Appendix A: Diagnostic codes used to identify 18 chronic conditions in defining multimorbidity (having 3 or more active chronic conditions), according to the methods of Mondor and Maxwell et al.

Conditions	**ICD 9/OHIP**	**ICD 10**
Stroke	430, 431, 432, 434, 436	I60-I64
Rheumatoid arthritis	714	M05-M06
Dementia	290, 292, 295, 297, 298, 299, 301, 302, 303, 304, 305, 306, 307, 313, 314, 315, 319	F00, F01, F02, F03, G30
Congestive heart failure	428	I500, I501, I509
Osteoarthritis	715	M15-M19
Depression, anxiety, and other nonpsychotic disorders	296, 300, 309, 311	F30, F31, 32, F33, F34 (excluding F34.0), F38, F39, F49, F41, F42, F43.1, F43.2, F43.8, F44, F45.0, F45.1, F45.2, F48, F68.0, F93.0, F99
Asthma	493	J45
Renal failure	403, 404, 584, 585, 586, v451	N17, N18, N19, T82.4, Z49.2, Z99.2
Chronic Obstructive Pulmonary Disease	491, 492, 496	J41-J44
Osteoporosis	733	M81, M82
Diabetes	250	E10, E11, E13, E14
Cardiac arrhythmia	427 (OHIP)/427.3 (DAD)	I48.0, I48.1
Acute Myocardial infarction	410	I21
Chronic coronary syndrome	411-414	I20, I22-I25
Hypertension	401-405	I10, I11, I12, I13, I15
Cancer (all)	140-239	C00-C26, C30-C44, C45-C97
Other arthritis	727, 729, 710, 720, 274, 716, 711, 718, 728, 739	M00-M03, M07, M10, M11-M14, M20-M25, M30-M36, M65-M79
Other mental illnesses	291, 292, 295, 297, 298, 299, 301-307, 313-315, 319	F04, F050, F058-F064, F07, F08, F10-F29, F340, F35, F36, F37, F430, F439, F453, F454, F458, F46, F47, F49, F50, F51, F52, F531, F538, F539, F54-FF67, F681, F688, F69-F92, F931, F932, F933, F938, F939, F94-F98
ICD: International Classification of Diseases; OHIP: Ontario Health Insurance Plan; DAD: Discharge Abstract Database		

Reference:

Mondor L, Maxwell CJ, Bronskill SE, Gruneir A, Wodchis WP. The relative impact of chronic conditions and multimorbidity on health-related quality of life in Ontario long-stay home care clients. Quality of Life Research. 2016;25(10):2619–32.

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Appendix B: Comprehensive Primary Care Codes Used for Virtually Rostering, according to the method of Stukel and Glazier et al.

OHIP Codes	Description
A001	Minor assessment
A002	Enhanced 18 month well baby visit
A003	General assessment
A007	Intermediate assessment
A903	Preoperative assessment
E075	Geriatric general assessment
G212	Allergy injection alone
G271	Anticoagulant supervision
G372	Injection, with visit
G373	Injection, sole reason
G365	Papanicolaou test
G538	Immunization, with visit
G539	Immunization, sole reason
G590	Influenza immunization, with visit
G591	Influenza immunization, sole reason
K005	Primary mental health care
K013	Counselling, individual care
K017	Annual health exam
P004	Minor prenatal assessment
K130	Periodic health visit, adolescent
K131	Periodic health visit, adult aged 18 to 64 inclusive
K132	Periodic health visit, adult 65 years of age and older
K030	Diabetic management
K080	Minor assessment, Covid, virtual
K081	Intermediate assessment, Covid, virtual
K082	Primary mental health care, Covid, virtual
A261	Minor assessment, pediatric
A268	Pediatrics, enhanced 18 months well baby visit
A267	Annual health exam, child 2–11 years
K269	Annual adolescent health exam

References:

Stukel T, Glazier RH, Schultz SE, et al. Multispecialty physician networks in Ontario. Open medicine: a peer-reviewed, independent, open-access journal. 2013.

Schultz SE, Glazier RH. Identification of physicians providing Comprehensive Primary Care in Ontario: A retrospective analysis using linked administrative data. CMAJ Open. 2017;5(4).

