

MyPractice: Primary Care Community Health Centres

Technical Appendix

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Document changelog

CHANGE	VERSION	RELEVANT RERELEASE DATE
<ul style="list-style-type: none">- Added opioid indicators and technical details- Excluded palliative care clients from all the indicators	V1	May 2018

Introduction

Cohort Generation

To generate the cohort included in this report, the following steps have been undertaken: For each reporting period, using a lookback of 2 years, clients who have had contact with either a physician or a nurse practitioner in a CHC setting were included (e.g. the 2017 reporting period includes clients who have had an encounter with either a physician or a nurse practitioner between April 1, 2015 and March 31, 2017). Additional eligibility criteria included that clients must be Ontario residents and the person must be alive and eligible for OHIP at index with a valid health card number.

The CHC data consisted of a unique site ID, physician and nurse practitioner encounters (date of encounter, issues addressed (using ICD10), and provider type). Client demographics were also collected (unique clients' id, sex, age, health card number (if applicable) and postal code). All diagnoses from physicians and nurse practitioner encounters were included in these analyses.

Overall cohort exclusions

The cohort excluded clients less than 1 year of age and palliative care clients identified from hospital and physician billing claims. Please see Appendix C for classification and billing codes.

Comparisons

In addition to practice-level CHC data, this report includes data for all Ontario CHCs as comparators, for context. Adjustment

Where indicated, a number of indicators have been adjusted for age, sex, income, rurality and co-morbidity. The reference population for adjustment is all Ontarians.

Income quintiles are derived using Statistics Canada's Postal Code Conversion File Plus (PCCF+). This program links the six-character postal codes to census geographic areas in order to derive information such as income for each geographic area. For these analyses, data from the 2006 Census was used to assign postal codes to residents for census dissemination areas in the 2006 Census. Income adequacy, adjusted for household size and specific to each community, was used to order postal codes into quintiles, with income quintile 1 having the lowest relative income and income quintile 5 having the highest.

Rurality is based on the Rurality Index of Ontario (RIO) score. The RIO score is based on community characteristics including travel time to different levels of care; community population; presence of providers, hospitals and ambulance services; social indicators; and weather conditions. A RIO score of 0 to 9 is considered urban, a score of 10 to 39 specifies a non-major urban center, and a score of 40 and above is considered rural.

Co-morbidity has been identified based on the Adjusted Diagnostic Groups (ADGs). The ADGs are part of the Johns Hopkins Adjusted Clinical Group (ACG) case-mix system used to adjust for comorbidity. The ACG System groups every ICD-10 diagnosis code assigned to a client into one of the 32 different ADGs based on five clinical and expected utilization criteria: duration of the condition (acute, recurrent, or chronic); severity of the condition (e.g., minor and stable versus major and unstable); diagnostic certainty (symptoms focusing on diagnostic evaluation versus documented disease focusing on treatment services); etiology of the condition (infectious, injury, or other); and specialty care involvement (medical, surgical, obstetric, haematology, etc.). ADGs measure the burden of the client's illness by counting the number of comorbid conditions that a person has based on aggregations of their symptomatology. ADGs serve as a diagnosis-based risk adjustment system that predicts medical resource utilization. A higher ADG range indicates that the client has a higher number of co-morbid conditions. Typically, clients who require a greater amount of health care resources are those with co-morbid conditions.

Section 1: Opioid Prescribing

Percentage of non-palliative care clients dispensed an opioid prescribed by any provider in the system (excluding opioid agonist therapy) within a 6-month reporting period

INDICATOR DESCRIPTION	Indicator description	This indicator measures the percentage of non-palliative care clients dispensed an opioid prescribed by any provider in the system within a 6-month reporting period. Opioid agonist therapy (OAT), cough and antidiarrheal opioid medications were not included in the opioid definition.
	HQO Reporting tool/product	My Practice: Primary Care
	Type	Process indicator
	External Alignment	Not applicable
	Other reporting	Not applicable
	Accountability	This indicator is strictly for quality improvement efforts and not for accountability.
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Clients dispensed an opioid within a 6-month reporting period prescribed by any provider in the system.</p> <p>Notes:</p> <ul style="list-style-type: none"> - OAT, cough and antidiarrheal opioid medications were not included in the opioid definition. - For a complete list of medications, please see table A.
		<p>Denominator Clients in your CHC for the specific reporting period.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> - Overall cohort exclusions (see page 5)
		<p>Methods numerator/denominator * 100</p> $\frac{\text{Clients dispensed an opioid prescribed by any provider in the system during the 6 – month reporting period}}{\text{Clients in your CHC for the specific reporting period}} \times 100$
		<p>Adjustment (risk, age/sex standardization) None</p>
	Data source / data elements	Data provider: Institute for Clinical Evaluative Sciences (ICES) Data sources: Canadian Institute for Health Information (CIHI) Discharge Abstract Database (DAD), Ontario Health Insurance Plan (OHIP), Registered Persons Database (RPDB), Narcotics Monitoring System (NMS).

OTHER RELEVANT INFORMATION	Limitations / Caveats	<ul style="list-style-type: none"> - Dispensed prescriptions don't always reflect actual use. - Opioids obtained through other means such as out-of-province or hospital dispensing, were not captured in the calculation of this indicator. - Uninsured clients are not included
	Comments	

Percentage of non-palliative care clients newly dispensed an opioid prescribed by any provider in the system (excluding opioid agonist therapy) within a 6-month reporting period

INDICATOR DESCRIPTION	Indicator description	This indicator measures the percentage of non-palliative care clients newly dispensed an opioid by any provider in the system within a 6-month reporting period. Opioid agonist therapy (OAT), cough and antidiarrheal opioid medications were not included in the opioid definition.
	HQO Reporting tool/product	My Practice: Primary Care
	Type	Process indicator
	External Alignment	Not applicable
	Other reporting	Not applicable
	Accountability	This indicator is strictly for quality improvement efforts and not for accountability.
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Clients newly dispensed an opioid prescribed by any provider in the system within a 6-month reporting period.</p> <p>New dispensations were defined using a 6-month washout period i.e., no opioid prescription within 6 months of the first opioid prescription in the reporting period.</p> <p>Notes:</p> <ul style="list-style-type: none"> - OAT, cough and antidiarrheal opioid medications were not included in the opioid definition. - For a complete list of medications, please see table A.
		<p>Denominator Clients in your CHC for the specific reporting period.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> - Overall cohort exclusions (see page 5)
		<p>Methods numerator/denominator * 100</p> $\frac{\text{Clients newly dispensed an opioid during the 6 – month reporting period}}{\text{Clients in your CHC for the specific reporting period}} \times 100$

		Adjustment (risk, age/sex standardization) None
	Data source / data elements	Data provider: Institute for Clinical Evaluative Sciences (ICES) Data sources: Canadian Institute for Health Information (CIHI) Discharge Abstract Database (DAD), Ontario Health Insurance Plan (OHIP), Registered Persons Database (RPDB), Narcotics Monitoring System (NMS).
OTHER RELEVANT INFORMATION	Limitations / Caveats	<ul style="list-style-type: none"> - Dispensed prescriptions do not always reflect actual use. - Opioids obtained through other means such as out-of-province or hospital dispensing, were not captured in the calculation of this indicator. - Uninsured clients are not included
	Comments	

Percentage of non-palliative care clients dispensed an opioid prescribed by any provider in the system (including opioid agonist therapy) and benzodiazepine within a 6-month reporting period

INDICATOR DESCRIPTION	Indicator description	This indicator measures the percentage of non-palliative care clients that have been dispensed an opioid (including opioid agonist therapy (OAT)) and benzodiazepine within a 6-month reporting period. Cough and antidiarrheal opioid medications were not included in the opioid definition.
	HQO Reporting tool/product	My Practice: Primary Care
	Type	Process indicator
	External Alignment	Not applicable
	Other reporting	Not applicable
	Accountability	This indicator is strictly for quality improvement efforts and not for accountability.
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Clients who have an opioid (including OAT) and a benzodiazepine dispensation prescribed by any provider in the system at any time within a 6-month reporting period.</p> <p>Notes:</p> <ul style="list-style-type: none"> - Cough and antidiarrheal opioid medications were not included in the opioid definition. - For a complete list of medications, please see table A. - Prescriptions do not have to be dispensed together or overlap in any way. <p>Denominator Clients in your CHC for the specific reporting period</p> <p>Exclusions:</p> <ul style="list-style-type: none"> - Overall cohort exclusions (see page 5)

		<p>Methods numerator/denominator * 100</p> <p><i>Clients dispensed an opioid and benzodiazepine prescribed by any provider in the system during the 6 – month reporting period.</i></p> $\frac{\text{Clients in your CHC for the specific reporting period}}{\text{Clients in your CHC for the specific reporting period}} \times 100$
		<p>Adjustment (risk, age/sex standardization)</p> <p>None</p>
	Data source / data elements	Data provider: Institute for Clinical Evaluative Sciences (ICES) Data sources: Canadian Institute for Health Information (CIHI) Discharge Abstract Database (DAD), Ontario Health Insurance Plan (OHIP), Registered Persons Database (RPDB), Narcotics Monitoring System (NMS).
OTHER RELEVANT INFORMATION	Limitations / Caveats	<ul style="list-style-type: none"> - Dispensed prescriptions do not always reflect actual use. - Opioids obtained through other means such as out- of- province or hospital dispensing, were not captured in the calculation of this indicator. - Uninsured clients are not included
	Comments	<ul style="list-style-type: none"> - Zolpidem is the only Z-drug that is regulated by Health Canada as a targeted drug, therefore captured by the NMS. The other Z-drug marketed in Canada is Zopiclone, a prescription drug, not classified as a targeted drug by Health Canada, and therefore not captured by the NMS.

