,479	1,432,222	768,687	5,062,890	4,716	31,974
2022	696,623	1,531,051	867,256	5,346,078	5,419	36,318

ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Intake Data Findings

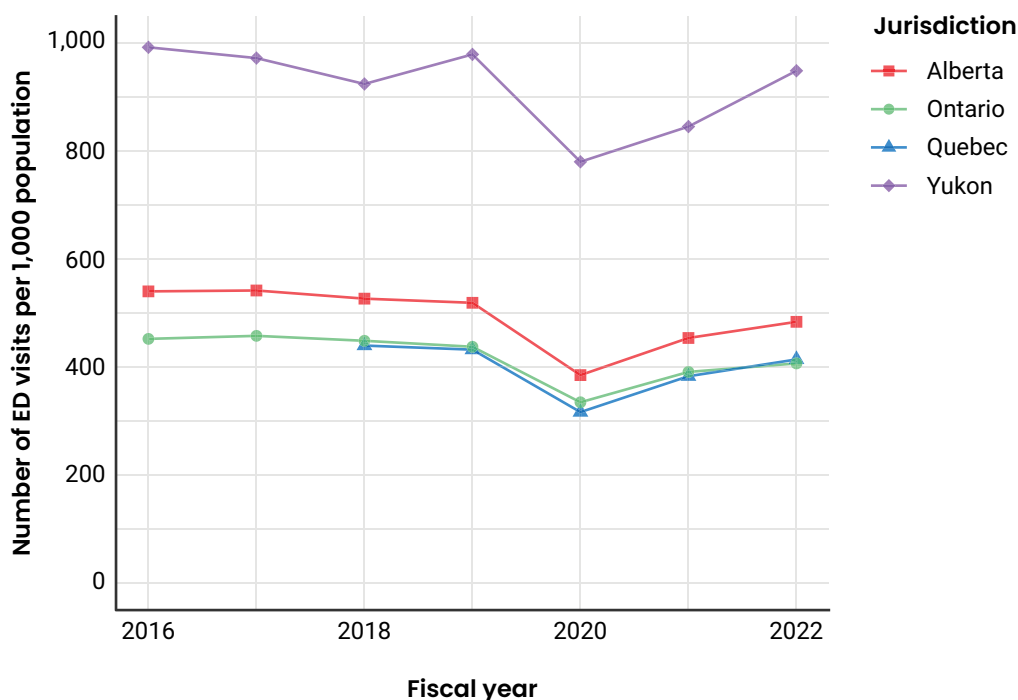
What Are the Data Trends for ED Visits per 1,000 Population?

The number of ED visits per 1,000 population remained relatively stable in Alberta, Ontario, and Yukon from 2016–2017 to 2019–2020, followed by a drop in 2020–2021.

- Overall, the number of ED visits per 1,000 population was highest in Yukon followed by Alberta and Ontario. In Quebec, the numbers were similar to that of Ontario from 2018–2019 to 2022–2023.
- Additional years of data from Quebec were not made available for this report.

Figure 3

ED Visits per 1,000 Population by Jurisdiction Between 2016–2017 and 2022–2023



ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions. Limited NACRS data for Quebec were available publicly from the Canadian Institute for Health Information.

Data are available in Appendix 1, [Table 11](#).

Intake Data Findings

What Are the Data Trends for ED Visits by Acuity?

The numbers or proportions (of all ED visits) of patients assigned to CTAS Level 1 were low from 2010–2011 through 2022–2023 in Alberta, Ontario, and Yukon.

- The numbers of patients assigned CTAS Levels 2, 3, and 4 decreased in 2020–2021 from prior years in the 3 jurisdictions, similar to a decrease observed in the overall numbers of patients. However, the numbers of patients assigned to CTAS Level 4 decreased from 2010–2011 to 2022–2023 in Alberta and Ontario.
- Ontario has consistently had higher proportions of patients assigned to CTAS Levels 2 and 3 than Alberta or Yukon since 2010–2011.
- Between 2010–2011 and 2022–2023, the 3 jurisdictions have experienced higher proportions of patients assigned to CTAS Levels 2 and 3 and lower proportions of patients assigned to CTAS Level 4.

Table 2

Percentage of ED Visits by Acuity (CTAS Level) by Jurisdiction Between 2016–2017 and 2022–2023

Fiscal year	ED visits by CTAS Level, %														
	Alberta					Ontario					Yukon				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
2016	0.5	12.8	37.0	37.0	9.9	0.9	19.5	45.6	29.9	3.8	0.1	5.3	26.0	54.4	12.0
2017	0.5	13.8	37.5	36.3	9.4	0.9	19.7	45.8	28.6	4.6	0.2	8.2	29.1	47.7	13.3
2018	0.6	15.1	38.2	35.1	8.8	1.0	20.6	46.1	25.1	6.8	0.4	12.2	32.3	32.9	22.1
2019	0.6	16.1	39.1	34.0	8.1	1.1	21.5	47.8	21.4	7.8	0.4	10.5	32.7	34.6	21.4
2020	0.8	17.7	40.6	31.1	7.7	1.2	21.7	49.8	19.8	7.3	0.3	10.3	33.2	33.5	22.2
2021	0.9	18.7	41.6	29.2	7.3	1.2	22.5	49.7	19.5	6.7	0.3	10.9	33.1	31.7	23.0
2022	1.0	18.5	43.1	26.8	8.2	1.3	22.9	49.5	19.0	6.8	0.3	10.1	33.4	34.0	21.1

CTAS = Canadian Triage and Acuity Scale; ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Table data are condensed to 2016–2017 to 2022–2023.

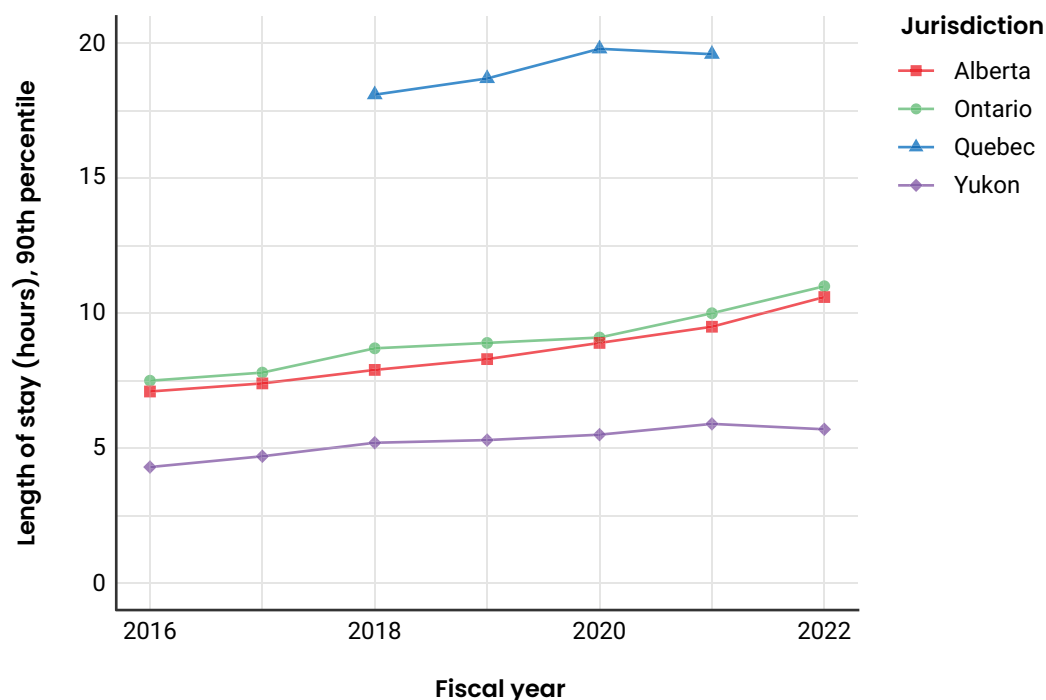
Process Data Findings

What Are the Data Trends for 90th Percentile ED Length of Stay

The 90th percentile ED length of stay increased in Alberta, Ontario, Quebec, and Yukon since 2016–2017, including during the COVID-19 pandemic.

Figure 4

The 90th Percentile ED Length of Stay (Hours) by Jurisdiction Between 2016–2017 and 2022–2023



ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Length of stay is defined as the time when patients registered or were triaged to the time when patients left or had disposition available. Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions. Limited NACRS data for Quebec were available publicly from the Canadian Institute for Health Information.

Data are available in Appendix 1, [Table 12](#).

Process Data Findings

What Are the Data Trends for ED Length of Stay for Patients Admitted or Discharged?

Patients admitted after ED visits experienced longer lengths of stay in EDs (90th percentile) compared with discharged patients. The lengths of stay increased after 2020–2021 in Alberta, Ontario, and Yukon.

Table 3

The 90th Percentile ED Length of Stay (Hours) for Patients Who Were Admitted or Discharged by Jurisdiction Between 2010–2011 and 2022–2023

Fiscal year	ED length of stay (hours), 90th percentile					
	Alberta		Ontario		Yukon	
	Admitted	Discharged	Admitted	Discharged	Admitted	Discharged
2010	29.0	5.7	32.4	6.2	7.6	3.1
2011	23.0	5.6	30.6	6.1	8.6	3.1
2012	21.2	5.6	29.6	6.1	8.7	3.3
2013	22.8	5.6	28.4	6.0	9.3	3.3
2014	28.1	5.8	29.9	6.0	15.0	3.4
2015	26.9	5.8	28.2	6.0	15.9	3.3
2016	28.3	5.9	31.3	6.1	25.9	3.5
2017	30.6	6.1	32.8	6.3	25.8	3.9
2018	27.1	6.2	33.3	6.3	18.7	4.1
2019	27.9	6.5	33.4	6.5	19.6	4.3
2020	26.2	6.6	29.1	6.3	15.4	4.4
2021	27.0	7.4	32.5	7.0	16.7	4.9
2022	36.4	8.2	45.0	7.3	20.6	4.8

ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Length of stay was defined as the time when patients registered or were triaged to the time when patients left or had disposition available. Patients who were not seen, transferred to another facility, transferred within the same facility, left, or died were not reported to simplify the figure. Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions.

Process Data Findings

What Are the Data Trends for ED Length of Stay by Acuity?

The acuity level of patients' conditions, measured by CTAS, was related to the 90th percentile ED length of stay.

In Alberta, Ontario, and Yukon, patients assigned CTAS Levels 1 and 2 tended to experience longer lengths of stay compared with those assigned CTAS Levels 3, 4, and 5.