Appendix C: List of variables and attributes:

Variables	Data source	Definition/Codes
Sex	RPDB	Sex in RPDB. Categorized as: Female=1 Male =0 (Ref)
Age	RPDB	Age in RPDBD in years: Number
Age – categorical	RPDB	Age in RPDBD. Categorized as: 16-39 = 0 40-64 = 1 65-84 = 2 85+ = 3
Rurality	RPDB	RIO score in RPDB. Categorized as: Large urban (RIO 0) = 0 (Ref) Medium urban (RIO 1-9) = 1 Small urban (RIO 10-39) = 2 Rural (RIO 40+) = 3
Education	HCES	Survey question: What is the highest level of education you have completed? Categorized as: High school = 0 College or bachelor's degree = 1 Graduate-professional degree = 2 (Ref)
Financial situation	HCES	Survey question: Which of the following words best describes your current financial situation: very comfortable, comfortable, tight, very tight, or poor? Categorized as: Very comfortable = 1 (Ref) Comfortable = 2 Tight/very tight/poor = 3 Don't know or refused = 4
Multimorbidity (mmb3_active).	ICES-derived cohorts	Having 3 or more active chronic conditions. Categorized as: No=0 (Ref) Yes=1
Use of walk-in clinics in the last 12 months (wi_1).	HCES	Survey question: Have you been to a walk-in clinic because you were sick or for a health-related problem in the last 12 months? Categorized as: No =0

Appendix 1, as supplied by the authors. Appendix to: Rahman B, Costa AP, Gayowsky A, et al. The association between patients' timely access to their usual primary care physician and use of walk-in clinics in Ontario, Canada: a cross-sectional study. *CMAJ Open* 2023. DOI:10.9778/cmajo.20220231.

Variables	Data source	Definition/Codes
		Yes = 1 (Event)
Quality of care received in walk-in clinics (wi_2)	HCES	Overall, would you say the medical are that you received in the walk-in clinic was excellent, very good, good, fair, or poor? Categorized as: Excellent/Very Good/Good = 1 Fair = 2 Poor = 0 Don't know/Refused = 3
Self-reported that the walk-in visit was for a condition could have been treated by own primary care provider, if he or she had been available (wi_4)	HCES	The last time you went to walk-in clinic, was it for a condition that you think could have been treated by your provider if he or she had been available? Categorized as: Yes = 1 No=0 Don't know/Refused = 2 Missing
Reasons for walk-in if attached (wi_5) Note: Question added in wave 6 of the survey, 2014.	HCES	Which of the following was the main reason you went to a walk-in rather than to your provider? Categorized as: Provider was not available or could not get an appointment with provider = 0 It was faster to go to the walk-in = 1 The walk-in was closer = 2 Provider advised or follow-up= 3 Don't Know/Refused = 4
Have called or tried to call primary care physician with a medical question or concern during the day on a Monday to Friday (access_1)	HCES	Survey question: Have you called or tried to call your provider's office with a medical question or concern during the day on a Monday to Friday in the last 12 months? Categorized as: No= 0 (Ref) Yes= 1
After-hours access (access_6)	HCES	Survey question: Not including hospital emergency departments, does your provider have an after-hours clinic where patients can be seen by or talk to a doctor or nurse when the practice is closed? Categorized as: No = 0

Appendix 1, as supplied by the authors. Appendix to: Rahman B, Costa AP, Gayowsky A, et al. The association between patients' timely access to their usual primary care physician and use of walk-in clinics in Ontario, Canada: a cross-sectional study. *CMAJ Open* 2023. DOI:10.9778/cmajo.20220231.

Variables	Data source	Definition/Codes
		Yes=1 (Ref) Missing=.
Wanted to see doctor when sick (sick_1)	HCES	Survey question: Waves 1-4: Not counting yearly check-ups or monitoring of an ongoing health issue, in the last 12 months did you want to see your provider because you were sick, had the flu or were concerned that you had a health problem? Waves 5+: Not counting yearly check-ups or monitoring of an ongoing health issue, in the last 12 months did you want to see a doctor because you were sick or were concerned that you had a health problem? Categorized as: Yes = 1 No = 5 Don't know = 8 Refused = 9 Note: Survey prerequisite indicator for the measure of same-day/next-day access(sick_3).
See doctor when sick (sick_2)	HCES	Survey question: Did you actually see your provider? Categorized as: Yes, saw own provider = 1 Yes, saw someone else in office = 2 Yes, saw both = 3 No = 5 Don't know = 8 Refused = 9 Note: Survey prerequisite indicator for the measure of same-day/next-day access (sick_3).
Saw own physician or clinic same-day/next-day when sick (sick_3)	HCES	Survey question: How many days did it take from when you first tried to see your provider to when you actually saw him/her or someone else in the office? Categorized as: No (2 or more days) =0 Yes (less than 2 days) = 1 (Ref) Not Applicable = 2

Appendix 1, as supplied by the authors. Appendix to: Rahman B, Costa AP, Gayowsky A, et al. The association between patients' timely access to their usual primary care physician and use of walk-in clinics in Ontario, Canada: a cross-sectional study. *CMAJ Open* 2023. DOI:10.9778/cmajo.20220231.