Percentage of non-palliative care clients with a high-dose opioid product(s) > 90 morphine equivalents (MEQ) (excluding opioid agonist therapy) prescribed by any provider in the system within a 6-month reporting period

INDICATOR DESCRIPTION	Indicator description	This indicator measures the percentage of non-palliative care clients with a high-dose opioid product(s) prescribed by any provider in the system within a 6-month reporting period. Opioid agonist therapy (OAT), cough and antidiarrheal opioid medications were not included in the opioid definition.
	HQO Reporting tool/product	My Practice: Primary Care
	Type	Process indicator
	External Alignment	Not applicable
	Other reporting	Not applicable
	Accountability	This indicator is strictly for quality improvement efforts and is not for accountability.
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator</p> <p>Clients who had an average daily dose of > 90 MEQ prescribed by any provider in the system on at least one day within a 6-month reporting period.</p>

		<p>Please see table B for MEQ calculations.</p> <p>Notes:</p> <ul style="list-style-type: none"> - The average daily doses were summed for clients receiving two or more opioid products on a single day. - OAT, cough and antidiarrheal opioid medications as well as opioid medications for which an MEQ is not available, were not included in the opioid definition. - For a complete list of medications, please see table A. <hr/> <p>Denominator</p> <p>Clients in your CHC for the specific reporting period.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> - Overall cohort exclusions (see page 5) <hr/> <p>Methods numerator/denominator * 100</p> <p><i>Clients who have had an average daily dose of > 90 MEQ on at least one day during the 6 – month reporting period</i></p> $\frac{\text{Clients who have had an average daily dose of } > 90 \text{ MEQ on at least one day during the 6 – month reporting period}}{\text{Clients in your CHC for the specific reporting period}} \times 100$ <hr/> <p>Adjustment (risk, age/sex standardization)</p> <p>None</p>
	<p>Data source / data elements</p>	<p>Data provider: Institute for Clinical Evaluative Sciences (ICES) Data sources: Canadian Institute for Health Information (CIHI) Discharge Abstract Database (DAD), Ontario Health Insurance Plan (OHIP), Registered Persons Database (RPDB), Narcotics Monitoring System (NMS).</p>
<p>OTHER RELEVANT INFORMATION</p>	<p>Limitations / Caveats</p>	<ul style="list-style-type: none"> - Dispensed prescriptions do not always reflect actual use. - Days' supply for the PRN medications are estimated in the NMS. - Considers all prescriptions the client was on each day if the client had an early fill but a different daily dose (e.g. when tapering). This method will overestimate their MEQ for the overlapping days. - Opioids obtained through other means such as out- of- province or hospital dispensing, were not captured in the calculation of this indicator. - Uninsured clients are not included.
	<p>Comments</p>	<ul style="list-style-type: none"> - The indicator's definition combines overlapping prescriptions for a client that had the same Drug Identification Number (DIN) with same average daily dose to get one record with earliest start and latest end date per client. The indicator does not account for early fills, so will be conservative on the length of the prescription but avoids double counting the prescription for the days' overlap between the current and next prescription. - The high dose could have been dispensed before the 6-month reporting period, but the prescription ran into the reporting period.

Table A: Complete list of medications

OPIOID MEDICATIONS FOR PAIN MANAGEMENT: DRUG NAME
ACETAMINOPHEN & CAFFEINE & CODEINE PHOSPHATE
ACETAMINOPHEN & CAFFEINE CITRATE & CODEINE PHOSPHATE
ACETAMINOPHEN & CHLORZOXAZONE & CODEINE
ACETAMINOPHEN & CODEINE & DOXYLAMINE
ACETAMINOPHEN & CODEINE PHOSPHATE
ACETAMINOPHEN & CODEINE PHOSPHATE & METHOCARBAMOL
ACETAMINOPHEN & METHOCARBAMOL
ACETAMINOPHEN & OXYCODONE HCL
ACETAMINOPHEN & TRAMADOL
ACETAMINOPHEN & TRAMADOL HCL
ACETYLSALICYLIC ACID & BUTALBITAL & CAFFEINE & CODEINE PHOSPHATE
ACETYLSALICYLIC ACID & CAFFEINE & CODEINE PHOSPHATE
ACETYLSALICYLIC ACID & CAFFEINE CITRATE & CODEINE PHOSPHATE
ACETYLSALICYLIC ACID & CAFFEINE CITRATE & CODEINE PHOSPHATE & MEPROBAMATE
ACETYLSALICYLIC ACID & CODEINE PHOSPHATE & METHOCARBAMOL
ACETYLSALICYLIC ACID & OXYCODONE HCL
ALFENTANIL HCL
BELLADONA & OPIUM
BUPRENORPHINE (for pain)
BUTORPHANOL TARTRATE
CODEINE PHOSPHATE
CODEINE SULFATE
FENTANYL
FENTANYL CITRATE
HYDROMORPHONE
HYDROMORPHONE HBR
HYDROMORPHONE HCL
INJECTABLE MIXTURE
MEPERIDINE HCL
METHADONE (for pain)
METHADONE HCL (for pain)
METHOCARBAMOL & ACETAMINOPHEN & CODEINE
MORPHINE
MORPHINE HCL
MORPHINE SULFATE
NALBUPHINE HCL
NALOXONE HCL & OXYCODONE HCL
OXYCODONE HCL
PENTAZOCINE HCL
PENTAZOCINE LACTATE
REMIFENTANIL HCL
SUFENTANIL CITRATE
TAPENTADOL HCL
TRAMADOL
TRAMADOL HCL
BENZODIAZEPINE MEDICATIONS: DRUG NAME
ALPRAZOLAM
BROMAZEPAM
CHLORDIAZEPOXIDE
CHLORDIAZEPOXIDE HCL & CLIDINIUM BROMIDE
CHLORDIAZEPOXIDE HCL & CLIDINIUM HCL
CLOBAZAM
CLONAZEPAM
CLORAZEPATE DIPOTASSIUM

DIAZEPAM
FLURAZEPAM HCL
LORAZEPAM
MIDAZOLAM
MIDAZOLAM HCL
NITRAZEPAM
OXAZEPAM
TEMAZEPAM
TRIAZOLAM
ZOLPIDEM TARTRATE
OPIOID AGONIST THERAPY (OAT): DRUG NAME
BUPRENORPHINE (used for OAT)
BUPRENORPHINE HCL & NALOXONE HCL (used for OAT)
METHADONE HCL (used for OAT)
METHADONE (used for OAT)
METHADONE MIXTURE (used for OAT)
OPIOID CONTAINING COUGH MEDICATIONS: DRUG NAME
ACETAMINOPHEN & CHLORPHENIRAMINE MALEATE & CODEINE PHOSPHATE & PSEUDOEPHEDRINE HCL
AMMONIUM CHLORIDE & CODEINE PHOSPHATE
AMMONIUM CHLORIDE & CODEINE PHOSPHATE & DIPHENHYDRAMINE HCL
AMMONIUM CHLORIDE & HYDROCODONE BITARTRATE & PHENYLEPHRINE HCL & PYRILAMINE MALEATE
BROMPHENIRAMINE MALEATE & CODEINE PHOSPHATE & GUAIFENESIN & PHENYLEPHRINE HCL
BROMPHENIRAMINE MALEATE & CODEINE PHOSPHATE & PHENYLEPHRINE HCL
BROMPHENIRAMINE MALEATE & GUAIFENESIN & HYDROCODONE BITARTRATE & PHENYLEPHRINE HCL
CHLORPHENIRAMINE MALEATE & PSEUDOEPHEDRINE HCL
CITRIC ACID SODIUM & DOXYLAMINE SUCCINATE & ETAFEDRINE HCL & HYDROCODONE BITARTRATE
CODEINE & GUAIFENESIN & PSEUDOEPHEDRINE HCL & TRIPROLIDINE HCL
CODEINE & PSEUDOEPHEDRINE HCL & TRIPROLIDINE HCL
CODEINE PHOSPHATE & GUAIFENESIN & PHENIRAMINE MALEATE
CODEINE PHOSPHATE & GUAIFENESIN & PSEUDOEPHEDRINE & PSEUDOEPHEDRINE HCL & TRIPROLIDINE HCL
CODEINE PHOSPHATE & GUAIFENESIN & PSEUDOEPHEDRINE HCL
CODEINE PHOSPHATE & PSEUDOEPHEDRINE HCL & TRIPROLIDINE HCL
COUGH AND COLD PREP
DIHYDROCODEINE BITARTRATE & DOXYLAMINE SUCCINATE & ETAFEDRINE HCL & ETHANOL & SODIUM CITRATE
HYDROCODONE & PHENYLTOLOXAMINE CITRATE
HYDROCODONE BITARTRATE
HYDROCODONE BITARTRATE & PHENYLEPHRINE HCL
HYDROCODONE BITARTRATE & PHENYLTOLOXAMINE CHLORIDE
NORMETHADONE HCL & P-HYDROXYEPHEDRINE HCL
PSEUDOEPHEDRINE HCL & CODEINE PHOSPHATE & GUAIFENESIN
OPIOID-CONTAINING ANTIDIARRHEAL MEDICATIONS: DRUG NAME
ATROPINE SULFATE & DIPHENOXYLATE HCL