Table 4

The 90th Percentile ED Length of Stay (Hours) for Patients by Acuity Level and Jurisdiction Between 2016–2017 and 2022–2023

Fiscal year	ED length of stay by CTAS Level (hours), 90th percentile														
	Alberta					Ontario					Yukon				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
2016	19.6	14.8	8.9	4.5	3.3	20.1	15.7	8.5	4.2	3.6	9.1	15.1	7.1	3.3	2.4
2017	20.6	15.1	9.2	4.7	3.5	21.0	16.2	8.7	4.4	3.9	11.9	10.6	6.6	3.6	3.1
2018	18.3	13.8	9.2	4.8	3.6	21.5	15.6	8.9	4.8	4.2	10.9	8.6	6.1	3.9	3.3
2019	20.2	14.2	9.4	5.0	3.9	20.8	15.0	9.0	5.1	4.4	11.6	9.5	6.2	4.0	3.6
2020	19.7	14.4	9.9	4.9	3.6	19.4	14.6	9.2	4.8	3.7	11.8	8.8	6.6	4.3	3.6
2021	19.3	14.6	10.3	5.6	4.4	21.7	15.8	10.2	5.6	4.6	11.8	9.2	6.9	4.8	3.9
2022	22.6	17.2	11.5	6.4	5.1	25.2	18.4	11.1	6.1	5.2	12.4	10.4	6.7	4.7	4.1

CTAS = Canadian Triage and Acuity Scale; ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

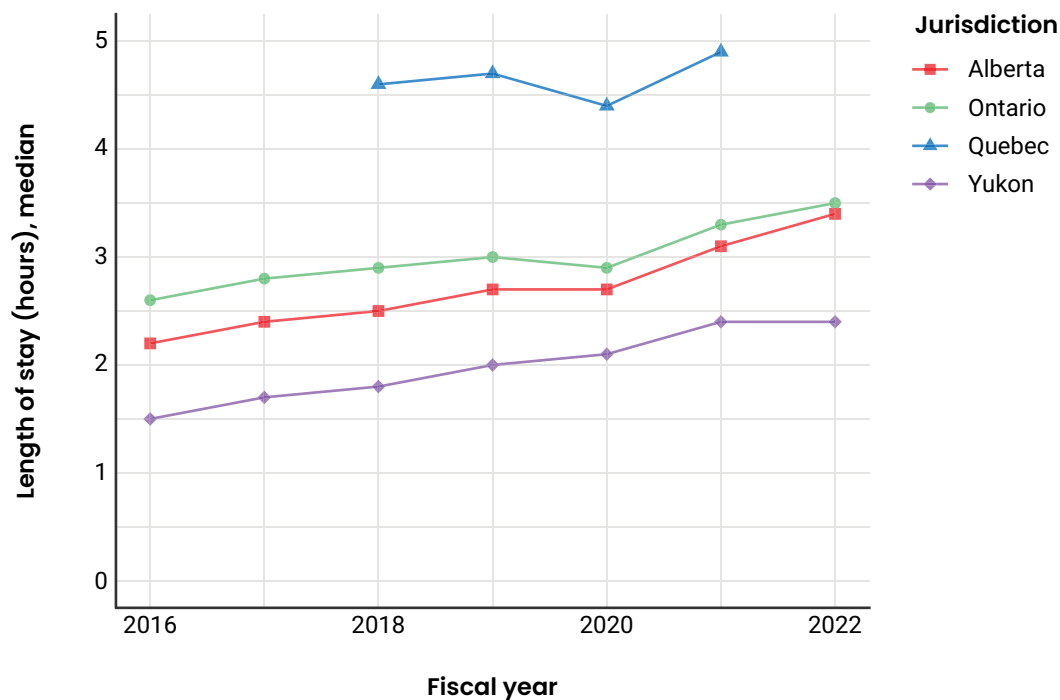
Length of stay was defined as the time when patients registered or were triaged to the time when patients left or had disposition available. Patients who were not seen, transferred to another facility, transferred within the same facility, left, or died were not reported to simplify the figure. Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions.

Process Data Findings

What Are the Data Trends for Median ED Length of Stay?

The median length of stay in EDs in Alberta and Yukon increased from 2016–2017 through 2022–2023, including during the COVID-19 pandemic. In Quebec and Ontario, the median length of stay increased from 2016–2017 through 2019–2020, decreased in 2020–2021, and then increased after 2020–2021.

Figure 5
Median Length of Stay (Hours) in EDs by Jurisdiction Between 2016–2017 and 2022–2023



ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Length of stay was defined as the time when patients registered or were triaged to the time when patients left or had disposition available. Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions. Limited NACRS data for Quebec were available publicly from the Canadian Institute for Health Information.

Data are available in Appendix 1, [Table 13](#).

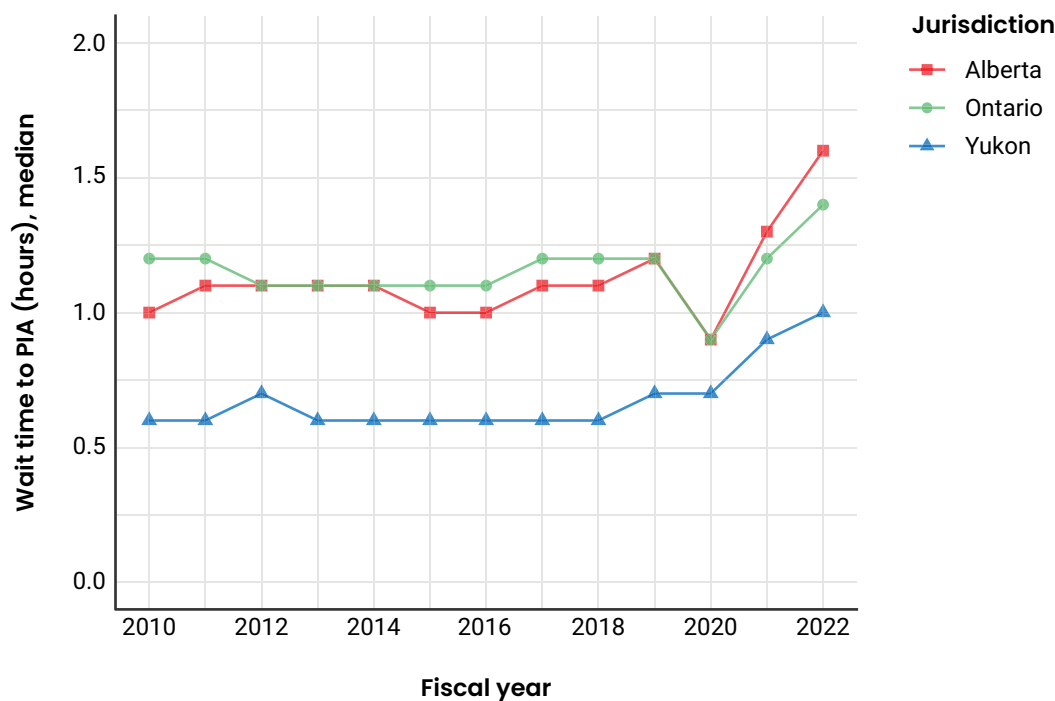
Process Data Findings

What Are the Data Trends for ED Wait Time to Physician Initial Assessment?

In Alberta and Ontario, the median wait time to PIA decreased 25% in 2020–2021 from the preceding year and increased by 78% and 56%, respectively, between 2020–2021 and 2022–2023. In Yukon, the median wait time to PIA increased steadily in recent years from 2019–2022 to 2022–2023.

Figure 6

Median Wait Time to Physician Initial Assessment (Hours) by Jurisdiction Between 2010–2011 and 2022–2023



PIA = physician initial assessment.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions.

Data are available in Appendix 1, [Table 14](#).

Process Data Findings

What Are the Data Trends for ED Wait Time to Physician Initial Assessment by Location?

Patients visiting rural or remote EDs did not wait as long for physician initial assessment as those visiting urban EDs in Alberta, Ontario, and Yukon. The median wait time in urban EDs increased more rapidly after the 2020–2021 fiscal year than rural or remote EDs. Patients experienced a steady increase in time to PIA from 2016–2017 through 2022–2023 in rural or remote EDs in Yukon.

Table 5

Median Wait Time to Physician Initial Assessment (Hours) by ED Location (Urban vs. Rural or Remote) Between 2016–2017 and 2022–2023

Fiscal year	Wait time to PIA (hours), median					
	Alberta		Ontario		Yukon	
	Rural or remote	Urban	Rural or remote	Urban	Rural or remote	Urban
2016	0.7	1.2	0.8	1.1	0.5	0.6
2017	0.7	1.3	0.8	1.2	0.5	0.6
2018	0.7	1.3	0.8	1.2	0.5	0.6
2019	0.7	1.4	0.9	1.2	0.5	0.8
2020	0.6	1.0	0.7	0.9	0.5	0.7
2021	0.7	1.5	0.9	1.3	0.6	1.0
2022	0.8	2.1	1.0	1.5	0.6	1.1

ED = emergency department; PIA = physician initial assessment.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Output Data Findings

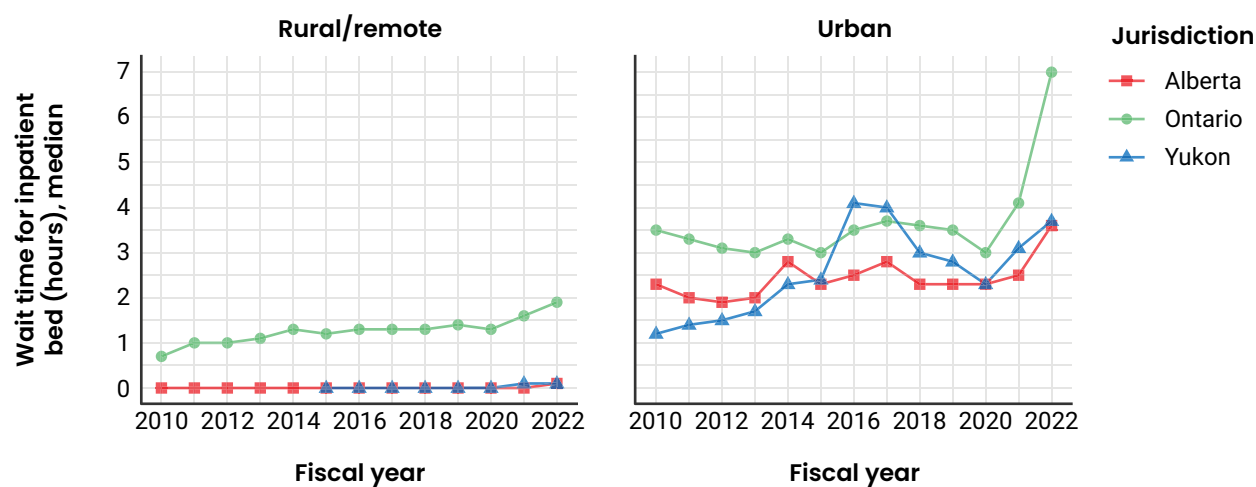
What Are the Data Trends for ED Wait Time for Inpatient Beds?