Variables	Data source	Definition/Codes
		Did not see own physician or clinic = 3 Missing=. Note: In the survey, response to Sick_3 variable is conditioned to a valid response to two prior questions (sick_1 = 1; and sick_2 = 1, 2, 3). Those who did not satisfy the survey condition for (sick_1: "Did not seek any medical care in the last 12 months" were coded as Not Applicable. Those who did not their own physician (sick_2 =5) were coded separately. This way of coding was used to ensure that true missing values were separated from cases that did not meet survey's conditions.
Primary care practice models *Note: Assignment includes formally and virtually rostered to the model over two years.*	PCPOP	From PROGTYPE2 in PCPOP within the six months of the interview date. Categorized as: Virtually enrolled to a Fee-for Service = 0 Enhanced fee for service (Family Health Group or Comprehensive Care Model) = 1 Non-team Capitation (Family Health Network or Family Health Organization not associated with a Family Health Team) = 2 Team Capitation (Family Health Network or Family Health Organization associated with a Family Health Team) = 3 (Ref) Other PEM models = 4
Number of visits to the usual primary care physician over two years	OHIP, CAPE	Count of visits in the 2 years prior to the interview date.
Number of visits to any primary care physicians over two years	OHIP, CAPE	Count of visits in the 2 years prior to the interview date.
Number of visits to a primary care physician other than the usual physician over two years	OHIP, CAPE	Count of visits in the 2 years prior to the interview date.
Wave	HCES	Wave of interview.
Year	HCES	Calendar year.

Appendix 1, as supplied by the authors. Appendix to: Rahman B, Costa AP, Gayowsky A, et al. The association between patients' timely access to their usual primary care physician and use of walk-in clinics in Ontario, Canada: a cross-sectional study. *CMAJ Open* 2023. DOI:10.9778/cmajo.20220231.

Appendix D: Description of Datasets:

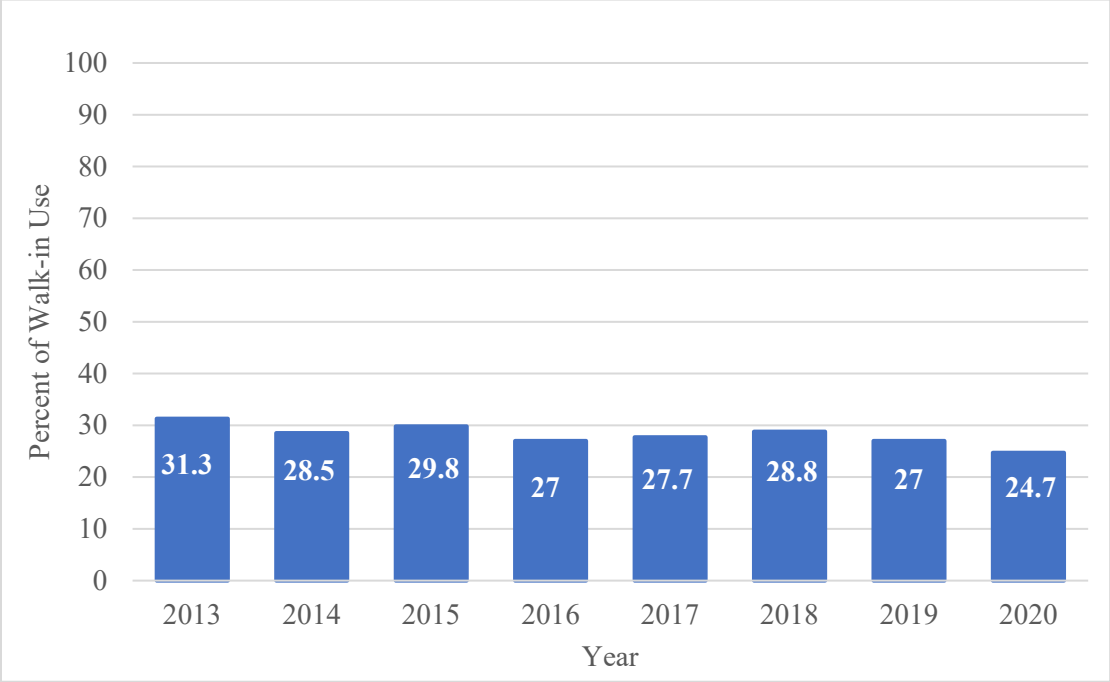
Name	Description
Registered Persons Database (RPBD)	RPDB is a personal information bank that contains information on all Ontario residents registered for the Ontario Health Insurance Plan (OHIP) and Ontario Drug Benefit (ODB).
Health Care Experience Survey (HCES)	The HCES is a voluntary telephone survey given to an annual sample of 11,200 Ontarian residents age 16 years and older.[13] Respondents are asked questions about their experiences with primary care, integration of specialists and primary care, the quality of their experiences, access to primary care for children living in the home, and socio-demographic information.[13, 14] The data is collected for the Ministry of Health/Ministry of Long-Term Care by Institute for Social Research is protected by law, and no identifying information is reported.[14] Before implementation, the survey was piloted between October 2012 and December 2012.[13] The pilot involved ensuring respondents understood the questions, that the flow and order of questions were logical and easy to follow, that Computer Assisted Telephone Interview codes (skip patterns and conditional logic) were implemented correctly, and that all interviewer instructions were clear.[13] Validation was completed at the Institute for Social Research to ensure that responses were consistent.[13] Responses in each wave were reviewed to check for anomalies and survey weights were assigned to enable population and community-level reporting.[13] Respondent households receive a letter to notify them that they will be receiving a phone call from Institute of Social Research on behalf of Ontario's Ministry of Health/Ministry of Long-Term Care for the HCES interview. Also, to further maximize the response rate, all telephone numbers receive up to 12 call attempts. More than 12 calls are made when there is a good reason to believe that additional calls will obtain interviews.