Table B: Calculation of morphine equivalents (MEQs)

Adapted from the Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain 2010 guidelines; available at: http://nationalpaincentre.mcmaster.ca/opioid_2010/cgop_b_app_b08.html

Oral Opioid Analgesic Equivalence Table

OPIOID	NUMBER MG	RATIO (OPIOID:MORPHINE)
Morphine	30 mg	1:1
Codeine	200 mg	1:0.15
Oxycodone	15-20 mg	1:1.5
Hydrocodone	30 mg	1:1
Hydromorphone	6-7.5 mg	1:5
Meperidine	300 mg	1:0.1
Tramadol	300 mg	1:0.1
Methadone	Dose equivalence between methadone and other opioids has not been reliably established	Excluded from analyses
Transdermal fentanyl (routeadm is PATCH or TRANS PAD)	<p>12.5mcg/h→30-67morphine* 25mcg/h→60-134mg morphine 37.5mcg/h→135-179mg morphine 50mcg/h→180-224mg morphine 75mcg/h→270-314mg morphine 100mcg/h→360-404mg morphine</p> <p>If 12.5mcg/h then Fent_Equiv = 1 If 25mcg/h then Fent_Equiv = 2 If 37.5mcg/h then Fent_equiv=3 If 50mcg/h then Fent_equiv=4 If 75mcg/h then Fent_equiv=5 If 100mcg/h then Fent_equiv=6</p> <p>*12.5 was assumed based on a 3.8 meq/ug</p>	<p>If day supply/quantity=2 then: Fent_equiv=1 → 1:48*2 Fent_equiv=2 → 1:97*2 Fent_equiv=3 → 1:157*2 Fent_equiv=4 → 1:202*2 Fent_equiv=5 → 1:292*2 Fent_equiv=6 → 1:382*2</p> <p>If day supply/quantity is not equal to 2 then adjust fentanyl day supply when <3 days to equal 3 and use the following conversion:</p> <p>Fent_equiv=1 → 1:48*3 Fent_equiv=2 → 1:97*3 Fent_equiv=3 → 1:157*3 Fent_equiv=4 → 1:202*3 Fent_equiv=5 → 1:292*3 Fent_equiv=6 → 1:382*3</p>
Other Fentanyl Formulations	Fentanyl buccal or SL tablets, or lozenge (routeadm= "BUC STRIP" or "TAB SL" or "EFF TAB")	1: 0.13
	Fentanyl film or oral spray (currently not in drug list)	1: 0.18
	Fentanyl nasal spray (currently not in drug list)	1: 0.16

Section 2: Cancer Screening

Percentage of screening eligible clients up-to-date with Papanicolaou (Pap) tests

INDICATOR DESCRIPTION	Indicator description	This indicator is measuring the percentage of female clients aged 23 to 69 years who had a Pap test within the previous three years.
	HQO Reporting tool/product	Primary Care Performance Measurement (PCPM) Framework
	Type	Process indicator
	External Alignment	Ministry of Health and Long-Term Care (MOHLTC) and Cancer Care Ontario (CCO)
	Other reporting	Cancer Quality Council of Ontario (CQCO), Ministry of Health and MOHLTC Health Analytics Branch, CHC MSA - Resource for Indicator Standards (RIS)
	Accountability	Primary Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Number of screen-eligible women aged 23 to 69 years who had a Pap smear within the past three years</p> <p>Includes:</p> <ul style="list-style-type: none"> Ontario women aged 23-69 years at the index date Index date was defined by service date in OHIP in a three-year period Pap tests identified using fee codes in OHIP (E430, G365a, G394a, E431, or L812, Q678, L713 and L733) Each woman is counted once regardless of the number of Pap tests performed in a three-year period <p>Denominator Total number of screen-eligible women aged 23 to 69 years</p> <p>Excludes:</p> <ul style="list-style-type: none"> Women with a missing or invalid HCN, date of birth, LHIN or postal code Women with a history of cervical cancer and/or a hysterectomy using the fee codes in OHIP (S710, S727, S757, S758, S759, S762, S763, S765, S766, S767, S810, S816). Overall cohort exclusions (see page 5) <p>Methods</p> $\frac{\text{Number of screen-eligible women aged 23 to 69 years who had a Pap smear within the past three years}}{\text{Total number of screen-eligible women aged 23 to 69 years}} \times 100$
	Adjustment (risk, age/sex standardization)	N/A
	Data source / data elements	<p>Measure source: Cancer Quality Council of Ontario (CQCO), Primary Care Performance Measurement Framework (PCPM)</p> <p>Data source: OHIP (Ontario Health Insurance Program), RPDB (Registered Persons Database), CCO-OCR (Cancer Care Ontario - Ontario Cancer Registry), CIHI (Canadian Institute of Health Information), SDS (Same-day Surgery Database).</p>

OTHER RELEVANT INFORMATION	Limitations / Caveats	<ul style="list-style-type: none"> • A small proportion of Pap tests performed as a diagnostic test could not be excluded from the analysis. • The indicator does not capture tests done in hospital laboratories or paid through alternate payment plans such as out-of-pocket. • Uninsured clients are not included
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Percentage of screening eligible clients up-to-date with a mammogram

INDICATOR DESCRIPTION	Indicator description	Percentage of screen-eligible female clients aged 52 to 69 years who had a mammogram within the past two years.
	HQO Reporting tool/product	Primary Care Performance Measurement (PCPM) Framework
	Type	Process indicator
	External Alignment	Ministry of Health and Long-Term Care (MOHLTC) and Cancer Care Ontario (CCO)
	Other reporting	Cancer Quality Council of Ontario (CQCO), Ministry of Health and MOHLTC Health Analytics Branch, CHC MSAA - Resource for Indicator standards (RIS)
	Accountability	Primary Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Total number of screen-eligible women aged 52 to 69 years, who have completed at least one mammogram in the past two years</p> <p>Includes:</p> <ul style="list-style-type: none"> • Ontario women (average risk and high risk) aged 52 to 69 years at the index date • Index date was defined as the first screen date per person by screen date in the Integrated Clients Management System (ICMS) or by service date in OHIP in a two-year period • OBSP mammograms for screening purposes were identified in the ICMS; all mammograms in ICMS were counted including those with partial views • Non-OBSP mammograms were identified using OHIP fee code (X172 Unilateral screening mammography; X 178 bilateral screening mammography; X185 diagnostic bilateral mammography) • Each woman was counted once regardless of the number of mammograms performed in a two-year period; if a woman had both a program and non-program mammogram within a two-year period, the program status was selected • Mammograms conducted in out-patient clinics located within hospitals are captured <p>Denominator Total number of screen-eligible women, aged 52 to 69 years</p> <p>Excludes:</p> <ul style="list-style-type: none"> • Women with a missing or invalid HCN, date of birth or postal code • Women with a history of breast cancer using the diagnostic code (dxcode-174) • Women with a mastectomy before Jan 1st of the two-year period • Overall cohort exclusions (see page 5)

		<p>Methods</p> <p><i>Total number of screen-eligible women aged 52 to 69 years, who have completed at least one mammogram in the past two years</i> X 100</p> <hr/> <p><i>Total number of screen-eligible women aged 52 to 69 years</i></p> <p>Adjustment (risk, age/sex standardization) N/A</p>
	Data source / data elements	<p>Measure source: Cancer Quality Council of Ontario (CQCO), Primary Care Performance Measurement Framework (PCPM)</p> <p>Data source: OHIP (Ontario Health Insurance Program), RPDB (Registered Persons Database), CCO-OCR (Cancer Care Ontario - Ontario Cancer Registry), CIHI (Canadian Institute of Health Information), SDS (Same-day Surgery Database).</p>
OTHER RELEVANT INFORMATION	Limitations / Caveats	<ul style="list-style-type: none"> This indicator is based on OBSP and OHIP data, which have different data cycle updates. As a result, mammography rates were underestimated during data periods when OBSP data was not yet available. In addition, in 2010 two additional OHIP fee codes were included to capture mammography rates. Uninsured clients are not included