Median wait times for an inpatient bed for admitted patients in Alberta, Ontario, and Yukon were up in 2022–2023 from levels in 2010–2011, with greater increases in urban EDs than in rural or remote EDs.

- The median wait time for inpatient beds was relatively stable in rural or remote EDs in Alberta and Yukon from 2016–2017 through 2022–2023. Ontario rural or remote EDs observed an increase from 2010–2011 through 2022–2023, particularly after 2020–2021.
- Median wait times have varied in Ontario, Alberta, and Yukon in urban EDs from 2010–2011 through 2022–2023, with all jurisdictions observing an increase in wait times in 2021–2022 above 2020–2021 levels.
- This upward trend in median wait times may impact how quickly ED beds are available for new patients.

Figure 7

Median Wait Time for Inpatient Bed for Admitted Patients by ED Location (Urban vs. Rural or Remote) and Jurisdiction Between 2010–2011 and 2022–2023



ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Wait time to inpatient bed for admitted patients = [Date and time patient left ED for admission to an inpatient bed or operating room] minus [disposition date and time (as determined by the main service provider)].

Data are available in Appendix 1, Table 15.

Output Data Findings

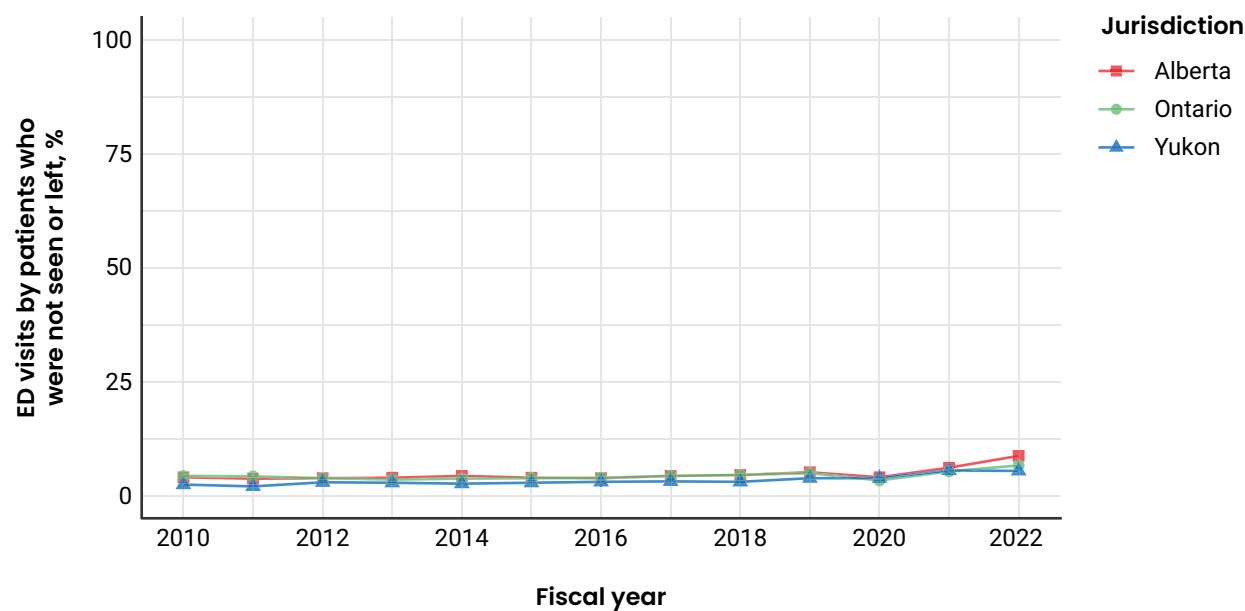
What Are the Data Trends for ED Patients Who Are Not Seen or Leave?

There has been an increasing trend in the percentage of people who were not seen or left the ED since 2010–2011 in Alberta, Ontario, and Yukon. There was a decrease in 2020–2021 in each jurisdiction, and a more than 100% increase between 2020–2021 and 2022–2023 in Alberta and Ontario. This proportion increased by 45% in Yukon.

- This trend may have a negative impact on disease progression and severity in those leaving without being seen.

Figure 8

Percentage of ED Visits by Patients Who Were Not Seen or Left by Jurisdiction Between 2010–2011 and 2022–2023



ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Data are available in Appendix 1, [Table 16](#).

Output Data Findings

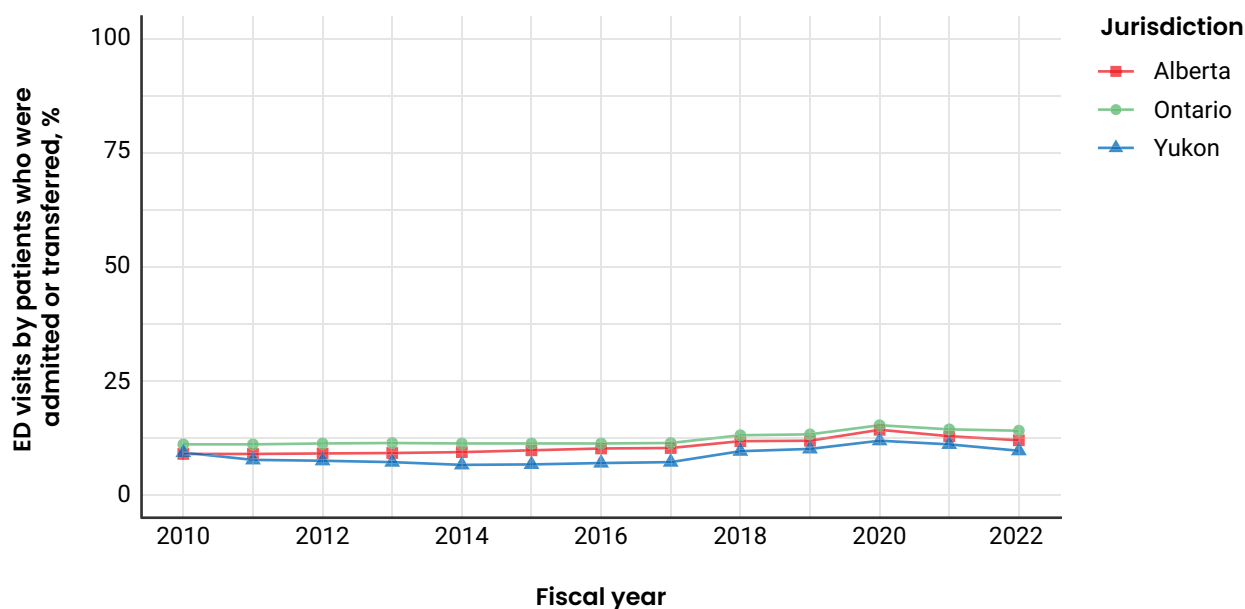
What Are the Data Trends for ED Patients Who Are Admitted or Transferred?

The percentage of ED patients who were admitted, were transferred to another facility, or transferred within the same facility increased from 2014–2015 through 2020–2021 in Alberta, Ontario, and Yukon, then decreased in subsequent years.

- These data suggest that a greater proportion of people visiting EDs may be presenting with more complex and/or severe health care needs that require additional care after they leave the ED.
- The data are not broken down by where or which medical specialty patients were transitioned to, which would give additional insight into those subsequent care pathways.

Figure 9

Percentage of ED Visits by Patients Who Were Admitted, Transferred to Another Facility, or Transferred Within the Same Facility by Jurisdiction Between 2010–2011 and 2022–2023



ED = emergency department.

Note: Fiscal year = start of fiscal year (i.e., April 1).

Data are available in Appendix 1, [Table 17](#).

Output Data Findings

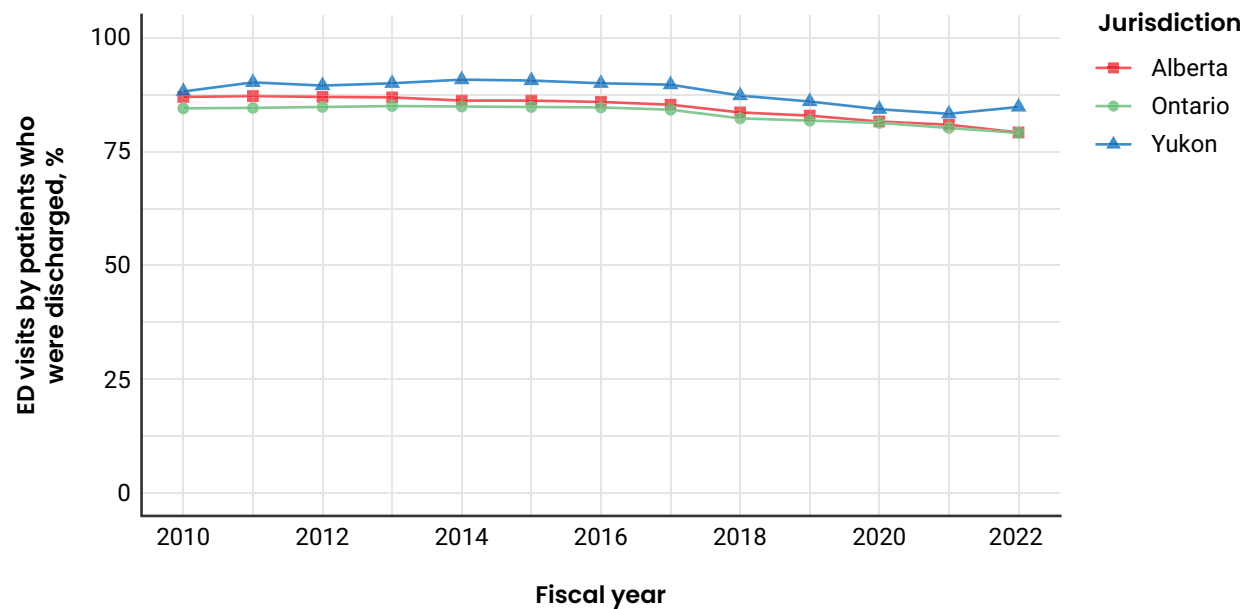
What Are the Data Trends for ED Patients Who Are Discharged?