Appendix 1, as supplied by the authors. Appendix to: Rahman B, Costa AP, Gayowsky A, et al. The association between patients' timely access to their usual primary care physician and use of walk-in clinics in Ontario, Canada: a cross-sectional study. *CMAJ Open* 2023. DOI:10.9778/cmajo.20220231.

Name	Description
Client Agency Program Enrolment (CAPE)	CAPE contains a list of patients enrolled with a specific primary care enrolment physician model, including the patient's enrolment status (active or inactive).
ICES Primary Care Population (PCPOP)	PCPOP is a population-level dataset that includes all people in Ontario who are deemed alive and eligible at a given point in time. All indicators are as of the index date, with various look-back periods and an extensive list of primary care related indicators.
Ontario Health Insurance Plan Claims Database (OHIP)	OHIP contains most claims paid for by the Ontario Health Insurance Plan. The data cover all health care providers who can claim under OHIP (this includes physicians, groups, laboratories, and out-of-province providers).
ICES Physician Database (IPDB)	IPDB contains yearly information about all physicians in Ontario. Its potential uses include physician profiling, predicting physician behaviour, measuring physician supply, and many others.

Appendix 1, as supplied by the authors. Appendix to: Rahman B, Costa AP, Gayowsky A, et al. The association between patients' timely access to their usual primary care physician and use of walk-in clinics in Ontario, Canada: a cross-sectional study. *CMAJ Open* 2023. DOI:10.9778/cmajo.20220231.

Appendix E: Percentage of Walk-in Use Over the Last12 Months by Year (Weighted):



Appendix F: Adjusted odds ratios (ORs) of the association between access measures and self-reported walk-in clinic use, stratified by respondent's sex, in large and medium-sized urban areas in the past 12 months:

Variables	Respondent's Registered Sex	
	Female (n=20,087)	**Male (n=14,023)**
Reported that own primary care physician or clinic offer after-hours access:		
Yes (ref)		
No	1.26 (1.16 -1.37)	1.18 (1.04 - 1.34)
Saw own physician or clinic same-day/next-day when sick:		
Yes (ref)		
No	1.31 (1.18 - 1.45)	1.19 (0.99 - 1.43)
Did not see own physician or clinic	3.08 (2.64 – 3.61)	2.98 (2.35 – 3.78)
Not Applicable^	0.64 (0.58 – 0.72)	0.63 (0.53 - 0.74)

Note: The model was adjusted for age, self-reported level of education, self-reported financial situation, multimorbidity (3+ chronic conditions), rurality (RIO score 0-9), access during office hours, type of primary care model, and the number of visits to the usual primary care physician over two years.
^ Not Applicable included those who did not seek any medical care in the last 12 months.

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Appendix G: Distribution of access measures in large and medium-sized urban areas by type of primary care model (n=36,821):

Variables	Type of Primary Care Model			
	Virtually enrolled in a FFS	**Enhanced FFS**	**Non-team Capitation**	**Team Capitation**
After-hours access to own primary care physician or clinic:				
Yes	426 (22.1)	3,941 (28.1)	6,658 (50.2)	5,488 (58.2)
No	1,401 (77.9)	8,816 (71.9)	6,193 (49.8)	3,790 (41.8)
Missing	1 (0.0)	2 (0.0)	3 (0.0)	4 (0.0)
Saw own physician or clinic same-day/next-day when sick ‡:				
Yes	437 (46.6)	3034 (44.4)	2558 (38.4)	2023 (40.2)
No	481 (46.5)	3739 (50.7)	4097 (56.8)	2911 (55.9)
Missing	69 (6.9)	377 (4.9)	365 (4.8)	230 (3.9)

Note: Results are weighted.
‡ The same-day/next-day access to own physician was calculate for a smaller subset of the data excluded those who did not seek any medical care and those who did not see their own physician or clinic (n=20,379).

Appendix H: Sensitivity Analysis for missing values for same-day/next-day access and after-hours access variables: Best (both access variables "yes") and Worst (both access variables "no") Method.