Percentage of screening eligible clients up-to-date with colorectal screening

INDICATOR DESCRIPTION	Indicator description	Percentage of screen-eligible clients aged 52 to 74 years who had an FOBT within the past two years, sigmoidoscopy within the past five years or a colonoscopy within the past 10 years
	HQO Reporting tool/product	Primary Care Performance Measurement (PCPM) Framework
	Type	Process indicator
	External Alignment	Ministry of Health and Long-Term Care (MOHLTC) and Cancer Care Ontario (CCO)
	Other reporting	Cancer Quality Council of Ontario (CQCO), Ministry of Health and MOHLTC Health Analytics Branch, CHC MSAA - Resource for Indicator standards (RIS)
	Accountability	Primary Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator</p> <p>Number of screen-eligible clients aged 52 to 74 years who had a FOBT within the past two years, sigmoidoscopy within five years, or a colonoscopy within the past 10 years</p> <p>Includes: Clients who received one of the following:</p> <ul style="list-style-type: none"> A fecal occult blood test (L181 or G004, L179, Q152, Q043, Q133) in the past 2 years A colonoscopy in the previous 10 years (Z491 through Z499, Z555 plus one of E740 or E741 or E747 or E705 on the same day) A flexible sigmoidoscopy in the previous five years (Z491 through Z499, Z555 (without E740 or E741 or E747 or E705 on the same day) or Z580)
		<p>Denominator</p> <p>Number of screen-eligible clients aged 52 to 74 years</p> <p>Excludes:</p>

		<ul style="list-style-type: none"> • Clients with a missing or invalid HCN, date of birth or postal code • Clients who have had colon cancer or inflammatory bowel disease in the past five years • Overall cohort exclusions (see page 5) <p>Methods</p> $\frac{\text{Number of screen-eligible clients aged 52 to 74 years who had a FOBT within past two years, sigmoidoscopy within five years, or a colonoscopy within the past 10 years}}{\text{Number of screen-eligible clients aged 52 to 74 years}} \times 100$ <p>Adjustment (risk, age/sex standardization) N/A</p>
	Data source / data elements	<p>Measure source: Cancer Quality Council of Ontario (CQCO), Primary Care Performance Measurement Framework (PCPM)</p> <p>Data source: OHIP (Ontario Health Insurance Program), RPDB (Registered Persons Database), CCO-OCR (Cancer Care Ontario - Ontario Cancer Registry), CIHI (Canadian Institute of Health Information), SDS (Same-day Surgery Database).</p>
OTHER RELEVANT INFORMATION	Limitations / Caveats	<ul style="list-style-type: none"> • A small proportion of FOBTs performed as diagnostic tests could not be excluded from the analysis. • FOBTs analyzed in hospital labs could not be captured.
	Comments	<ul style="list-style-type: none"> • Definition updated in May 2018 report to exclude barium enema and rigid sigmoidoscopy. • Uninsured clients are not included

Section 3: Health Service Utilization

Rate of total hospital emergency department (ED) visits per 1,000 clients

INDICATOR DESCRIPTION	Indicator description	Adjusted rate of ED visits measured as level 1-5 on the Canadian Triage Acuity Scale (CTAS) per 1,000 clients
	HQO Reporting tool/product	N/A
	Type	Outcome indicator
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care, Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Rate per 1,000 clients
	Calculation	<p>Numerator Number of visits to the ED for conditions measured as CTAS level 1, 2, 3, 4 or 5 in the previous year</p> <p>Includes:</p> <ul style="list-style-type: none"> • CTAS level 1: Conditions that are threats to life or limb (or imminent risk of deterioration) requiring immediate aggressive interventions • CTAS level 2: Conditions that are a potential threat to life limb or function, requiring rapid medical intervention or delegated acts • CTAS level 3: Conditions that could potentially progress to a serious problem requiring emergency intervention. May be associated with significant discomfort or affecting ability to function at work or activities of daily living • CTAS level 4: Conditions that related to client's age, distress, or potential for deterioration or complications would benefit from intervention or reassurance within 1–2 hours • CTAS level 5: Conditions that may be acute but non-urgent as well as conditions which may be part of a chronic problem with or without evidence of deterioration¹ <p>Denominator Total number of clients within the previous year</p> <p>Exclusion Criteria:</p> <ul style="list-style-type: none"> • Visits with an in-patient admission • Visits with CTAS 4, or 5 and planned emergency visits • Overall cohort exclusions (see page 5) <p>Methods</p> $\frac{\text{Number of visits to the ED for conditions measured as CTAS level 1, 2, 3, 4 or 5 in the previous year}}{\text{Total number of clients within the previous year}} \times 1,000$ <p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your clients and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
	Data source / data elements	<p>Measure source: Data source: Canadian Institute of Health Information (CIHI) – National Ambulatory Care Reporting System (NACRS).</p>
	Limitations / Caveats	Uninsured clients are not included
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	Sources	1. National Ambulatory Care Reporting System (NACRS). "Emergency Department Trends, 2012-2013". <i>Canadian Institute of Health Information (CIHI)</i> .
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Rate of urgent hospital emergency department (ED) visits per 1,000 clients

INDICATOR DESCRIPTION	Indicator description	Adjusted rate of urgent ED visits measured as level 1-3 on CTAS per 1,000 clients
	HQO Reporting tool/product	N/A
	Type	Outcome indicator
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care, Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Rate per 1,000 clients
	Calculation	<p>Numerator Number of visits to the ED for conditions measured as CTAS level 1, 2, or 3 in the previous year</p> <p>Note:</p> <ul style="list-style-type: none"> • CTAS level 1: Conditions that are threats to life or limb (or imminent risk of deterioration) requiring immediate aggressive interventions • CTAS level 2: Conditions that are a potential threat to life, limb or function, requiring rapid medical intervention or delegated acts • CTAS level 3: Conditions that could potentially progress to a serious problem requiring emergency intervention. May be associated with significant discomfort or affecting ability to function at work or activities of daily living¹
		<p>Denominator Total number of clients within the previous year</p> <p>Exclusion Criteria:</p> <ul style="list-style-type: none"> • Visits with an in-patient admission • Visits with CTAS 4, or 5 and planned emergency visits • Overall cohort exclusions (see page 5)
		<p>Methods</p> $\frac{\text{Number of visits to the ED for conditions measured as CTAS level 1, 2, or 3 in the previous year}}{\text{Total number of clients within the previous year}} \times 1,000$
		<p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your clients and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
Data source / data elements	<p>Measure source: Data source: Canadian Institute of Health Information (CIHI) – National Ambulatory Care Reporting System (NACRS).</p>	

OTHER RELEVANT INFORMATION	Limitations / Caveats	Uninsured clients are not included
	Comments	N/A
	Sources	1. National Ambulatory Care Reporting System (NACRS). "Emergency Department Trends, 2012-2013". <i>Canadian Institute of Health Information (CIHI)</i> .

Rate of less urgent hospital emergency department (ED) visits per 1,000 clients

INDICATOR DESCRIPTION	Indicator description	Adjusted rate of less urgent ED visits measured as level 4-5 on CTAS per 1,000 clients
	HQO Reporting tool/product	N/A
	Type	Outcome indicator
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care, Acute Care
	DEFINITION & SOURCE INFORMATION	Unit of analysis
Calculation		<p>Numerator Number of visits to the ED for conditions measured as CTAS level 4-5 in the previous year Includes:</p> <ul style="list-style-type: none"> • CTAS level 4: Conditions that related to client's age, distress, or potential for deterioration or complications would benefit from intervention or reassurance within 1 –2 hours • CTAS level 5: Conditions that may be acute but non-urgent as well as conditions which may be part of a chronic problem with or without evidence of deterioration¹ <p>Denominator Total number of clients within the previous year</p> <p>Exclusion Criteria:</p> <ul style="list-style-type: none"> • Visits with an in-patient admission • Visits with CTAS 1, 2 or 3 and planned emergency visits • Overall cohort exclusions (see page 5) <p>Methods</p> $\frac{\text{Number of visits to the ED for conditions measured as CTAS level 4-5 in the previous year}}{\text{Total number of clients within the previous year}} \times 1,000$ <p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your clients and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
Data source / data elements		Measure source: Data source: Canadian Institute of Health Information (CIHI) – National Ambulatory Care Reporting System (NACRS).
Limitations / Caveats		Uninsured clients are not included
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	Comments	N/A
	Sources	1. National Ambulatory Care Reporting System (NACRS). "Emergency Department Trends, 2012-2013". <i>Canadian Institute of Health Information (CIHI)</i> .