The percentage of ED patients who were discharged decreased in Alberta, Ontario, and Yukon from 2014–2015 through 2021–2022.

- These data support that a greater proportion of people visiting EDs may be presenting with health care needs requiring additional care.

Figure 10

Percentage of ED Visits by Patients Who Were Discharged by Jurisdiction Between 2010–2011 and 2022–2023



ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Data are available in Appendix 1, Table 18.

Output Data Findings

What Are the Data Trends for Patient Deaths Within EDs?

The percentages of deaths within ED visits have been relatively stable in Alberta, Ontario, and Yukon from 2010–2011 through 2022–2023.

- The percentages of deaths appeared to increase in 2020–2021 in Alberta and Ontario after a decreasing trend in prior years.
- Additional data are required to identify specific factors (e.g., COVID-19) leading to these fluctuations.

Table 6

Percentage of Deaths Within EDs by Jurisdiction Between 2010–2011 and 2022–2023

Fiscal year	Deaths within EDs, %		
	Alberta	Ontario	Yukon
2010	0.07	0.11	0.03
2011	0.07	0.09	0.04
2012	0.06	0.09	0.02
2013	0.06	0.08	0.02
2014	0.06	0.08	0.02
2015	0.06	0.08	0.02
2016	0.06	0.08	0.05
2017	0.06	0.09	0.03
2018	0.06	0.09	0.05
2019	0.07	0.09	0.04
2020	0.08	0.12	0.03
2021	0.07	0.11	0.05
2022	0.07	0.11	0.03

ED = emergency department.

Note: Fiscal year = start of fiscal year (i.e., April 1).

System-Level Data Findings

What Are the Data Trends for the Number of ED Physicians?

There were considerable interjurisdictional differences and variability within jurisdictions from 2010–2011 through 2022–2023 in the number of ED physicians per 1,000 population.

- In Alberta, Ontario, Quebec, and Yukon, the number of ED visits were proportional to number of ED physicians, although Yukon had more ED visits per ED physician.
- These fluctuations may affect the number of ED physicians that are available to staff EDs and may have an impact on temporary or permanent ED closures.

Table 7

Number of ED Physicians per 1,000 Population by Jurisdiction Between 2016 and 2021

Year	Number of ED physicians per 1,000 population													
	CA	AB	BC	MB	NB	NL	NT	NS	NU	ON	PE	QC	SK	YK
2016	0.09	0.22	0.23	0.14	0.13	0.12	0.09	0.23	NA	0.20	0.24	0.14	0.11	0.10
2017	0.09	0.23	0.23	0.13	0.14	0.13	0.09	0.23	NA	0.20	0.28	0.14	0.10	0.10
2018	0.09	0.22	0.24	0.15	0.17	0.04	0.13	0.20	NA	0.18	0.27	0.13	0.09	0.10
2019	0.09	0.23	0.24	0.15	0.17	0.03	0.09	0.22	0.03	0.19	0.16	0.13	0.11	0.10
2020	0.09	0.23	0.25	0.16	0.18	0.05	0.11	0.23	0.03	0.19	0.20	0.14	0.12	0.09
2021	0.09	0.23	0.25	0.17	0.17	0.05	0.11	0.22	0.03	0.19	0.20	0.14	0.12	0.09

AB = Alberta; BC = British Columbia; CA = Canada; ED = emergency department; MB = Manitoba; NA = not available; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; NT = Northwest Territories; NU = Nunavut; ON = Ontario; PE = Prince Edward Island; QC = Quebec; SK = Saskatchewan; YT = Yukon.

Notes: Year = calendar year.

ED physicians included physicians specialized in emergency medicine, emergency family medicine, or pediatric emergency medicine. ED physicians per 1,000 population were calculated based on 2 data sources.^{15,16}

System-Level Data Findings

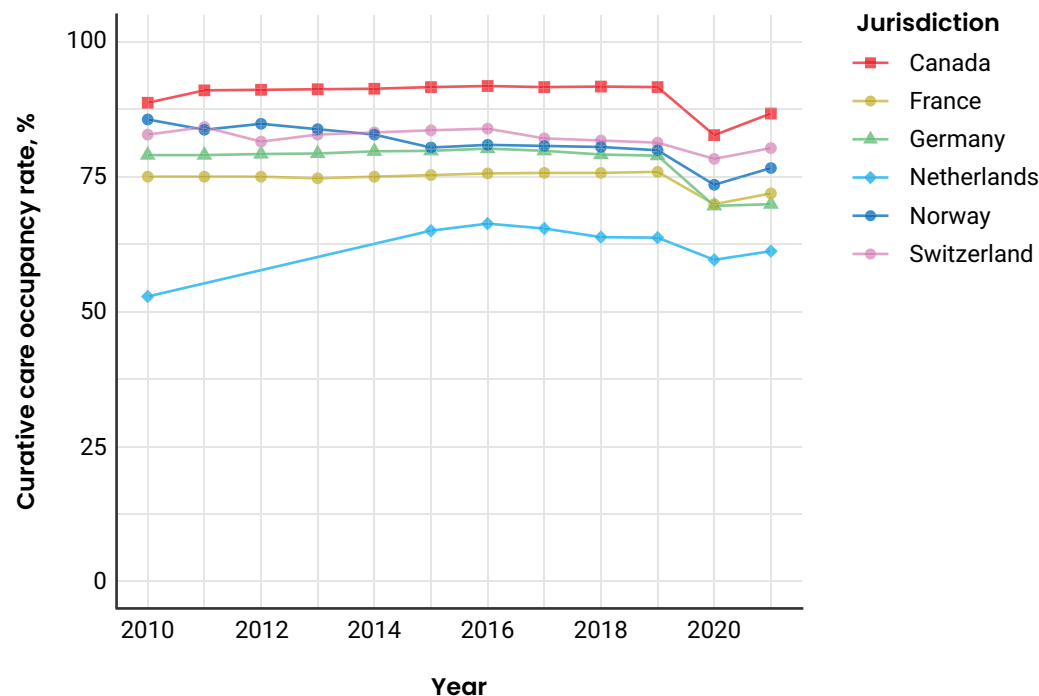
How Does Canada Rank in Curative (Acute) Care Bed Occupancy?

The OECD Health Utilization database contains data from 31 countries on occupancy rates in curative (acute) care beds. In 2021, Canada ranked second-highest among these 31 countries, with an estimated curative (acute) care bed occupancy rate of 86.7%.

- In Canada, the estimated curative care bed occupancy rate was at or more than 91% from 2011 to 2019. There was a temporary reduction in occupancy rate to below 90% in 2020, but it increased again in 2021.
- These data suggest there is a smaller proportion of available curative (acute) care beds in Canada compared with other OECD countries.

Figure 11

Curative (Acute) Care^a Bed Occupancy Rate (%) by Country Between 2010 and 2021



Notes: These countries also participated in the International Health Policy Survey.

Data are available in Appendix 1, [Table 19](#).

^a Curative (acute) care beds are hospital beds to “manage labour (obstetrics), cure illness or provide definitive treatment of injury, perform surgery, relieve symptoms of illness or injury (excluding palliative care), reduce severity of illness or injury, protect against exacerbation and/or complication of illness and/or injury which could threaten life or normal functions, perform diagnostic or therapeutic procedures.”¹⁷

System-Level Data Findings

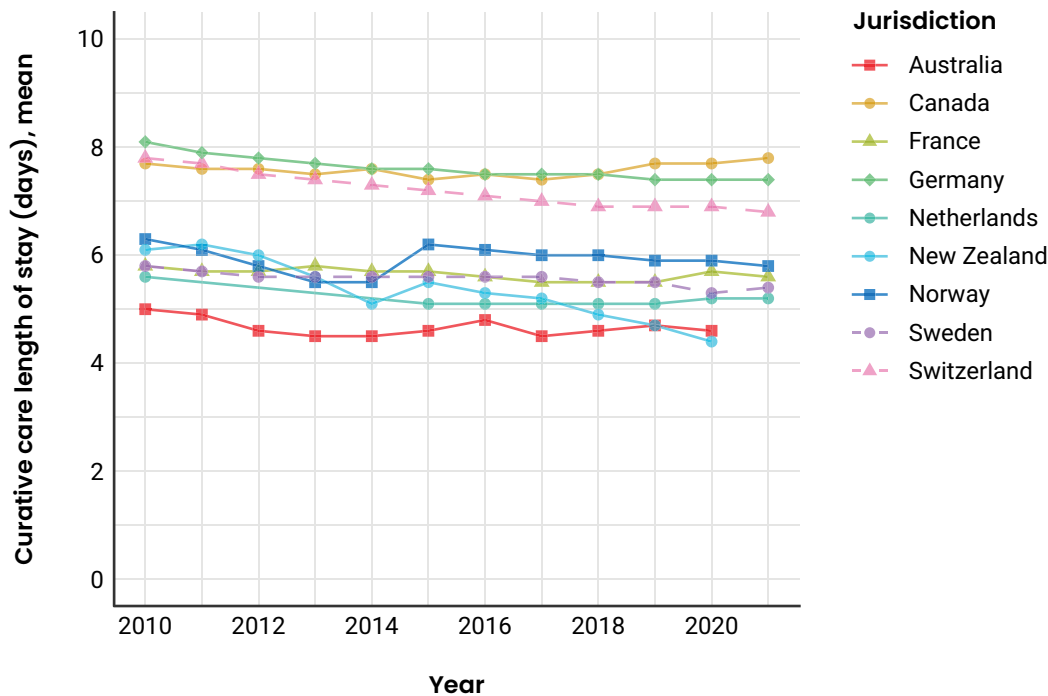
How Does Canada Rank in Curative (Acute) Care Length of Stay?

Canada had the fourth-longest curative (acute) care average length of stay among 38 OECD countries, with an average length of stay of 7.8 days in 2021.

- In Canada, the curative (acute) care average length of stay has remained consistently at or above 7.4 days since 2010.
- The need for longer stays suggests patients are presenting with complex health care needs and/or there is limited capacity in the community or other facilities to transition these patients into.

Figure 12

Mean Curative (Acute) Care Average Length of Stay in Days by Country Between 2010 and 2021



Notes: These countries also participated in the International Health Policy Survey. Data are available in Appendix 1, [Table 20](#).