Variables	Odds Ratio (95% Cl)		
	Main Model N = 56,297	**Best- N = 57,834**	**Worst N = 57,834**
Reported that own primary care physician or clinic offered after-hours access:			
Yes (ref)			
No	1.14 (1.07 – 1.21)	1.14 (1.08 – 1.20)	1.14 (1.07 – 1.21)
Saw own physician or clinic same-day/next-day when sick:			
Yes (ref)			
No	1.23 (1.13 – 1.34)	1.23 (1.13 – 1.33)	1.22 (1.12 – 1.32)
Did not see own physician or clinic	2.77 (2.49 -3.09)	2.75 (2.48 – 3.06)	2.76 (2.48 – 3.08)
Not Applicable^	0.62 (0.57 – 0.68)	0.62 (0.57 – 0.67)	0.62 (0.57 – 0.68)

Note. Adjusted for sex, age, self-reported levels of education, self-reported financial situation, rurality, multimorbidity (3+ chronic conditions), patient's type of primary care model, access during office hours, and the number of visits to the usual primary care physician over two years.

^ Not Applicable included those who did not seek any medical care in the last 12 months.

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Appendix I: Sensitivity Analysis for the survey waves (28 and 29) with the lowest response rate

Variables	Odds Ratio (95% Cl)	
	Main Model **N =** 56,297)	**Wave 28 and 29** **(N=** 3,949**)**
Reported that own primary care physician or clinic offer after-hours access:		
Yes (ref)		
No	1.14 (1.07 – 1.21)	1.30 (1.07 – 1.56)
Saw own physician or clinic same-day/next-day when sick :		
Yes (ref)		
No	1.23 (1.13 – 1.34)	1.71 (1.35 – 2.15)
Did not see own physician or clinic	2.77 (2.49 -3.09)	3.62 (2.55 – 5.12)
Not Applicable^	0.62 (0.57 – 0.68)	0.81 (0.63 – 1.04)

Note. Adjusted for sex, age, self-reported levels of education, self-reported financial situation, rurality, multimorbidity (3+ chronic conditions), patient's type of primary care model, access during office hours and the number of primary care visits to the usual primary care physician over two years.
^ Not Applicable included those who did not seek any medical care in the last 12 months.

Appendix A: Diagnostic codes used to identify 17 chronic conditions in defining multimorbidity (having 3 or more active chronic conditions), according to the methods of Mondor and Maxwell et al.

Conditions	**ICD 9/OHIP**	**ICD 10**
Stroke	430, 431, 432, 434, 436	I60-I64
Rheumatoid arthritis	714	M05-M06
Dementia	290, 292, 295, 297, 298, 299, 301, 302, 303, 304, 305, 306, 307, 313, 314, 315, 319	F00, F01, F02, F03, G30
Congestive heart failure	428	I500, I501, I509
Osteoarthritis	715	M15-M19
Depression, anxiety, and other nonpsychotic disorders	296, 300, 309, 311	F30, F31, 32, F33, F34 (excluding F34.0), F38, F39, F49, F41, F42, F43.1, F43.2, F43.8, F44, F45.0, F45.1, F45.2, F48, F68.0, F93.0, F99
Asthma	493	J45
Renal failure	403, 404, 584, 585, 586, v451	N17, N18, N19, T82.4, Z49.2, Z99.2
Chronic Obstructive Pulmonary Disease	491, 492, 496	J41-J44
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Cardiac arrhythmia	427 (OHIP)/427.3 (DAD)	I48.0, I48.1
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Chronic coronary syndrome	411-414	I20, I22-I25
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ICD: International Classification of Diseases; OHIP: Ontario Health Insurance Plan; DAD: Discharge Abstract Database		

Reference:

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G372	Injection, with visit
G373	Injection, sole reason
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G538	Immunization, with visit
G539	Immunization, sole reason
G590	Influenza immunization, with visit
G591	Influenza immunization, sole reason
K005	Primary mental health care
K013	Counselling, individual care
K017	Annual health exam
P004	Minor prenatal assessment
K130	Periodic health visit, adolescent
K131	Periodic health visit, adult aged 18 to 64 inclusive
K132	Periodic health visit, adult 65 years of age and older
K030	Diabetic management
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K081	Intermediate assessment, Covid, virtual
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Age – categorical	RPDB	Age in RPDBD. Categorized as: 16-39 = 0 40-64 = 1 65-84 = 2 85+ = 3
Rurality	RPDB	RIO score in RPDB. Categorized as: Large urban (RIO 0) = 0 (Ref) Medium urban (RIO 1-9) = 1 Small urban (RIO 10-39) = 2 Rural (RIO 40+) = 3
Education	HCES	Survey question: What is the highest level of education you have completed? Categorized as: High school = 0 College or bachelor's degree = 1 Graduate-professional degree = 2 (Ref)
Financial situation	HCES	Survey question: Which of the following words best describes your current financial situation: very comfortable, comfortable, tight, very tight, or poor? Categorized as: Very comfortable = 1 (Ref) Comfortable = 2 Tight/very tight/poor = 3 Don't know or refused = 4
Multimorbidity (mmb3_active).	ICES-derived cohorts	Having 3 or more active chronic conditions. Categorized as: No=0 (Ref) Yes=1
Use of walk-in clinics in the last 12 months (wi_1).	HCES	Survey question: Have you been to a walk-in clinic because you were sick or for a health-related problem in the last 12 months? Categorized as: No =0 Yes = 1 (Event)