Percentage of clients who visited the emergency department (ED) for conditions Best Managed Elsewhere (BME)

INDICATOR DESCRIPTION	Indicator description	Percentage of clients who visited the emergency department (ED) for conditions BME
	HQO Reporting tool/product	N/A
	Type	Outcome indicator
	External Alignment	Quality Improvement Plans (QIPs)
	Other reporting	QIPs; Primary Care Public Reporting Web Pages; Primary Care Theme Report
	Accountability	Primary Care, Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Number of unscheduled visits to the ED for conditions that are BME Includes:</p> <ul style="list-style-type: none"> • Conditions designated as "BME" include: conjunctivitis, cystitis, otitis media, and upper respiratory infections (e.g., common cold, acute or chronic sinusitis and tonsillitis, acute pharyngitis, laryngitis or tracheitis, and others). <p>Denominator Total number of visits to the ED within the past year</p> <p>Exclusion Criteria:</p> <ul style="list-style-type: none"> • Clients less than 1 year of age and more than 74 years old • Emergency visits resulting in an inpatient admission • Overall cohort exclusions (see page 5) <p>Methods</p> $\frac{\text{Number of visits to the ED for conditions BME}}{\text{Total number of clients who have visited the ED}} \times 100$
	Data source / data elements	<p>Measure source: Primary Care Performance Measurement (PCPM) Framework</p> <p>Data source: Discharge Abstract Database (DAD), ICES Physician Database (IPDB), Ontario Health Insurance Plan (OHIP), Registered Persons Database (RPDB).</p>
	Limitations / Caveats	Uninsured clients are not included
	Comments	N/A
OTHER RELEVANT INFORMATION	Sources	N/A

Percentage of hospital readmissions within 30 days

INDICATOR DESCRIPTION	Indicator description	Adjusted percentage of clients who were re-admitted to a hospital for urgent and emergent care within 30 days of discharge
	HQO Reporting tool/product	Primary Care Performance Measurement (PCPM) Framework
	Type	Process
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care, Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Number of re-admissions to a hospital for urgent and emergent care within 30 days of discharge</p> <p>Note: A hospital readmission is readmission to any acute care hospital in the province for any condition, including a different condition than the reason for their original hospital admission¹</p> <p>Denominator Total number of discharges from a hospital</p> <p>Exclusion Criteria:</p> <ul style="list-style-type: none"> Overall cohort exclusions (see page 5) <p>Methods</p> $\frac{\text{Number of clients who were re-admitted to a hospital for urgent and emergent care within 30 days of discharge}}{\text{Total number of clients discharged from a hospital}} \times 100$ <p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your clients' and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
	Data source / data elements	<p>Measure source: Primary Care Performance Measurement (PCPM) Framework</p> <p>Data source: Canadian Institute of Health Information (CIHI) –Discharge Abstract Database (DAD).</p>
	Limitations / Caveats	<ul style="list-style-type: none"> Data from the DAD only pertains to clients who are readmitted to the same institution. Those who are discharged and subsequently admitted to other institutions will not be captured by this field (Health Analyst's Toolkit, 2012)
	Comments	Uninsured clients are not included
OTHER RELEVANT INFORMATION	Sources	1. Goldfield, N. (2011). How important is it to identify avoidable hospital readmissions with certainty? CMAJ, 19;183(7):E368-9. Epub 2011 Mar 28.

Percentage of hospital readmissions within 1 year

INDICATOR DESCRIPTION	Indicator description	Adjusted percentage of clients who were re-admitted to a hospital for urgent and emergent care within 1 year of discharge
	HQO Reporting tool/product	Primary Care Performance Measurement (PCPM) Framework
	Type	Process
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care, Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Number re-admissions to a hospital for urgent and emergent care within 1 year of discharge</p> <p>Note: A hospital readmission is readmission to any acute care hospital in the province for any condition, including a different condition than the reason for their original hospital admission¹</p> <p>Denominator Total number of discharges from a hospital</p> <p>Exclusion Criteria: - Overall cohort exclusions (see page 5)</p> <p>Methods</p> $\frac{\text{Number of clients who were re-admitted to a hospital for urgent and emergent care within 1 year of discharge}}{\text{Total number of clients discharged from a hospital}} \times 100$ <p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your clients and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
	Data source / data elements	<p>Measure source: Primary Care Performance Measurement (PCPM) Framework</p> <p>Data source: Canadian Institute of Health Information (CIHI) –Discharge Abstract Database (DAD).</p>
	Limitations / Caveats	<ul style="list-style-type: none"> Data from the DAD only pertains to clients who are readmitted to the same institution. Those who are discharged and subsequently admitted to other institutions will not be captured by this field (Health Analyst's Toolkit, 2012)
	Comments	Uninsured clients are not included
	Sources	1. Goldfield, N. (2011). How important is it to identify avoidable hospital readmissions with certainty? CMAJ, 19;183(7):E368-9. Epub 2011 Mar 28.
OTHER RELEVANT INFORMATION		

Percentage of clients who have had a 7-day post hospital discharge follow-up

INDICATOR DESCRIPTION	Indicator description	Percentage of clients who have had a 7-day post hospital discharge follow-up
	HQO Reporting tool/product	N/A
	Type	Process indicator
	External Alignment	Quality Improvement Plans (QIPs)
	Other reporting	N/A
	Accountability	Primary Care, Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Percentage
	Calculation	<p>Numerator Number of discharges where the client was seen by a primary care physician or nurse practitioner within 7-days of discharge from hospital for the following conditions: pneumonia, diabetes, stroke, gastrointestinal disease, congestive heart failure, chronic obstructive pulmonary disease, and cardiac conditions excluding heart attack.</p> <p>Denominator Number of acute care discharges for an episode of care in which one of the mentioned conditions is recorded in the first hospitalization of the episode within each fiscal year (minus 30 days for follow-up).</p> <p>Include: CMGs (stroke, COPD, pneumonia, CHF, diabetes, cardiac conditions and gastrointestinal disorders), clients must be registered to an Ontario physician in a PC practice model at the time of discharge, and the service must be provided by a GP/FP, geriatrician, or pediatrician</p> <p>Exclusion criteria:</p> <ul style="list-style-type: none"> Exclude missing admission/discharge date, health card number, age, gender; deaths; transfers, discharge destinations that include: acute, ambulatory, day surgery, ER, palliative, cases with no RIW, short stay cases, stillbirths and cadavers. Overall cohort exclusions (see page 5)
	Methods	$\frac{\text{Number of discharges where the client was seen by a primary care physician or nurse practitioner within 7-days of discharge from hospital for the mentioned conditions}}{\text{Number of acute care discharges from episode of care in which one of the mentioned conditions is recorded in the first hospitalization of the episode within each fiscal year (minus 30 days for follow-up)}} \times 100$
	Data source / data elements	Discharge Abstract Database (DAD), ICES Physician Database (IPDB), Ontario Health Insurance Plan (OHIP), Registered Persons Database (RPDB).
OTHER RELEVANT INFORMATION	Limitations / Caveats	Uninsured clients are not included
	Comments	N/A

ACSC Admissions: Total

INDICATOR DESCRIPTION	Indicator description	Adjusted rate of hospital admissions for one or more of the following conditions: asthma, CHF, COPD and diabetes per 1,000 clients
	HQO Reporting tool/product	N/A
	Type	Outcome indicator
	External Alignment	Quality Improvement Plans (QIPs)
	Other reporting	Ministry of Health and Long-Term Care (MOHLTC) – Resource for Indicator Standards (RIS), Canadian Institute for Health Information (CIHI)
	Accountability	Primary Care , Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Per 1,000 clients
	Calculation	<p>Numerator</p> <p>The number of acute care hospital admissions for the following ACSCs: asthma, COPD, CHF, or diabetes (see codes below) in the previous year</p> <p>Includes (by ICD 10 diagnosis):</p> <ul style="list-style-type: none"> • Hospital admissions with ICD 10 code(s) for <ul style="list-style-type: none"> ○ Asthma: codes beginning with J45 ○ COPD: J41, J42, J43, J44, J47 ○ CHF: I500, J81; excluding cases with cardiac procedures and that are not coded as abandoned on onset ○ Diabetes: E10.1, E10.6, E10.7, E10.9, E11.0, E11.1, E11.6, E11.7, E11.9, E13.0, E13.1, E13.6, E13.7, E13.9, E14.0, E14.1, E14.6, E14.7, E14.9 • All discharges from acute care hospitals <p>Excludes:</p> <ul style="list-style-type: none"> • In-hospital complications (i.e. DXTYPE M and 2) • Admissions with the following CCI codes: 1IJ50, 1IJ76, 1HB53, 1HD53, 1HZ53, 1HB55, 1HD55, 1HZ55, 1HZ85, 1HB54, 1HD54 • Cases where death occurs before discharge • Overall cohort exclusions (see page 5)
		<p>Denominator</p> <p>Total number of clients within the previous year</p> <p>Exclusion criteria: Overall cohort exclusions (see page 5)</p>
		<p>Methods</p> $\frac{\text{The number of acute care hospital admissions for one or more of the following conditions: asthma, CHF, COPD and diabetes in the previous year}}{\text{Total number of clients}} \times 1,000$
		<p>Adjustment</p> <p>This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your clients and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
		<p>Data source / data elements</p> <p>Measure source: Canadian Institute of Health Information (CIHI), Ministry of Health and Long-Term Care Resource for Indicator Standards (RIS) Data source: Canadian Institute of Health Information Discharge Abstract Database (CIHI DAD).</p>

OTHER RELEVANT INFORMATION	Limitations / Caveats	Uninsured clients are not included
	Comments	