System-Level Data Findings

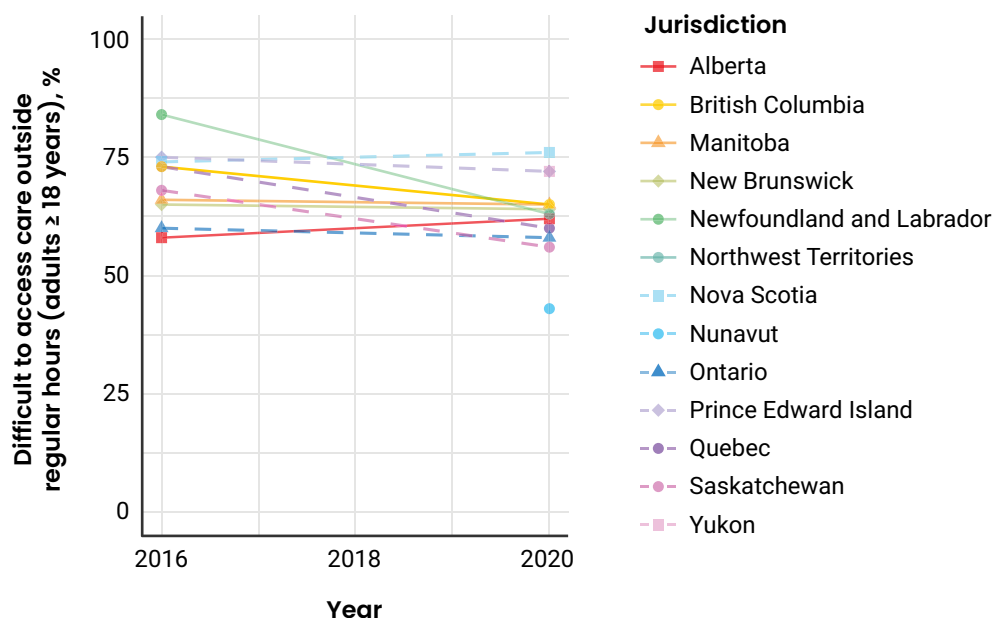
How Accessible Is Care Outside of Regular Hours Without Having to Go to the ED Across Jurisdictions?

According to the International Health Policy Survey, the percentage of participants who reported difficulty accessing care outside of regular hours and outside of EDs varied across jurisdictions, ranging from 43% to 76% in 2020.

- These percentages decreased in all reporting jurisdictions from 2016 to 2020, except for Alberta and Nova Scotia. Data from 2016 were not available for the 3 territories.
- Challenges in accessing after-hours care may be steering people to EDs, which typically operate 24/7.
- In total, 4,547 and 5,297 interviews with adults aged 18 years and older were conducted across Canada in 2016¹⁸ and 2020,¹⁹ respectively.

Figure 13

Percentage of People Reporting Difficulty Accessing Medical Care Outside of Regular Hours by Jurisdiction in 2016 and 2020



Notes: Care outside of regular hours was defined as the availability of appointments with primary care physicians after 6 p.m. during the week (i.e., Monday to Friday) at least once a week or on the weekend (i.e., Saturday or Sunday) at least once a month.²⁰

Data are available in Appendix 1, [Table 21](#).

System-Level Data Findings

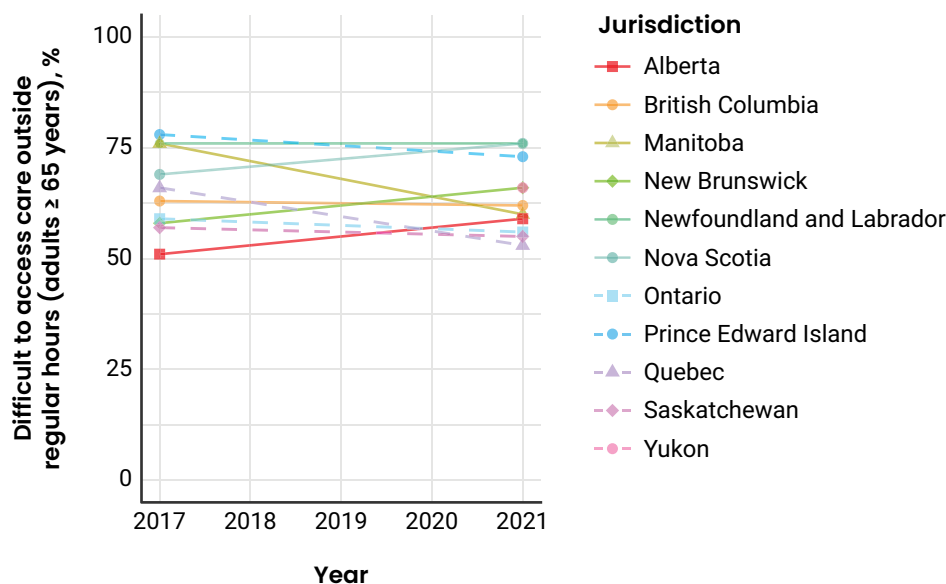
How Accessible Is Care Outside of Regular Hours Without Having to Go to the ED for People Aged 65 Years and Older?

According to the International Health Policy Survey, the percentage of people aged 65 years and older who reported difficulty in accessing medical care outside of regular hours and outside of EDs varied across jurisdictions, ranging from 53% to 76% in 2021.

- These percentages increased in Alberta, New Brunswick, and Nova Scotia from 2017 to 2021. Data from 2017 were not available for Yukon. No data were available for Northwest Territories and Nunavut.
- Challenges in accessing care outside of regular hours may require older adults who may have more complex health care needs to visit the ED.
- In total, 4,549 and 4,484 interviews with adults aged 65 years and older were conducted across Canada in 2017²¹ and 2021,²² respectively.

Figure 14

Percentage of People Aged 65 Years and Older Reporting Difficulty Accessing Care Outside of Regular Hours by Jurisdiction in 2017 and 2021



Notes: Care outside of regular hours was defined as the availability of appointments with primary care physicians after 6 p.m. during the week (i.e., Monday to Friday) at least once a week or on the weekend (i.e., Saturday or Sunday) at least once a month.

Data are available in Appendix 1, [Table 22](#).

System-Level Data Findings

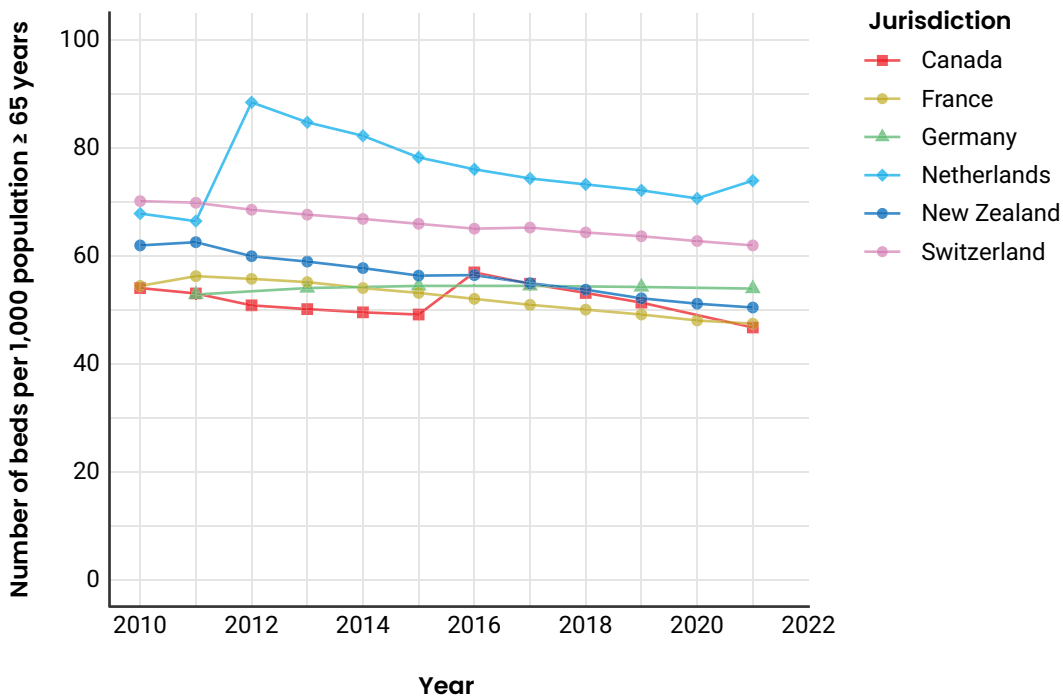
How Does Canada Rank in Number of Long-Term Care Beds?

Canada ranked 13th among 34 OECD countries in terms of the number of long-term care beds per 1,000 population aged 65 years and older.

- Higher-ranked countries had more long-term care beds per 1,000 population aged 65 years and older.
- In Canada, the number of long-term care beds per 1,000 population aged 65 years and older has decreased year over year since 2016, which may contribute to ED overcrowding.

Figure 15

Number of Long-Term Care Beds per 1,000 Population Aged 65 Years and Older by Country Between 2010 and 2021



Notes: These countries also participated in the International Health Policy Survey. Beds in residential long-term care facilities were included. Data are available in Appendix 1, Table 23.

System-Level Data Findings

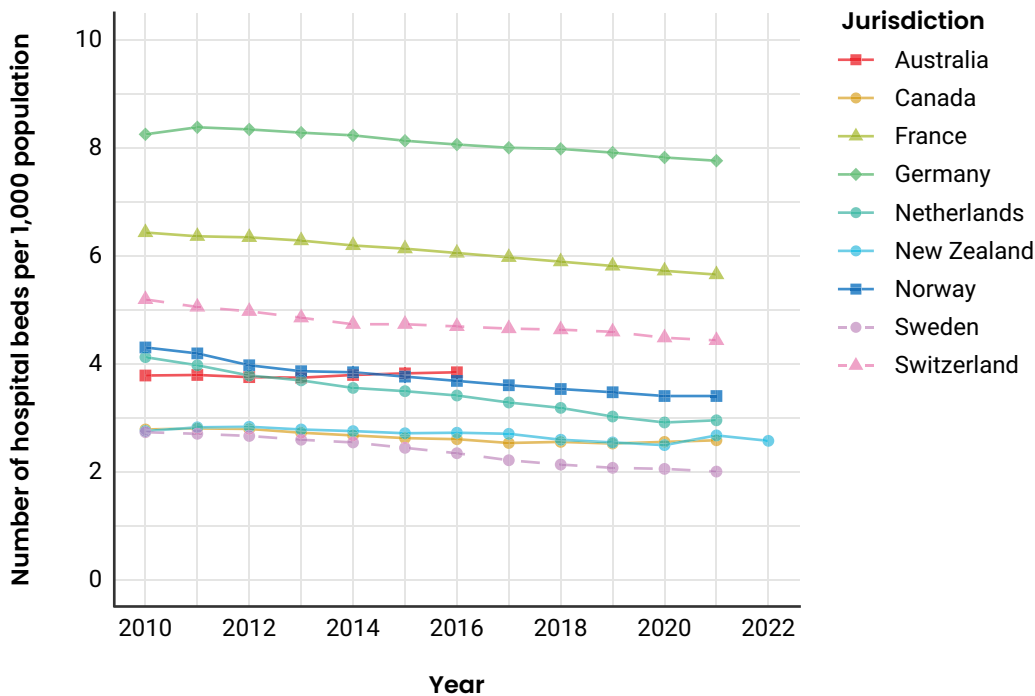
How Does Canada Rank in Total Number of Hospital Beds?

