

Template:

**❏ Question:**

For what portion of adults were screening blood tests conducted in any given year? ([Relates to CWC Family Medicine recommendation #5](#))

**❏ Team and list of all team member names:**

NYFHT / UTOPIAN-CPCSSN:

Suja Arackal

Marjan Moeineddin

Babak Aliarzadeh

Michelle Greiver

(all team members must have agreed to challenge rules through registration)

**Describing the Data and Analysis**

Population: Patients age 18 or more as of December 31<sup>st</sup> 2014

Rostered to a physician at North York Family Health Team that participates in CPCSSN as of December 31<sup>st</sup> 2014 (N = 65 physicians)

**❏ Data Custodian Organization(s) and data sources:**

Data custodians:

Physicians at NYFHT that have provided consent for participation in CPCSSN

Data sources:

EMR data extracted and cleaned by CPCSSN and returned to NYFHT with Data Presentation Tool (DPT) to allow data mining

**☒ List of Datasets Used (e.g. names of database and/or data origins):**

Data extracted as of December 31<sup>st</sup> 2014 from EMRs used by physicians at NYFHT. EMRs are: Practice Solutions EMR (Telus); Nightingale EMR (ASP); Nightingale EMR (local database)

**☒ Exclusions:**

Physician not participating in CPCSSN (N = 5)

Patient not rostered to participating physician

Patient under age 18 as of December 31<sup>st</sup> 2014

**☒ Nature and Size of Cohort (e.g. geographic area covered, number of patients included):**

Primary care cohort, all patients rostered to large Family Health Team in Toronto, Ontario, Canada; adults (age 18 or more as of December 31<sup>st</sup> 2014); most patients are located in Greater Toronto Area

N patients = 49,263

**☒ Data timeframe:**

All patients currently rostered to participating family physicians, regardless of date of last visit are included. Rosters are kept up to date by each office on a monthly basis. Roster list is compared to and reviewed for accuracy against Ministry of Health roster list and is updated on a yearly basis.

Date of last roster verification for current dataset: June 2014.

**Please provide a brief summary of the analysis methodology:**

Numerators and denominators extracted using DPT. Percentages obtained by dividing numerator by denominator.

Analyzed by age ranges.

Data on screening to answer this question is provided for patients less than age 45 as of December 31<sup>st</sup> 2014.

**Describing the Findings**

☒ Numerator and Denominator (as specified in the question definition)

Numerator: All patients rostered to a participating NYFHT family physician, patients age 18 or more as of December 31<sup>st</sup> 2014

Denominator: All patients in the numerator with at least one screening blood test. CWC currently recommends that blood tests be used to screen for high cholesterol and diabetes. Cholesterol screening should be done for men over 40 or women over 50, every 3 to 5 years. The Canadian Diabetes Association recommends screening for diabetes in individuals age 40 or over, every 3 years. Screening tests for diabetes include Hemoglobin A1c (A1c) or Fasting Blood Glucose (FBG).

We therefore searched for patients who had at least one total cholesterol, HbA1c or FBG in 2014. Prevalence of diabetes, hypertension and ischemic heart disease is known; we provide the total burden of testing for our population.

To answer the question on screening, we restricted data to patients less than age 45 as of December 31<sup>st</sup> 2014. The prevalence of diabetes or cardiovascular disease is low in this age range, and testing is generally not indicated for disease management. Most patients are low cardiovascular risk. This therefore represents a population in which the majority of testing is for screening purposes.

**☑ Please also provide a brief summary of the findings including any key limitations or interpretation issues (may also include one figure/table)**

	Population N	age ranges						
		18-24	25-34	35-44	45-54	55-64	65-74	75+
Rostered, age 18 or more as of December 31 2014	49263	4937	7415	8649	9299	7857	5761	5345
Had Total cholesterol, A1c or FBG in 2014	19691	443	1196	2376	3880	4144	3986	3666
Percentage of population	40%	9%	16%	27%	42%	53%	69%	69%

Overall, 40% of rostered adults had at least one of the included blood tests in their EMR in 2014. The proportion increases with age; testing for purposes other than screening is more likely in older patients. 4,015 patients under the age of 45 had a screening blood test, out of a rostered population of 21,001 patients; 19% of rostered patients under age 45 were screened.