ACSC Admissions: Asthma

INDICATOR DESCRIPTION	Indicator description	Adjusted rate of hospital admissions for asthma per 1,000 clients
	HQO Reporting tool/product	N/A
	Type	Outcome indicator
	External Alignment	Quality Improvement Plans (QIPs)
	Other reporting	Ministry of Health and Long-Term Care (MOHLTC) – Resource for Indicator Standards (RIS), Canadian Institute for Health Information (CIHI)
	Accountability	Primary Care, Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Per 1,000 clients
	Calculation	<p>Numerator The number of acute care hospital admissions for asthma (see codes below) in the previous year</p> <p>Includes</p> <ul style="list-style-type: none"> Hospital admissions with ICD 10 code(s) for asthma (codes beginning with J45) <p>Excludes:</p> <ul style="list-style-type: none"> In-hospital complications (i.e. DXTYPE M and 2) Admissions with the following CCI codes: 1IJ50, 1IJ76, 1HB53, 1HD53, 1HZ53, 1HB55, 1HD55, 1HZ55, 1HZ85, 1HB54, 1HD54 Cases where death occurs before discharge Overall cohort exclusions (see page 5)
		<p>Denominator Total number of clients within the previous year</p>
		<p>Exclusion Criteria:</p> <ul style="list-style-type: none"> Overall cohort exclusions (see page 5)
		<p>Methods</p> $\frac{\text{The number of acute care hospital admissions for asthma in the previous year}}{\text{Total number of clients}} \times 1,000$
		<p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your clients and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
	<p>Data source / data elements</p> <p>Measure source: Canadian Institute of Health Information (CIHI), Ministry of Health and Long-Term Care Resource for Indicator Standards (RIS) Data source: Canadian Institute of Health Information Discharge Abstract Database (CIHI DAD).</p>	

OTHER RELEVANT INFORMATION	Limitations / Caveats	Uninsured clients are not included
	Comments	N/A

ACSC Admissions: CHF

INDICATOR DESCRIPTION	Indicator description	Adjusted rate of hospital admissions for CHF per 1,000 clients
	HQO Reporting tool/product	N/A
	Type	Outcome indicator
	External Alignment	Quality Improvement Plans (QIPs)
	Other reporting	Ministry of Health and Long-Term Care (MOHLTC) – Resource for Indicator Standards (RIS), Canadian Institute for Health Information (CIHI)
	Accountability	Primary Care , Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Per 1,000 clients
	Calculation	<p>Numerator The number of acute care hospital admissions for CHF (see codes below) in the previous year</p> <p>Includes</p> <ul style="list-style-type: none"> Hospital admissions with ICD 10 code(s) for CHF (I500, J81); excluding cases with cardiac procedures and have not been coded as abandoned on onset <p>Excludes:</p> <ul style="list-style-type: none"> In-hospital complications (i.e. DXTYPE M and 2) Admissions with the following CCI codes: 1IJ50, 1IJ76, 1HB53, 1HD53, 1HZ53, 1HB55, 1HD55, 1HZ55, 1HZ85, 1HB54, 1HD54 Cases where death occurs before discharge Overall cohort exclusions (see page 5)
		<p>Denominator Total number of clients</p> <p>Exclusion Criteria:</p> <ul style="list-style-type: none"> Overall cohort exclusions (see page 5)
		<p>Methods</p> $\frac{\text{The number of acute care hospital admissions for CHF in the previous year}}{\text{Total number of clients}} \times 1,000$
		<p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your client and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
	Data source / data elements	<p>Measure source: Canadian Institute of Health Information (CIHI), Ministry of Health and Long-Term Care Resource for Indicator Standards (RIS)</p> <p>Data source: Canadian Institute of Health Information Discharge Abstract Database (CIHI DAD).</p>

OTHER RELEVANT INFORMATION	Limitations / Caveats	Uninsured clients are not included
	Comments	N/A

ACSC Admissions: COPD

INDICATOR DESCRIPTION	Indicator description	Adjusted rate of hospital admissions for COPD per 1,000 clients
	HQO Reporting tool/product	N/A
	Type	Outcome indicator
	External Alignment	Quality Improvement Plans (QIPs)
	Other reporting	Ministry of Health and Long-Term Care (MOHLTC) – Resource for Indicator Standards (RIS), Canadian Institute for Health Information (CIHI)
	Accountability	Primary Care, Acute Care
	Unit of analysis	Per 1,000 clients
DEFINITION & SOURCE INFORMATION	Calculation	<p>Numerator The number of acute care hospital admissions for COPD (see codes below) in the previous year</p> <p>Includes</p> <ul style="list-style-type: none"> Hospital admissions with ICD 10 code(s) for COPD (J41, J42, J43, J44, J47) <p>Excludes:</p> <ul style="list-style-type: none"> In-hospital complications (i.e. DXTYPE M and 2) Admissions with the following CCI codes: 1IJ50, 1IJ76, 1HB53, 1HD53, 1HZ53, 1HB55, 1HD55, 1HZ55, 1HZ85, 1HB54, 1HD54 Cases where death occurs before discharge Overall cohort exclusions (see page 5) <p>Denominator Total number of clients within the previous year</p> <p>Exclusion Criteria:</p> <ul style="list-style-type: none"> Overall cohort exclusions (see page 5) <p>Methods</p> $\frac{\text{The number of acute care hospital admissions for COPD in the previous year}}{\text{Total number of clients}} \times 1,000$ <p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your clients and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
	Data source / data elements	<p>Measure source: Canadian Institute of Health Information (CIHI), Ministry of Health and Long-Term Care Resource for Indicator Standards (RIS)</p> <p>Data source: Canadian Institute of Health Information Discharge Abstract Database (CIHI DAD).</p>

OTHER RELEVANT INFORMATION	Limitations / Caveats	Uninsured clients are not included
	Comments	N/A

ACSC Admissions: Diabetes

INDICATOR DESCRIPTION	Indicator description	Adjusted rate of hospital admissions for diabetes per 1,000 clients
	HQO Reporting tool/product	Health Quality Ontario Quality Improvement Plans (QIPs) N/A
	Type	Outcome indicator
	External Alignment	N/A
	Other reporting	Ministry of Health and Long-Term Care (MOHLTC) – Resource for Indicator Standards (RIS), Canadian Institute for Health Information (CIHI)
	Accountability	Primary Care, Acute Care
DEFINITION & SOURCE INFORMATION	Unit of analysis	Per 1,000 clients
	Calculation	<p>Numerator The number of acute care hospital admissions for diabetes (see codes below) in the previous year</p> <p>Includes</p> <ul style="list-style-type: none"> Hospital admissions with ICD 10 code(s) for diabetes: E10.1, E10.6, E10.7, E10.9, E11.0, E11.1, E11.6, E11.7, E11.9, E13.0, E13.1, E13.6, E13.7, E13.9, E14.0, E14.1, E14.6, E14.7, E14.9 <p>Excludes:</p> <ul style="list-style-type: none"> In-hospital complications (i.e. DXTYPE M and 2) Admissions with the following CCI codes: 1IJ50, 1IJ76, 1HB53, 1HD53, 1HZ53, 1HB55, 1HD55, 1HZ55, 1HZ85, 1HB54, 1HD54 Cases where death occurs before discharge
		<p>Denominator Total number of clients within the previous year</p> <p>Exclusion Criteria: Overall cohort exclusions (see page 5)</p>
		<p>Methods</p> $\frac{\text{The number of acute care hospital admissions for diabetes in the previous year}}{\text{Total number of clients}} \times 1,000$
		<p>Adjustment This indicator has been risk adjusted for age, sex, income (neighborhood income), rurality and co-morbidities (number of ADGs). Risk adjustment takes into account the differences among clients' populations to allow for fairer comparisons between your Clients and other populations. Unadjusted data is also provided to inform quality improvement efforts. The reference population for adjustment is all Ontarians.</p>
	Data source / data elements	Measure source: Canadian Institute of Health Information (CIHI), Ministry of Health and Long-Term Care Resource for Indicator Standards (RIS)

		Data source: Canadian Institute of Health Information Discharge Abstract Database (CIHI DAD).
OTHER RELEVANT INFORMATION	Limitations / Caveats	Uninsured clients are not included
	Comments	N/A

Section 4: Clients Demographics

Recent OHIP registrants

INDICATOR DESCRIPTION	Indicator description	Number of recent OHIP registrants within 10 years
	HQO Reporting tool/product	N/A
	Type	Structure indicator
	External Alignment	N/A
	Other reporting	N/A
	Accountability	N/A
OTHER RELEVANT INFORMATION	Data source / data elements	Ontario Health Insurance Plan (OHIP).
	Limitations / Caveats	N/A
	Comments	<ul style="list-style-type: none"> Overall cohort exclusions (see page 5)

Age

INDICATOR DESCRIPTION	Indicator description	Clients' age category at index date
	HQO Reporting tool/product	N/A
	Type	N/A
	External Alignment	N/A
	Other reporting	N/A
	Accountability	N/A
OTHER RELEVANT INFORMATION	Data source / data elements	Registered Persons Database (RPDB).
	Limitations / Caveats	<ul style="list-style-type: none"> Does not capture clients whose date of last contact occurred before 7 years of the index date Uninsured clients are not included
	Comments	<p>Age Categories:</p> <ol style="list-style-type: none"> 1 to 18 19 to 34 35 to 49 50 to 64 65+ <p>Overall cohort exclusions (see page 5)</p>