Canada ranked 35th among 47 OECD countries in terms of the total number of hospital beds per 1,000 population.

- Higher-ranked countries had more total hospital beds per 1,000 population.
- In Canada, the number of total hospital beds per 1,000 population decreased from 2.78 in 2010 to 2.58 in 2021, suggesting there were fewer hospital beds (occupied and unoccupied) per capita to care for admitted patients.
- This metric includes beds in general hospitals, mental health hospitals, and other specialized hospitals.

Figure 16

Number of Total Hospital Beds per 1,000 Population by Country Between 2010 and 2022



Notes: These countries also participated in the International Health Policy Survey. Data are available in Appendix 1, [Table 24](#).

System-Level Data Findings

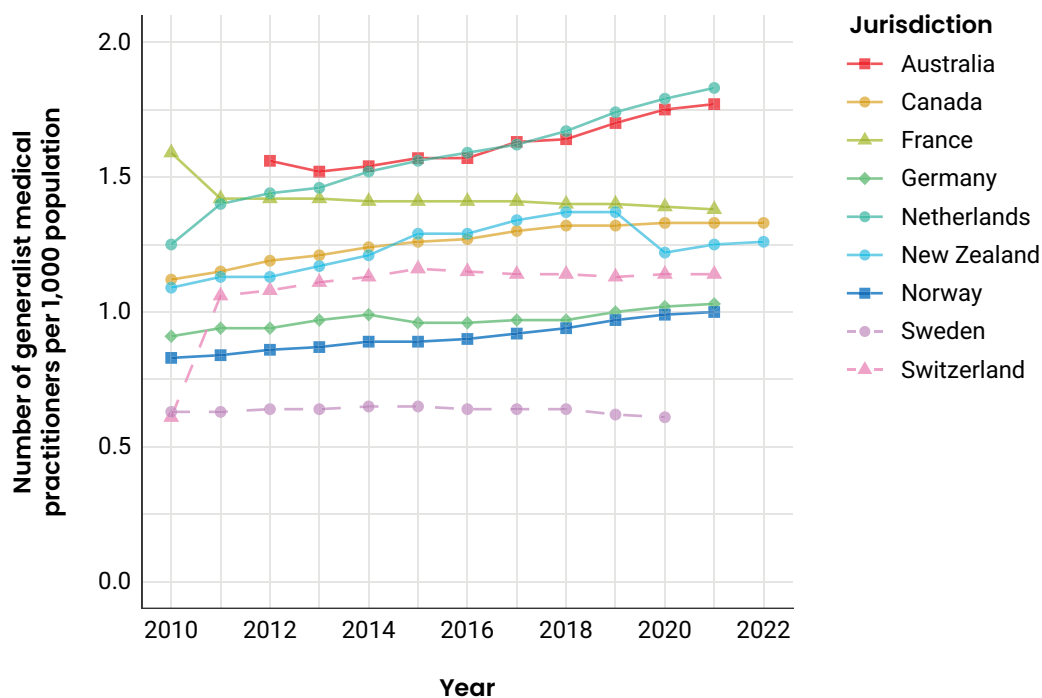
How Does Canada Rank in Number of Generalist Practitioners?

Canada ranked 10th among 42 OECD countries in terms of number of generalist medical practitioners per 1,000 population.

- Higher-ranked countries had more generalist medical practitioners per 1,000 population.
- In Canada, the number of generalist medical practitioners per 1,000 increased from 2010 to 2018.
- The population in Canada grew roughly 6.8% from 2018 to 2022; however, the number of generalist medical practitioners per capita remained relatively stable during this period.

Figure 17

Number of Generalist Medical Practitioners per 1,000 Population by Country Between 2010 and 2022



Notes: These countries also participated in the International Health Policy Survey. Data are available in Appendix 1, Table 25.

What Did We Learn?

- Statistics on ED utilization are important for the planning, management, and resource allocation decisions in EDs in Canada. However, only 4 jurisdictions reported all ED visits to NACRS in the 2020–2021 fiscal year. Many reporting items that could inform more meaningful subgroup analyses remain optional and lacking, such as reporting on racialized groups, those who are underhoused, or other equity-deserving groups.
- The number of ED visits decreased in the 2020–2021 fiscal year and increased to nearly 2019–2020 levels since the 2016–2017 fiscal year in Alberta, Ontario, and Yukon, while the number of ED physicians remained relatively stable. The proportion of ED visits made by adults aged 65 years and older were higher after the fiscal year 2020–2021 in Alberta, Ontario, and Yukon. Factors that might influence numbers of ED visits, such as reasons or main problems to visit EDs, access to primary care, and arrival via ambulance, were not presented due to limited data coverage across jurisdictions and/or project time constraints.
- Length of stay and wait time to PIA varied by patient acuity measured by CTAS. Additional data aggregated by CTAS Levels are available on the [Utilization Analysis Dashboard](#).
- The median wait time to PIA increased by 78% and 56% between 2020–2021 and 2022–2023 in Alberta and Ontario, respectively. In Yukon, the median wait time to PIA increased steadily in recent years from 2019–2022 to 2022–2023. In addition to increases in median wait times to PIA, other factors contributing to the steady increase in length of stay in Alberta, Ontario, and Yukon since 2010–2011 need to be studied.
- Patients requiring admission to hospital after ED visits experienced extended boarding time in Alberta, Ontario, and Yukon after 2020–2021, a key indicator of ED overcrowding. Boarding is the practice of holding patients in the ED after they have been admitted to the hospital because inpatient beds are not available.²³
- The proportions of patients who were not seen or left the ED (with or without being seen) increased more than 100% between 2020–2021 and 2022–2023 in the 3 jurisdictions. After ED visits, the proportions of patients who needed to be admitted, transferred to another facility, or transferred within the same facility in Alberta, Ontario, and Yukon has increased since 2018–2019. This suggests an increasing need for admissions to hospital, while many patients experienced difficulty in accessing care.

- The curative (acute) bed occupancy rates in Canada were high compared with other OECD countries. This rate decreased in 2020 and increased thereafter. This implies Canada has relatively fewer beds available, and it is unclear whether this is related to the longer wait time for beds in hospitals.
- How inequities in access to, or care within, EDs are amplified in the context of overcrowding remains an issue for investigation and was not accounted for in the data presented here. It is important to account for these factors for equitable policy and resource allocation decision-making.

What Else Do We Need to Consider?

- Recent increases in length of stay, wait time to PIA, and wait time to inpatient beds were related to multiple factors, such as older age and level of acuity, suggesting EDs in the reporting jurisdictions are experiencing worsening ED overcrowding.
- There are limitations to this utilization analysis. NACRS remains the major source of information on ED utilization, although many jurisdictions did not mandate the reporting to NACRS, and many data items were optional to report. NACRS data quality and reporting rates varied over time and by jurisdiction. More information on these differences could inform analyses of access and equity considerations.
- Length of stay and wait time to PIA are 2 of the measures that CIHI often report. However, there are other measures that would help policy-makers understand resource utilization and the factors related to ED overcrowding, such as wait time to initial assessment by any health care professional (e.g., nurses), number of ED beds available, physicians available for each ED visit, and outcomes related to ED care quality. Collecting these data items might increase the burden on providers in EDs who are already facing care burdens and burnout.
- Data collection requires considerable resource requirements (and administrative burden) to undertake, making this particularly challenging in the context of overcrowded EDs. Collecting these data also raises considerations related to patient privacy, confidentiality, and data custodianship. Further, data collection and reporting systems need to be representative and respectful of Canada's diverse cultures, and respect appropriate disclosure practices, including for equity-deserving groups.

- Linking utilization data to additional datasets may provide further insights into the factors underlying changes to ED use patterns over time, such as nursing resources, inpatient bed availability, and staffing at the time of visits. However, these linkages are often challenging for researchers to request and complete and require considering patient privacy and confidentiality in linked data.
- Continued review of available data to identify bottlenecks in ED patient flow is essential to understand the causes, contributors, and consequences of ED overcrowding.
- Underserved population groups may encounter barriers to accessing EDs or experience different quality of care within EDs. Analyses to account for these groups may require collecting and reporting more data items via different data sources to explore differential access, treatment, or outcomes for these groups, as well as intersections between them.

What NACRS Data Are Available?

- During the 2021–2022 fiscal year, 9 Canadian jurisdictions (i.e., Alberta, British Columbia, Manitoba, Nova Scotia, Ontario, Prince Edward Island, Quebec, Saskatchewan, and Yukon) reported to NACRS. The estimated data coverage of the facilities varied by jurisdiction.²
- New Brunswick, Newfoundland and Labrador, Northwest Territories, and Nunavut do not submit data to NACRS.
- Of the 9 reporting jurisdictions, 4 reported all ED visits to NACRS: Ontario (2002–2003 onward), Alberta (2010–2011 onward), Yukon (2015–2016 onward), and Quebec (2018–2019 onward).
 - In fiscal year 2020–2021, these 4 jurisdictions were estimated to report all ED visits in their jurisdictions to NACRS.²
 - The percentages of ED visits reported to NACRS in the other 5 reporting provinces were estimated to range from 38.0% to 83.5% in 2021–2022.²

Table 8

Percentage of ED Visits Reported to NACRS by Jurisdiction Between 2015–2016 and 2021–2022

Jurisdiction	ED visits reported to NACRS, %						
	2015	2016	2017	2018	2019	2020	2021
Alberta	100	100	100	100	100	100	100
British Columbia	74.1	71.7	73.3	72.5	71.3	71.3	72.9
Manitoba	44.6	45.5	42	43.8	43.7	43.7	38
New Brunswick	0	0	0	0	0	0	0
Newfoundland and Labrador	0	0	0	0	0	0	0
Northwest Territories	0	0	0	0	0	0	0
Nova Scotia	50.4	55.3	52.3	47.6	48.6	48.6	46.2
Nunavut	0	0	0	0	0	0	0
Ontario	100	100	100	100	100	100	99.9
Prince Edward Island	25.8	25.6	25.9	25.8	25	25	67.8
Quebec	0	0	0	96.8	100	100	100
Saskatchewan	40.3	45.3	49.3	48.7	51.7	51.7	83.5
Yukon	100	100	100	100	100	100	100

ED = emergency department; NACRS = National Ambulatory Care Reporting System.