Variables	Data source	Definition/Codes
Quality of care received in walk-in clinics (wi_2)	HCES	Overall, would you say the medical are that you received in the walk-in clinic was excellent, very good, good, fair, or poor? Categorized as: Excellent/Very Good/Good = 1 Fair = 2 Poor = 0 Don't know/Refused = 3
Self-reported that the walk-in visit was for a condition could have been treated by own primary care provider, if he or she had been available (wi_4)	HCES	The last time you went to walk-in clinic, was it for a condition that you think could have been treated by your provider if he or she had been available? Categorized as: Yes = 1 No=0 Don't know/Refused = 2 Missing
Reasons for walk-in if attached (wi_5) Note: Question added in wave 6 of the survey, 2014.	HCES	Which of the following was the main reason you went to a walk-in rather than to your provider? Categorized as: Provider was not available or could not get an appointment with provider = 0 It was faster to go to the walk-in = 1 The walk-in was closer = 2 Provider advised or follow-up= 3 Don't Know/Refused = 4
Have called or tried to call primary care physician with a medical question or concern during the day on a Monday to Friday (access_1)	HCES	Survey question: Have you called or tried to call your provider's office with a medical question or concern during the day on a Monday to Friday in the last 12 months? Categorized as: No= 0 (Ref) Yes= 1
After-hours access (access_6)	HCES	Survey question: Not including hospital emergency departments, does your provider have an after-hours clinic where patients can be seen by or talk to a doctor or nurse when the practice is closed? Categorized as: No = 0 Yes=1 (Ref) Missing=.

Variables	Data source	Definition/Codes
Wanted to see doctor when sick (sick_1)	HCES	Survey question: Waves 1-4: Not counting yearly check-ups or monitoring of an ongoing health issue, in the last 12 months did you want to see your provider because you were sick, had the flu or were concerned that you had a health problem? Waves 5+: Not counting yearly check-ups or monitoring of an ongoing health issue, in the last 12 months did you want to see a doctor because you were sick or were concerned that you had a health problem? Categorized as: Yes = 1 No = 5 Don't know = 8 Refused = 9 Note: Survey prerequisite indicator for the measure of same-day/next-day access(sick_3).
See doctor when sick (sick_2)	HCES	Survey question: Did you actually see your provider? Categorized as: Yes, saw own provider = 1 Yes, saw someone else in office = 2 Yes, saw both = 3 No = 5 Don't know = 8 Refused = 9 Note: Survey prerequisite indicator for the measure of same-day/next-day access (sick_3).
Saw own physician or clinic same-day/next-day when sick (sick_3)	HCES	Survey question: How many days did it take from when you first tried to see your provider to when you actually saw him/her or someone else in the office? Categorized as: No (2 or more days) =0 Yes (less than 2 days) = 1 (Ref) Not Applicable = 2 Did not see own physician or clinic = 3 Missing