Gender

INDICATOR DESCRIPTION	Indicator description	Proportion of clients that are female
	HQO Reporting tool/product	Primary Care Performance Measurement Framework (PCPM); Yearly Reports, Theme Reports, Long-Term Care Reports, Home Care Reports, Home Care Reports
	Type	N/A
	External Alignment	N/A
	Other reporting	N/A
	Accountability	N/A
OTHER RELEVANT INFORMATION	Data source / data elements	Registered Persons Database (RPDB).
	Limitations / Caveats	Uninsured clients are not included
	Comments	Overall cohort exclusions (see page 5)

Income quintile

INDICATOR DESCRIPTION	Indicator description	Income quintile at the index event using the dissemination area of the client's residential address
	HQO Reporting tool/product	Primary Care Performance Measurement Framework (PCPM); Yearly Reports, Theme Reports, Long-Term Care Reports, Home Care Reports, Home Care Reports
	Type	N/A
	External Alignment	N/A
	Other reporting	N/A
	Accountability	N/A
DEFINITION & SOURCE INFORMATION	Unit of analysis	N/A
	Calculation	Income quintile are derived using Statistics Canada's Postal Code Conversion File Plus (PCCF+). This program links the six-character postal codes to census geographic areas in order to derive information such as income for each geographic area. For these analyses data from the 2006 Census was used to assign postal codes to residents for census dissemination areas in the 2006 Census. Income adequacy, adjusted for household size and specific to each community, was used to order postal codes into quintiles, with income quintile 1 having the lowest relative income and income quintile 5 having the highest.
	Data source / data elements	Registered Persons Database (RPDB), Statistics Canada 2006 Census.
OTHER RELEVANT INFORMATION	Limitations / Caveats	<ul style="list-style-type: none"> - A limitation of this measure is that people with a missing or invalid postal code, and those living in institutions, are not assigned a neighbourhood income quintile and therefore are not included in the summary measures of disparity. - Uninsured clients are not included
	Comments	<p>Values: 1 (low) to 5 (high)</p> <p>Overall cohort exclusions (see page 5)</p>

Clients Rurality Index of Ontario (RIO)

INDICATOR DESCRIPTION	Indicator description	The Rurality Index of Ontario provides continuous and broad measurements of rurality using the dissemination area of the client's residential postal code. A RIO score of 0 to 9 is considered urban, a score of 10 to 39 specifies a non-major urban center, and a score of 40 and above is considered rural.
	HQO Reporting tool/product	N/A
	Type	N/A
	External Alignment	N/A
	Other reporting	N/A
	Accountability	N/A
OTHER RELEVANT INFORMATION	Data source / data elements	Registered Persons Database (RPDB).
	Limitations / Caveats	Does not capture clients whose date of last contact occurred before 7 years of the index date
	Comments	<ul style="list-style-type: none"> - Overall cohort exclusions (see page 5) - The RIO methodology is based on the Kralj methodology. Kralj B. Measuring Rurality – RIO2008_BASIC: Methodology and Results. Toronto, Ontario: Ontario Medical Association; 2009. Available at: https://www.oma.org/Resources/Documents/2008RIO-FullTechnicalPaper.pdf

Additional Indicators

Section 2: Health Service Utilization

Specialist Visits – Cardiologist

INDICATOR DESCRIPTION	Indicator description	The number of visits to the cardiologist in the previous year.
	HQO Reporting tool/product	Primary Care Performance Measurement Framework (PCPM); Yearly Reports, Theme Reports, Long-Term Care Reports, Home Care Reports, Home Care Reports
	Type	Process indicator
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care
OTHER RELEVANT INFORMATION	Data source / data elements	National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP), CIHI Discharge Abstract Database (DAD), ICES Physicians Database (IPDB).
	Limitations / Caveats	Uninsured clients are not included
	Comments	<ul style="list-style-type: none"> • The number of visits to a cardiologist in the previous year where the main specialty is cardiology in the IPDB • Restricted to one visit per client per physician per day • Only physician visits that occurred in the office, home, or LTC are included • Overall cohort exclusions (see page 5)

Specialist Visits – Endocrinologist

INDICATOR DESCRIPTION	Indicator description	The number of visits to the Endocrinologist in the previous year.
	HQO Reporting tool/product	Primary Care Performance Measurement Framework (PCPM); Yearly Reports, Theme Reports, Long-Term Care Reports, Home Care Reports, Home Care Reports
	Type	Process indicator
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care
OTHER RELEVANT INFORMATION	Data source / data elements	National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP), CIHI Discharge Abstract Database (DAD), ICES Physicians Database (IPDB).
	Limitations / Caveats	Uninsured clients are not included
	Comments	<ul style="list-style-type: none"> The number of visits to an endocrinologist in the previous year where the main specialty is endocrinology in the IPDB Restricted to one visit per client per physician per day Only physician visits that occurred in the office, home, or LTC are included Overall cohort exclusions (see page 5)

Specialist Visits – Internal Medicine Physician

INDICATOR DESCRIPTION	Indicator description	The number of visits to an internal medicine physician in the previous year.
	HQO Reporting tool/product	Primary Care Performance Measurement Framework (PCPM); Yearly Reports, Theme Reports, Long-Term Care Reports, Home Care Reports, Home Care Reports
	Type	Process indicator
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care
OTHER RELEVANT INFORMATION	Data source / data elements	National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP), CIHI Discharge Abstract Database (DAD), ICES Physicians Database (IPDB).
	Limitations / Caveats	Uninsured clients are not included
	Comments	<ul style="list-style-type: none"> The number of visits to an internal medicine physician in the previous year where the main specialty is internal medicine in the IPDB Restricted to one visit per client per physician per day Only physician visits that occurred in the office, home, or LTC are included Overall cohort exclusions (see page 5)

Specialist Visits – Psychiatrist

INDICATOR DESCRIPTION	Indicator description	The number of visits to a psychiatrist in the previous year.
	HQO Reporting tool/product	Primary Care Performance Measurement Framework (PCPM)
	Type	Process indicator

	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care
OTHER RELEVANT INFORMATION	Data source / data elements	National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP), CIHI Discharge Abstract Database (DAD), ICES Physicians Database (IPDB).
	Limitations / Caveats	N/A
	Comments	<ul style="list-style-type: none"> The number of visits to a psychiatrist in the previous year where the main specialty is psychiatry in the IPDB Restricted to one visit per client per physician per day Only physician visits that occurred in the office, home, or LTC are included Overall cohort exclusions (see page 5)

Specialist Visits – Respiriologist

INDICATOR DESCRIPTION	Indicator description	The number of visits to a respirologist in the previous year.
	HQO Reporting tool/product	Primary Care Performance Measurement Framework (PCPM);
	Type	Process indicator
	External Alignment	N/A
	Other reporting	N/A
	Accountability	Primary Care
OTHER RELEVANT INFORMATION	Data source / data elements	National Ambulatory Care Reporting System (NACRS), Ontario Health Insurance Plan (OHIP), CIHI Discharge Abstract Database (DAD), ICES Physicians Database (IPDB).
	Limitations / Caveats	Uninsured clients are not included
	Comments	<ul style="list-style-type: none"> The number of visits to a respirologist in the previous year where the main specialty is respirology in the IPDB Restricted to one visit per client per physician per day Only physician visits that occurred in the office, home, or LTC are included Overall cohort exclusions (see page 5)

Resource Utilization Band (RUB)

INDICATOR DESCRIPTION	Indicator description	The RUB is the mean resource intensity weight using any diagnosis from a physician or nurse practitioner encounter, physician claim, or hospitalization in the past year. Resource Utilization Bands (RUBs) are part of the Johns Hopkins Adjusted Clinical Group® (ACG®) Case Mix System. The RUBs are a simplified ranking system of each person's overall illness level, taking into account all the diagnoses attributed to them during medical visits and hospitalizations in the preceding year.
	HQO Reporting tool/product	N/A
	Type	N/A
	External Alignment	N/A
	Other reporting	N/A
	Accountability	N/A

OTHER RELEVANT INFORMATION	Data source / data elements	Ontario Health Insurance Plan (OHIP), National Ambulatory Care Reporting System (NACRS), Canadian Institute of Health Information Discharge Abstract Database (CIHI DAD).
	Limitations / Caveats	N/A
	Comments	Clients are assigned to one of 6 RUB categories: 0-Non-user 1-Healthy User 2-Low Morbidity 3-Moderate Morbidity 4-High Morbidity 5-Very High Morbidity

Standardized ACG Morbidity Index (SAMI)