Notes: Year = start of fiscal year (i.e., April 1).

ED data coverage is estimated and published by the Canadian Institute for Health Information.¹ Quebec began reporting to NACRS in the fiscal year 2018–2019. Four jurisdictions (i.e., Alberta, Ontario, Quebec, and Yukon) had an estimated ED data coverage of 100% from 2019 to 2021. Percentage of ED visits reported to NACRS for fiscal year 2022–2023 not yet available at time of this report publication.

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What Else Is CADTH Doing?

This utilization analysis is part of a [series of publications](#) that CADTH is producing on the topic of ED overcrowding in Canada as an update to our 2006 publications.¹¹⁻¹⁴ Separate reports not described in this report include:

- a review of the factors contributing to ED overcrowding in Canada and interventions that have been researched to determine whether they can effectively alleviate ED overcrowding
- the impact ED overcrowding has on quality of care and patient safety (i.e., the risks of overcrowding), and on health professional learner experiences and staff well-being
- the identification of new and emerging interventions to alleviate ED overcrowding (those not captured in the overview of reviews on intervention effectiveness)
- a summary of CADTH's multistakeholder dialogue sessions.

CADTH's Health Technology Expert Review Panel (HTERP) will use the CADTH deliverables as inputs into deliberations that will result in the development of guidance in response to addressing the decision problem of what evidence-informed solutions should be considered to inform decision- and policy-making to effectively alleviate overcrowding of adult and pediatric ED services in urban, rural, and remote health care settings in Canada?

Indigenous Knowledge and Perspectives

From the project's outset, we considered how to explore and understand Indigenous Knowledges and the perspectives and experiences of Indigenous people who engaged with (or faced barriers to accessing) health care services in overcrowded EDs in Canada. We understand that Indigenous Peoples' experiences, values, needs, and priorities are important for understanding and improving the state of health services provided in EDs and informing decision-making around the potential solutions to ED overcrowding in Canada. Ultimately, after careful deliberation with CADTH's Strategic Partner, Indigenous Engagement and Partnerships, we decided in the interest of fostering culturally safe practices that it would be best not to seek input from Indigenous Peoples regarding their perspectives and experiences for several reasons. CADTH set the project timelines and research design to respond to short-term decision-making needs, which precluded the ability to engage with Indigenous Peoples and Knowledges appropriately. Without adequate time to develop respectful and meaningful relationships with Indigenous Peoples to inform this work, CADTH is aware that any attempt to reflect Indigenous Knowledges and voices would not be culturally appropriate or safe and could further perpetuate harm. CADTH acknowledges the lack of engagement and inclusion of Indigenous perspectives and voices as a major limitation and gap. In the spirit of reconciliation, CADTH is committed to engaging with Indigenous partners to explore the importance of this topic and future CADTH work in this area, which would involve the development of a strengths-based approach and process to conduct the work respectfully and rigorously.

For more information on CADTH's work on this topic, please visit: [Emergency Department Overcrowding in Canada: An Update | CADTH](#)

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Acknowledgements: **Danielle MacDougall, Mary-Ellen Hogan, Laurie Lambert, Chris Vannabouathong**

Data source: Parts of this report are based on data and information provided by the Canadian Institute for Health Information. However, the analyses, conclusions, opinions, and statements expressed herein are those of the author(s) and not necessarily those of the Canadian Institute for Health Information.

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Appendix 1: Data Tables

Table 9

Number of ED Visits by Jurisdiction Between 2016–2017 and 2022–2023

Fiscal year	Number of ED visits			
	Alberta	Ontario	Quebec	Yukon
2016	2,275,272	6,311,959	NA	38,472
2017	2,308,934	6,483,987	NA	38,722
2018	2,275,926	6,462,689	3,712,435	37,622
2019	2,277,560	6,409,687	3,695,475	40,801
2020	1,704,359	4,933,208	2,718,280	33,044
2021	2,028,701	5,831,577	3,307,925	36,690
2022	2,227,674	6,213,334	3,626,684	41,737

ED = emergency department; NA = not available.

Note: Fiscal year = start of fiscal year (i.e., April 1).

Table 10

Percentage of ED Visits of All Visits by Adults Aged 65 Years and Older by Jurisdiction Between 2016–2017 and 2022–2023

Fiscal year	ED visits by adults ≥ 65 years, %			
	Alberta	Ontario	Quebec	Yukon
2016	17.1	22.8	NA	13.9
2017	17.6	23	NA	15.2
2018	18.0	23.3	26.3	15.9
2019	18.4	23.5	26.7	16.1
2020	20.2	25.6	28.2	17.6
2021	19.3	24.8	26.7	17.1
2022	19.3	24.1	NA	17.5

ED = emergency department; NA = not available.

Note: Fiscal year = start of fiscal year (i.e., April 1).

Table 11

ED Visits per 1,000 Population by Jurisdiction Between 2016–2017 and 2022–2023

Fiscal year	Number of ED visits per 1,000 population			
	Alberta	Ontario	Quebec	Yukon
2016	540.6	452.6	NA	992.8
2017	542.2	458.2	NA	972.8
2018	527.1	449.0	440.1	924.9
2019	519.4	437.9	432.6	979.7
2020	385.4	335.1	316.9	780.7
2021	454.2	391.3	383.3	845.9
2022	484.1	407.1	414.4	949.3

ED = emergency department; NA = not available.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions. Limited NACRS data for Quebec were available publicly from the Canadian Institute for Health Information.

Table 12

The 90th Percentile ED Length of Stay (Hours) by Jurisdiction Between 2016–2017 and 2022–2023

Fiscal year	ED length of stay (hours), 90th percentile			
	Alberta	Ontario	Quebec	Yukon
2016	7.5	8.2	NA	4.5
2017	7.8	8.5	NA	4.9
2018	7.9	8.7	18.1	5.2
2019	8.3	8.9	18.7	5.3
2020	8.9	9.1	19.8	5.5
2021	9.5	10.0	19.6	5.9
2022	10.6	11.0	NA	5.7

ED = emergency department; NA = not available.

Note: Fiscal year = start of fiscal year (i.e., April 1).

Table 13

Median Length of Stay (Hours) in EDs by Jurisdiction Between 2016–2017 and 2022–2023

Fiscal year	Length of stay (hours), median			
	Alberta	Ontario	Quebec	Yukon
2016	2.3	2.7	NA	1.5
2017	2.4	2.9	NA	1.7
2018	2.5	2.9	4.6	1.8
2019	2.7	3.0	4.7	2.0
2020	2.7	2.9	4.4	2.1
2021	3.1	3.3	4.9	2.4
2022	3.4	3.5	NA	2.4

ED = emergency department; NA = not available.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Length of stay was defined as the time when patients registered or were triaged to the time when patients left or had disposition available. Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions. Limited NACRS data for Quebec were available publicly from the Canadian Institute for Health Information.

Table 14

Median Wait Time to Physician Initial Assessment (Hours) by Jurisdiction Between 2010–2011 and 2022–2023

Fiscal year	Wait time to PIA (hours), median		
	Alberta	Ontario	Yukon
2010	1.0	1.2	0.6
2011	1.1	1.2	0.6
2012	1.1	1.1	0.7
2013	1.1	1.1	0.6
2014	1.1	1.1	0.6
2015	1.0	1.1	0.6
2016	1.0	1.1	0.6
2017	1.1	1.2	0.6
2018	1.1	1.2	0.6
2019	1.2	1.2	0.7
2020	0.9	0.9	0.7
2021	1.3	1.2	0.9
2022	1.6	1.4	1.0

PIA = physician initial assessment.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Data extracted from the National Ambulatory Care Reporting System (NACRS). Due to various data quality considerations related to NACRS, caution should be used when analyzing trends over time and across jurisdictions.

Table 15

Median Wait Time for Inpatient Bed for Admitted Patients by ED Location (Urban vs. Rural or Remote) and Jurisdiction Between 2016–2017 and 2022–2023

Fiscal year	Wait time for inpatient bed (hours), median					
	Alberta		Ontario		Yukon	
	Rural or remote	Urban	Rural or remote	Urban	Rural or remote	Urban
2016	0	2.5	1.3	3.5	0	4.1
2017	0	2.8	1.3	3.7	0	4.0
2018	0	2.3	1.3	3.6	0	3.0
2019	0	2.3	1.4	3.5	0	2.8
2020	0	2.3	1.3	3.0	0	2.3
2021	0	2.5	1.6	4.1	0.1	3.1
2022	0.1	3.6	1.9	7.0	0.1	3.7

ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Wait time to inpatient bed for admitted patients = [Date and time patient left ED for admission to an inpatient bed or operating room] minus [disposition date and time (as determined by the main service provider)].

Table 16

Percentage of ED Visits by Patients Who Were Not Seen or Left by Jurisdiction Between 2010–2011 and 2022–2023

Fiscal year	Patients who were not seen or left ED, %		
	Alberta	Ontario	Yukon
2010	4.0	4.3	2.4
2011	3.7	4.2	2.0
2012	3.8	3.8	2.9
2013	3.9	3.5	2.8
2014	4.3	3.7	2.6
2015	3.9	3.8	2.8
2016	3.8	3.9	3.0
2017	4.3	4.3	3.1
2018	4.5	4.5	3.0
2019	5.1	4.9	3.8
2020	4.0	3.3	3.8
2021	6.1	5.3	5.5
2022	8.7	6.6	5.4

ED = emergency department.

Notes: Fiscal year = start of fiscal year (i.e., April 1).