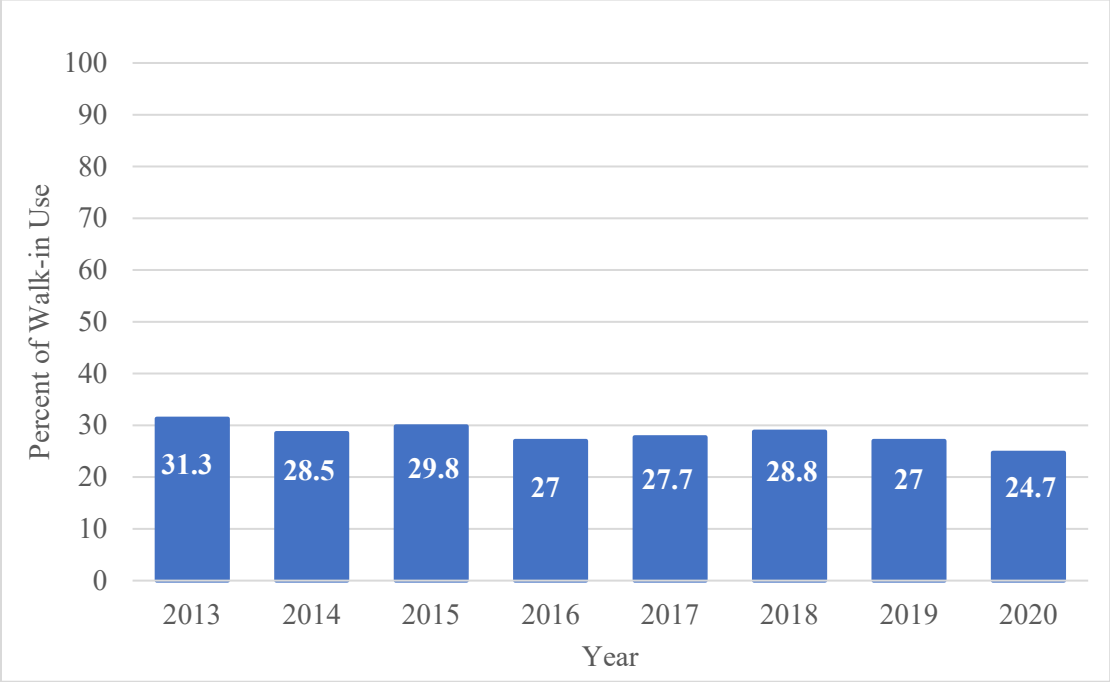
Variables	Data source	Definition/Codes
		Note: In the survey, response to Sick_3 variable is conditioned to a valid response to two prior questions (sick_1 = 1; and sick_2 = 1, 2, 3). Those who did not satisfy the survey condition for (sick_1: “Did not seek any medical care in the last 12 months" were coded as Not Applicable. Those who did not their own physician (sick_2 =5) were coded separately. This way of coding was used to ensure that true missing values were separated from cases that did not meet survey’s conditions.
Primary care practice models *Note: Assignment includes formally and virtually rostered to the model over two years.*	PCPOP	From PROGTYPE2 in PCPOP within the six months of the interview date. Categorized as: Virtually enrolled to a Fee-for Service = 0 Enhanced fee for service (Family Health Group or Comprehensive Care Model) = 1 Non-team Capitation (Family Health Network or Family Health Organization not associated with a Family Health Team) = 2 Team Capitation (Family Health Network or Family Health Organization associated with a Family Health Team) = 3 (Ref) Other PEM models = 4
Number of visits to the usual primary care physician over two years	OHIP, CAPE	Count of visits in the 2 years prior to the interview date.
Number of visits to any primary care physicians over two years	OHIP, CAPE	Count of visits in the 2 years prior to the interview date.
Number of visits to a primary care physician other than the usual physician over two years	OHIP, CAPE	Count of visits in the 2 years prior to the interview date.
Wave	HCES	Wave of interview.
Year	HCES	Calendar year.

Appendix D: Description of Datasets:

Name	Description
Registered Persons Database (RPBD)	RPDB is a personal information bank that contains information on all Ontario residents registered for the Ontario Health Insurance Plan (OHIP) and Ontario Drug Benefit (ODB).
Health Care Experience Survey (HCES)	The HCES is a voluntary telephone survey given to an annual sample of 11,200 Ontarian residents age 16 years and older.[13] Respondents are asked questions about their experiences with primary care, integration of specialists and primary care, the quality of their experiences, access to primary care for children living in the home, and socio-demographic information.[13, 14] The data is collected for the Ministry of Health/Ministry of Long-Term Care by Institute for Social Research is protected by law, and no identifying information is reported.[14] Before implementation, the survey was piloted between October 2012 and December 2012.[13] The pilot involved ensuring respondents understood the questions, that the flow and order of questions were logical and easy to follow, that Computer Assisted Telephone Interview codes (skip patterns and conditional logic) were implemented correctly, and that all interviewer instructions were clear.[13] Validation was completed at the Institute for Social Research to ensure that responses were consistent.[13] Responses in each wave were reviewed to check for anomalies and survey weights were assigned to enable population and community-level reporting.[13] Respondent households receive a letter to notify them that they will be receiving a phone call from Institute of Social Research on behalf of Ontario's Ministry of Health/Ministry of Long-Term Care for the HCES interview. Also, to further maximize the response rate, all telephone numbers receive up to 12 call attempts. More than 12 calls are made when there is a good reason to believe that additional calls will obtain interviews.

Name	Description
Client Agency Program Enrolment (CAPE)	CAPE contains a list of patients enrolled with a specific primary care enrolment physician model, including the patient's enrolment status (active or inactive).
ICES Primary Care Population (PCPOP)	PCPOP is a population-level dataset that includes all people in Ontario who are deemed alive and eligible at a given point in time. All indicators are as of the index date, with various look-back periods and an extensive list of primary care related indicators.
Ontario Health Insurance Plan Claims Database (OHIP)	OHIP contains most claims paid for by the Ontario Health Insurance Plan. The data cover all health care providers who can claim under OHIP (this includes physicians, groups, laboratories, and out-of-province providers).
ICES Physician Database (IPDB)	IPDB contains yearly information about all physicians in Ontario. Its potential uses include physician profiling, predicting physician behaviour, measuring physician supply, and many others.