INDICATOR DESCRIPTION	Indicator description	The SAMI represents the mean ACG weight of expected resource use. The distribution of primary care physicians and the number of very sick clients is varied, and can result in systematic inequities where physicians are not adequately reimbursed and where these very sick clients are underserved and/or unable to enroll with a family physicians ¹ . Thus, there has been an increasing need to predict primary care utilization to better equip and enable practices to meet health care needs. The John's Hopkins Adjusted Clinical Groups (ACG) Case-mix System was used in developing SAMI as it has "demonstrated validity for explaining the health care service needs of Canadian populations". ² The ACG system uses diagnostic codes derived from OHIP billing data, the CIHI Discharge Abstract Database and CHC encounter data with physicians and nurse practitioners to place clients into one or more of the 30 Adjusted Diagnostic Groups (ADGs). ² Then clients are assigned to one of 90 mutually exclusive ACGs based on their age, sex, and the number of different ADGs they were placed in. Each ACG has a weight that indicates the expected level of health care resources needed or the level of need for health care. ^{2,3} Finally, the practice-based ACG morbidity index, known as SAMI, is created by adding specific actual and expected costs to each ACG weight and dividing these by the provincial grand mean. ³ For example, a SAMI of 1.85 can be interpreted as an expected need for health care that is 85% higher than in the general Ontario population, and a SAMI of 0.88 can be interpreted as a 12% lower expected need for health care than in the general Ontario population. ⁴
	HQO Reporting tool/product	N/A
	Type	N/A
	External Alignment	N/A
	Other reporting	N/A
	Accountability	N/A
OTHER RELEVANT INFORMATION	Data source / data elements	Ontario Health Insurance Plan (OHIP), Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD), Ontario Mental Health Reporting System (OMHRS), CHC encounter data
	Limitations / Caveats	N/A
	Comments	Sources: 1. Glazier RH, Klein-Geltink J, Kopp A, Sibley LM. Capitation and enhanced fee-for-service models for primary care reform: a population-based evaluation. Canadian Medical Association Journal 2009;180:E72-81.

		<ol style="list-style-type: none">2. Sibley, Lyn M., and Richard H. Glazier. "Evaluation of the equity of age–sex adjusted primary care capitation payments in Ontario, Canada." <i>Health Policy</i> 104.2 (2012): 186-192.3. Reid, R., et al. "Do some physician groups see sicker clients than others." <i>Implications for Primary Care Policy in Manitoba</i>. Manitoba Centre for Health Policy and Evaluation (2001).4. Glazier, Richard H., Brandon M. Zagorski, and Jennifer Rayner. <i>Comparison of primary care models in Ontario by demographics, case mix and emergency department use, 2008/09 to 2009/10</i>. Institute for Clinical Evaluative Sciences, 2012.
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Appendix A – Table of Acronyms

ACRONYM	TERM
ACSC	Ambulatory Care Sensitive Conditions
ADGs	Adjusted Diagnostic Groups
AMI	acute myocardial infarction
CHF	congestive heart failure
COPD	chronic obstructive pulmonary disease
CPSO	College of Physicians and Surgeons of Ontario
CTAS	Canadian Triage and Acuity Scale
DAD	Discharge Abstract Database
ED	emergency department
FOBT	fecal occult blood test
GDS	group data suppressed; physician group size <6
HQO	Health Quality Ontario
ICES	Institute for Clinical Evaluative Sciences
IPDB	ICES Physician Database
LHIN	Local Health Integration Network
NACRS	National Ambulatory Care Reporting System
OCR	Ontario Cancer Registry
OHIP	Ontario Health Insurance Plan
OMHRS	Ontario Mental Health Reporting System
RIO	Rurality Index of Ontario
RPBD	Registered Persons Database
RUB	Resource Utilization Band

Appendix B – Data Sources

TERM	DATA SOURCE(S)
OPIOID PRESCRIBING	
Percentage of non-palliative care clients who have been dispensed an opioid prescription (excluding opioid agonist therapy) within the last 6 months	CIHI DAD; OHIP; RPDB; NMS
Percentage of non-palliative care clients who have been newly dispensed an opioid prescription (excluding opioid agonist therapy) within the last 6 months	CIHI DAD; OHIP; RPDB; NMS
Percentage of non-palliative care clients who have been dispensed an opioid (including opioid agonist therapy) and benzodiazepine within the last 6 months	CIHI DAD; OHIP; RPDB; NMS
Percentage of non-palliative care clients who have at least one high-dose opioid >90 mg MEQ daily within the last 6 months	CIHI DAD; OHIP; RPDB; NMS
CLIENTS DEMOGRAPHICS	
Clients population	OHIP; RPDB
Percentage of clients by age cohorts	RPDB
Rurality Index of Ontario (RIO) of clients	RPDB
Income quintiles of clients	RPDB; CHC encounter data
Mean Resource Utilization Band (RUB) of Clients	OHIP; CIHI DAD; CHC encounter data
Standardized ACG Morbidity Index (SAMI)	OHIP; CIHI DAD; CHC encounter data
HEALTH SERVICES UTILIZATION	
Rate of emergency department visits per 1,000 Clients	NACRS
Rate of ED visits per 1,000 clients: Canadian Triage Acuity Scale 1-3	NACRS
Rate of ED visits per 1,000 clients: CTAS 4-5	NACRS
Rate of hospital admissions for asthma per 1,000 clients	CIHI DAD
Rate of hospital admissions for CHF per 1,000 Clients	CIHI DAD
Rate of hospital admissions for COPD per 1,000 clients	CIHI DAD
Rate of hospital admissions for diabetes per 1,000 clients	CIHI DAD
Rate of hospital admissions for asthma, CHF, COPD and diabetes per 1,000 clients	CIHI DAD
Percentage of hospital readmissions (within 30 days) of admitted clients	CIHI DAD
Percentage of hospital readmissions (within one year) of admitted clients	CIHI DAD

Percentage of clients who visited the emergency department (ED) for conditions best managed elsewhere	CIHI DAD; IPDB; OHIP; RPDB
Percentage of clients who have had a 7-day post hospital discharge follow-up	CIHI DAD; IPDB; OHIP; RPDB
ADDITIONAL INDICATORS	
Rate of visits to cardiologist per 1,000 clients	OHIP; NACRS; CIHI DAD; IPDB
Rate of visits to respirologist per 1,000 clients	OHIP; NACRS; CIHI DAD; IPDB
Rate of visits to psychiatrist per 1,000 clients	OHIP; NACRS; CIHI DAD; IPDB
Rate of visits to endocrinologist per 1,000 clients	OHIP; NACRS; CIHI DAD; IPDB
Rate of visits to general internist per 1,000 clients	OHIP; NACRS; CIHI DAD; IPDB
Rate of visits to non-specified specialist per 1,000 clients	OHIP; NACRS; CIHI DAD; IPDB
Rate of visits to any specialists per 1,000 clients	OHIP; NACRS; CIHI DAD; IPDB
Rate of visits to specified and non-specified specialists per 1,000 clients by physician	OHIP; NACRS; CIHI DAD; IPDB
Cancer Screening	
Percentage of female clients aged 23 to 69 who had a Pap smear within past three years	OHIP; RPDB; CIHI SDS; OCR
Percentage of female clients aged 52 to 69 who had a mammogram within past two years	OHIP; RPDB; CIHI SDS; OCR
Percentage of clients aged 52 to 74 who had a fecal occult blood test (FOBT) within past two years	OHIP; RPDB; CIHI SDS; OCR
Percentage of clients aged 52 to 74 had a colonoscopy within past 10 years	OHIP; RPDB; CIHI SDS; OCR
Percentage of clients seen aged 52 to 74 who had a FOBT within past two years, other investigations within five years or a colonoscopy within the past 10 years	OHIP; RPDB; CIHI SDS; OCR

Appendix C – Palliative care Clients identified by using hospital and physician billing claims data

OHIP FEE CODE	DESCRIPTION
A945	GEN./FAM.PRACT.SPECIAL PALLIATIVE CARE CONSULTATION
C945	SPECIAL PALLIATIVE CARE CONSULT HOSP IN CLIENTS
C882	TERMINAL CARE IN HOSP.G.P/F.P
C982	PALLIATIVE CARE
W872	TERMINAL CARE N.H G.P/FAMILY PRACTICE
W882	TERMINAL CARE IN CHR.HOSP.G.P.
W972	PALLIATIVE CARE
W982	PALLIATIVE CARE
K023	PALLIAT CARE SUPPORT INDIVID CARE 1/2 HR OR MAJOR PART
B998	SPEC VIS PALLIATIVE CARE HOME, DAYS, EVE
B966	TRAVEL PREMIUM - PALLIATIVE CARE HOME VISIT
B997	SPEC VIS PALLIATIVE CARE HOME, DAYS, EVE
G511	TELEPHONE MANAGEMENT OF PALLIATIVE CARE AT HOME
G512	WEEKLY PALLIATIVE CARE CASE MANAGEMENT
CIHI DAD PATSERV	DESCRIPTION
58	PALLIATIVE CARE
CIHI ICD10 CODE	DESCRIPTION
Z515	PALLIATIVE CARE

Please note that palliative care clients are identified from hospital and physician billing data. Therefore if clients were only seen by a family physician/ nurse practitioner in a CHC setting, they will not be identified as palliative care patients.