Table 17

Percentage of ED Visits by Patients Who Were Admitted, Transferred to Another Facility, or Transferred Within the Same Facility by Jurisdiction Between 2010–2011 and 2022–2023

Fiscal year	Patients admitted, transferred to another facility, or transferred within same facility, %		
	Alberta	Ontario	Yukon
2010	9.0	11.1	9.3
2011	9.0	11.1	7.7
2012	9.1	11.3	7.5
2013	9.2	11.4	7.2
2014	9.4	11.3	6.6
2015	9.8	11.3	6.7
2016	10.2	11.3	7.0
2017	10.3	11.4	7.2
2018	11.8	13.1	9.6
2019	11.9	13.3	10.1
2020	14.3	15.3	11.9
2021	12.9	14.4	11.1
2022	12.0	14.1	9.7

ED = emergency department.

Note: Fiscal year = start of fiscal year (i.e., April 1).

Table 18

Percentage of ED Visits by Patients Who Were Discharged by Jurisdiction Between 2010–2011 and 2022–2023

Fiscal year	Patients discharged from ED, %		
	Alberta	Ontario	Yukon
2010	87.0	84.5	88.2
2011	87.2	84.6	90.2
2012	87.0	84.8	89.5
2013	86.9	85.0	90.0
2014	86.2	84.9	90.8
2015	86.2	84.8	90.6
2016	85.9	84.7	90.0
2017	85.3	84.2	89.7
2018	83.6	82.3	87.3
2019	82.9	81.8	86.0
2020	81.6	81.3	84.3
2021	80.9	80.2	83.3
2022	79.2	79.1	84.8

ED = emergency department.

Note: Fiscal year = start of fiscal year (i.e., April 1).

Table 19

Curative (Acute) Care^a Bed Occupancy Rate (%) by Country Between 2010 and 2021

Year	Curative (acute) care bed occupancy rate, %					
	Canada	France	Germany	Netherlands	Norway	Switzerland
2010	88.7	75.0	79.0	52.8	85.6	82.8
2011	91.0	75.0	79.0	NA	83.7	84.2
2012	91.1	75.0	79.2	NA	84.8	81.5
2013	91.2	74.7	79.3	NA	83.8	82.8
2014	91.3	75.0	79.7	NA	82.8	83.2
2015	91.6	75.3	79.8	65.0	80.4	83.6
2016	91.8	75.6	80.2	66.3	80.9	83.9
2017	91.6	75.7	79.8	65.4	80.7	82.1
2018	91.7	75.7	79.1	63.8	80.5	81.7
2019	91.6	75.9	78.9	63.7	79.9	81.3
2020	82.7	69.9	69.6	59.6	73.5	78.3
2021	86.7	71.9	69.9	61.2	76.6	80.3

NA = not available.

Note: These countries also participated in the International Health Policy Survey.

^a Curative (acute) care beds are hospital beds to "manage labour (obstetrics), cure illness or provide definitive treatment of injury, perform surgery, relieve symptoms of illness or injury (excluding palliative care), reduce severity of illness or injury, protect against exacerbation and/or complication of illness and/or injury which could threaten life or normal functions, perform diagnostic or therapeutic procedures."¹⁷

Table 20

Mean Curative (Acute) Care Length of Stay in Days by Country Between 2010 and 2021

Year	Curative (acute) length of stay (days), mean						
	Canada	France	Germany	Netherlands	New Zealand	Norway	Switzerland
2010	7.7	5.8	8.1	5.6	6.1	6.3	7.8
2011	7.6	5.7	7.9	NA	6.2	6.1	7.7
2012	7.6	5.7	7.8	NA	6.0	5.8	7.5
2013	7.5	5.8	7.7	NA	5.6	5.5	7.4
2014	7.6	5.7	7.6	NA	5.1	5.5	7.3
2015	7.4	5.7	7.6	5.1	5.5	6.2	7.2
2016	7.5	5.6	7.5	5.1	5.3	6.1	7.1
2017	7.4	5.5	7.5	5.1	5.2	6.0	7.0
2018	7.5	5.5	7.5	5.1	4.9	6.0	6.9
2019	7.7	5.5	7.4	5.1	4.7	5.9	6.9
2020	7.7	5.7	7.4	5.2	4.4	5.9	6.9
2021	7.8	5.6	7.4	5.2	NA	5.8	6.8

NA = not available.

Note: These countries also participated in the International Health Policy Survey.

Table 21

Percentage of People Reporting Difficulty Accessing Medical Care Outside of Regular Hours by Jurisdiction Between 2016 and 2020

Jurisdiction	People having difficulty getting outside of regular hours, %	
	2016	2020
Alberta	58	62
British Columbia	73	65
Manitoba	66	65
New Brunswick	65	64
Newfoundland and Labrador	84	69
Northwest Territories	NA	63
Nova Scotia	74	76
Nunavut	NA	43
Ontario	60	58
Prince Edward Island	75	72
Quebec	73	60
Saskatchewan	68	56
Yukon	NA	72

NA = not available.

Note: Care outside of regular hours was defined as the availability of appointments with primary care physicians after 6 p.m. during the week (i.e., Monday to Friday) at least once a week or on the weekend (i.e., Saturday or Sunday) at least once a month.¹⁸

Table 22

Percentage of People Aged 65 Years and Older Reporting Difficulty Accessing Care Outside of Regular Hours by Jurisdiction in 2017 and 2021

Province or territory	2017		2021	
	Adults ≥ 65 years with difficulty, %	Population ≥ 65 years, N	Adults ≥ 65 years with difficulty, %	Population ≥ 65 years, N
Alberta	51	525,296	59	639,830
British Columbia	63	878,623	62	1,023,614
Manitoba	76	202,065	60	228,254
New Brunswick	58	154,329	66	177,662
Newfoundland and Labrador	76	104,040	76	120,214
Northwest Territories	NA	3,313	NA	4,284
Nova Scotia	69	189,075	76	215,702
Nunavut	NA	1,430	NA	1,697
Ontario	59	2,341,689	56	2,685,008
Prince Edward Island	78	28,843	73	33,401
Quebec	66	1,527,929	53	1,749,372
Saskatchewan	57	173,867	55	197,098
Yukon	NA	4,513	66	6,015

NA = not available.

Note: Care outside of regular hours was defined as the availability of appointments with primary care physicians after 6 p.m. during the week (i.e., Monday to Friday) at least once a week or on the weekend (i.e., Saturday or Sunday) at least once a month.

Table 23

Number of Long-Term Care Beds per 1,000 Population Aged 65 Years and Older by Country Between 2010 and 2021

Year	Number of hospital beds per 1,000 population					
	Canada	France	Germany	Netherlands	New Zealand	Switzerland
2010	54.0	54.4	NA	67.8	61.9	70.1
2011	53.0	56.2	52.8	66.4	62.5	69.8
2012	50.8	55.7	NA	88.4	59.9	68.5
2013	50.1	55.1	54.0	84.7	58.9	67.6
2014	49.5	54.0	NA	82.2	57.7	66.8
2015	49.1	53.1	54.4	78.2	56.3	65.9
2016	56.9	52.0	NA	76.0	56.4	65.0
2017	54.8	50.9	54.4	74.3	54.9	65.2
2018	53.1	50.0	NA	73.2	53.7	64.3
2019	51.3	49.1	54.2	72.1	52.1	63.6
2020	NA	48.0	NA	70.6	51.1	62.7
2021	46.7	47.4	53.9	73.9	50.4	61.9

NA = not available.

Note: These countries also participated in the International Health Policy Survey. Beds in residential long-term care facilities were included.

Table 24

Number of Total Hospital Beds per 1,000 Population by Country Between 2010 and 2022

Year	Number of hospital beds per 1,000 population								
	Australia	Canada	France	Germany	Netherlands	New Zealand	Norway	Sweden	Switzerland
2010	3.78	2.78	6.43	8.25	4.12	2.75	4.30	2.73	5.19
2011	3.79	2.8	6.36	8.38	3.97	2.82	4.19	2.70	5.05
2012	3.75	2.79	6.34	8.34	3.78	2.83	3.97	2.66	4.97
2013	3.74	2.72	6.28	8.28	3.69	2.78	3.86	2.59	4.85
2014	3.79	2.67	6.19	8.23	3.55	2.75	3.84	2.54	4.73
2015	3.82	2.62	6.13	8.13	3.49	2.71	3.76	2.44	4.73
2016	3.84	2.60	6.05	8.06	3.41	2.72	3.68	2.34	4.69
2017	NA	2.53	5.97	8.00	3.28	2.70	3.60	2.21	4.65
2018	NA	2.55	5.89	7.98	3.18	2.59	3.53	2.13	4.63
2019	NA	2.52	5.81	7.91	3.02	2.54	3.47	2.07	4.59
2020	NA	2.55	5.72	7.82	2.91	2.49	3.4	2.05	4.48
2021	NA	2.58	5.65	7.76	2.95	2.67	3.4	2.00	4.43
2022	NA	NA	NA	NA	NA	2.57	NA	NA	NA

NA = not available.

Notes: These countries also participated in the International Health Policy Survey.

Table 25

Number of Generalist Medical Practitioners per 1,000 Population by Country Between 2010 and 2022

Year	Number of generalist practitioners per 1,000 population								
	Australia	Canada	France	Germany	Netherlands	New Zealand	Norway	Sweden	Switzerland
2010	NA	1.12	1.59	0.91	1.25	1.09	0.83	0.63	0.61
2011	NA	1.15	1.42	0.94	1.40	1.13	0.84	0.63	1.06
2012	1.56	1.19	1.42	0.94	1.44	1.13	0.86	0.64	1.08
2013	1.52	1.21	1.42	0.97	1.46	1.17	0.87	0.64	1.11
2014	1.54	1.24	1.41	0.99	1.52	1.21	0.89	0.65	1.13
2015	1.57	1.26	1.41	0.96	1.56	1.29	0.89	0.65	1.16
2016	1.57	1.27	1.41	0.96	1.59	1.29	0.90	0.64	1.15
2017	1.63	1.30	1.41	0.97	1.62	1.34	0.92	0.64	1.14
2018	1.64	1.32	1.40	0.97	1.67	1.37	0.94	0.64	1.14
2019	1.70	1.32	1.40	1.00	1.74	1.37	0.97	0.62	1.13
2020	1.75	1.33	1.39	1.02	1.79	1.22	0.99	0.61	1.14
2021	1.77	1.33	1.38	1.03	1.83	1.25	1.00	NA	1.14
2022	NA	1.33	NA	NA	NA	1.26	NA	NA	NA

NA = not available.

Notes: These countries also participated in the International Health Policy Survey.

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November 2023