Appendix E: Percentage of Walk-in Use Over the Last12 Months by Year (Weighted):



Appendix F: Adjusted odds ratios (ORs) of the association between access measures and self-reported walk-in clinic use, stratified by respondent's sex, in large and medium-sized urban areas in the past 12 months:

Variables	Respondent's Registered Sex	
	Female (n=20,087)	**Male (n=14,023)**
Reported that own primary care physician or clinic offer after-hours access:		
Yes (ref)		
No	1.26 (1.16 -1.37)	1.18 (1.04 - 1.34)
Saw own physician or clinic same-day/next-day when sick:		
Yes (ref)		
No	1.31 (1.18 - 1.45)	1.19 (0.99 - 1.43)
Did not see own physician or clinic	3.08 (2.64 – 3.61)	2.98 (2.35 – 3.78)
Not Applicable^	0.64 (0.58 – 0.72)	0.63 (0.53 - 0.74)

Note: The model was adjusted for age, levels of education, financial situation, multimorbidity (3+ chronic conditions), rurality (RIO score 0-9), access during office hours, type of primary care model, and the number of visits to the usual primary care physician over two years.
^ Not Applicable included those who did not seek any medical care in the last 12 months.

Appendix G: Distribution of access measures in large and medium-sized urban areas by type of primary care model (n=36,821):

Variables	Type of Primary Care Model			
	Virtually enrolled in a FFS	**Enhanced FFS**	**Non-team Capitation**	**Team Capitation**
After-hours access to own primary care physician or clinic:				
Yes	426 (22.1)	3,941 (28.1)	6,658 (50.2)	5,488 (58.2)
No	1,401 (77.9)	8,816 (71.9)	6,193 (49.8)	3,790 (41.8)
Missing	1 (0.0)	2 (0.0)	3 (0.0)	4 (0.0)
Saw own physician or clinic same-day/next-day when sick ǂ:				
Yes	437 (46.6)	3034 (44.4)	2558 (38.4)	2023 (40.2)
No	481 (46.5)	3739 (50.7)	4097 (56.8)	2911 (55.9)
Missing	69 (6.9)	377 (4.9)	365 (4.8)	230 (3.9)

Note: Results are weighted.
ǂ The same-day/next-day access to own physician was calculate for a smaller subset of the data excluded those who did not seek any medical care and those who did not see their own physician or clinic (n=20,379).

Appendix H: Sensitivity Analysis for missing values for same-day/next-day access and after-hours access variables: Best (both access variables "yes") and Worst (both access variables "no") Method.

Variables	Odds Ratio (95% Cl)		
	Main Model N = 56,297	**Best- N = 57,834**	**Worst N = 57,834**
Reported that own primary care physician or clinic offered after-hours access:			
Yes (ref)			
No	1.14 (1.07 – 1.21)	1.14 (1.08 – 1.20)	1.14 (1.07 – 1.21)
Saw own physician or clinic same-day/next-day when sick:			
Yes (ref)			
No	1.23 (1.13 – 1.34)	1.23 (1.13 – 1.33)	1.22 (1.12 – 1.32)
Did not see own physician or clinic	2.77 (2.49 -3.09)	2.75 (2.48 – 3.06)	2.76 (2.48 – 3.08)
Not Applicable^	0.62 (0.57 – 0.68)	0.62 (0.57 – 0.67)	0.62 (0.57 – 0.68)

Note. Adjusted for sex, age, self-reported levels of education, self-reported financial situation, rurality, multimorbidity (3+ chronic conditions), patient's type of primary care model, access during office hours, and the number of visits to the usual primary care physician over two years.

^ Not Applicable included those who did not seek any medical care in the last 12 months.

Appendix I: Sensitivity Analysis for the survey waves (28 and 29) with the lowest response rate

Variables	Odds Ratio (95% Cl)	
	Main Model **N =** 56,297)	**Wave 28 and 29** **(N=** 3,949**)**
Reported that own primary care physician or clinic offer after-hours access:		
Yes (ref)		
No	1.14 (1.07 – 1.21)	1.30 (1.07 – 1.56)
Saw own physician or clinic same-day/next-day when sick:		
Yes (ref)		
No	1.23 (1.13 – 1.34)	1.71 (1.35 – 2.15)
Did not see own physician or clinic	2.77 (2.49 -3.09)	3.62 (2.55 – 5.12)
Not Applicable^	0.62 (0.57 – 0.68)	0.81 (0.63 – 1.04)

Note. Adjusted for sex, age, self-reported levels of education, self-reported financial situation, rurality, multimorbidity (3+ chronic conditions), patient's type of primary care model, access during office hours and the number of primary care visits to the usual primary care physician over two years.
^ Not Applicable included those who did not seek any medical care in the last 12 months.