

GUIDE: Comparing Organizational Patient-Level Data to 2016 Census¹ Data

This guide is an accompaniment to “Demographic Profile Comparison” Excel template developed by the Human Rights & Health Equity Office at Sinai Health System.

The purpose of the Excel template is to help hospitals compare their patient demographic data to 2016 Census data and present the results in tables and graphs. This comparison enables an organization to understand who is (not) being served, identify gaps in access to services, and evaluate programs targeting particular populations.



RESOURCES ACCOMPANYING THIS GUIDE

- Excel template [source: Sinai Health team]:
 - Includes data from the ‘Greater Toronto Area’ 2016 Census area
 - Data in the Excel template can be replaced by 2016 Census data from other geographical areas
 - Provides tables for organizations to add their own data
 - Automatically generates tables and graphs
- Census 2016 database [source: Statistics Canada]
 - Website provides demographic data summaries on multiple levels including national, provincial, city-level, and neighbourhood-level
 - <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>



QUESTIONS TO START WITH

- What is the time period are you interested in?
 - You can limit your organization’s demographic data summary to patients seen over the past 12 months
 - You can include all patients with demographic data on file (i.e. since the start of data collection)
 - Tip: You can use the annual demographic data summary hospitals submit to the Toronto Central LHIN
- What is your ‘catchment area’?
 - ‘Catchment area’ usually refers to areas you want to target for care
 - Options for ‘catchment area’ for Toronto on the Census 2016 website include electoral district, Greater Toronto Area, central Toronto, etc (see screenshot below)
 - This step requires some strategic thinking and isn’t always straightforward. For example, a hospital that has a unique specialized program may need to expand the area of interest beyond central Toronto to the Greater Toronto Area.

¹ 2016 Census: Refers to the data collected as part of the mandatory ‘Canada 2016 Census’, carried out by Statistics Canada in May 2016. Out of all Canadian households who receive the census questionnaire, approximately 25% receive a long-form census that asks about additional questions about demographic, social, and economic characteristics. The ‘2016 Census’ term here refers to data collected through the long-form census.

- The data used in these instructions cover “**Toronto CMA**”, which covers data from the Greater Toronto Area.
- See figure below for other geographic area options

Census Profile, 2016 Census - Search results

The search for “**M5T3L9**” returned the following results grouped by geographic level.

Expand all Collapse all

- ▼ Provinces/Territories
 - [Ontario \(Province\)](#) [map]
- ▼ Census subdivisions (municipalities)
 - [Toronto \(City\), Ontario](#) [map]
- ▼ Census metropolitan areas / Census agglomerations
 - [Toronto \(CMA\), Ontario](#) [map]
- ▼ Census divisions
 - [Toronto \(Census division\), Ontario](#) [map]
- ▼ Federal electoral districts (2013 representation order)
 - [University--Rosedale, Ontario](#) [map]
- ▼ Population centres
 - [Toronto, Ontario](#) [map]
- ▼ Economic regions
 - [Toronto, Ontario](#) [map]
- ▼ Census tracts
 - [5350037.00, Ontario](#) [map]

New search

► Place name

▼ Postal code

Postal codeSM

Q Search

► Geographic code

Information about geographic levels

The [Census Dictionary](#) provides more information about geographic levels.

- [Aggregate dissemination area \(ADA\)](#)
- [Census division \(CD\)](#)
- [Census subdivision \(CSD\)](#)
- [Census metropolitan area \(CMA\) and census agglomeration \(CA\)](#)
- [Census tract \(CT\)](#)
- [Dissemination area \(DA\)](#)
- [Economic region \(ER\)](#)
- [Federal electoral district](#)

Four variables in the Census 2016 can be used to make comparisons with the Toronto Central LHIN data. These variables are: (1) language, (2) born in Canada, (3) race/ethnicity, (4) income. The Excel template presents each variable on a separate tab and includes instructions for aggregating and presenting the data. This guide will review each of those tabs and provide additional instructions on how the data was combined and calculated.



Link to Toronto Central LHIN 8 mandatory questions:

- <http://torontohealthequity.ca/demographic-questions>

Link to the Census 2016 questions:

- <http://www12.statcan.gc.ca/nhs-enm/2016/ref/questionnaires/questions-eng.cfm>



This template requires you to plug in demographic data about your patients. One option is to use the latest version of the data summary submitted to the Toronto Central LHIN.



Important note on the Excel template:

- Census 2016 data in the template covers the Greater Toronto Area (i.e. 'Census Metropolitan Area')
- You can retrieve data for another geographical location by visiting the Census 2016 database (see 'resources' on p. 1). Instructions below will provide a roadmap on how to embed that data into the Excel template

QUESTION: LANGUAGE

Table 1.1. ‘Language’ question

Source	Question(s)	Notes
Toronto Central LHIN	<p>Language:</p> <p>What language would you feel most comfortable speaking in with your health-care provider?</p>	<ul style="list-style-type: none"> • Toronto Central LHIN uses one question • Respondents select one response only
Census 2016	<p>First official language spoken (Question 7):</p> <p>Can this person speak English or French well enough to conduct a conversation?</p> <hr/> <p>Language spoken most often at home (Question 8a):</p> <p>What language does this person speak most often at home?</p> <hr/> <p>Other language spoken regularly at home (Question 8b):</p> <p>Does this person speak any other languages on a regular basis at home?</p> <hr/> <p>Mother tongue (Question 9):</p> <p>What is the language that this person first learned at home in childhood and still understands?</p>	<ul style="list-style-type: none"> • Language is captured in 4 questions • We recommend using data from one question: <ul style="list-style-type: none"> ○ “Mother tongue” ○ Respondents select one response only

Step 1- Language: Compile and align original data summaries



The 2016 Census collects data on 216 languages including 33 of the 34 languages listed in the Toronto Central LHIN’s demographic language question. The missing language is Dari

- A comparison table listing the 33 languages in common between the 2016 Census and the Toronto Central LHIN demographic questions has been created and populated with Census 2016 data (see below).
- Steps used to calculate data in ‘language’ categories:
 - Pull Census 2016 data for Mother tongue question (Q9)
 - Perform additional calculations for “Other” data:
 - Census 2016 data: Combine ‘Other’ and the remaining 183 languages that are not covered in the Toronto Central LHIN language categories; and
 - Individual organization data (i.e. your hospital): Combine ‘Other’ and ‘Dari’

- Individual Hospital ‘frequencies’ column should be populated with your organization’s patient demographic data, collected through the Toronto Central LHIN questions
 - Percentages will be automatically calculated based on ‘Frequencies’ data

STEP 1. COMPILE and ALIGN ORIGINAL DATA SUMMARIES

Language	Greater Toronto Area (Census 2016) Data by Frequencies	Greater Toronto Area (Census 2016) Data by Percentages	[your organization's name] Data by Frequencies	[your organization's name] Data by Percentages
Amharic	7,460	0.13%		#DIV/0!
Arabic	85,175	1.50%		#DIV/0!
ASL	470	0.01%		#DIV/0!
Bengali	38,325	0.68%		#DIV/0!
Cantonese	247,710	4.37%		#DIV/0!
Czech	4,795	0.08%		#DIV/0!
English	3,061,820	53.96%		#DIV/0!
Farsi	100,640	1.77%		#DIV/0!
French	65,535	1.16%		#DIV/0!
Greek	41,225	0.73%		#DIV/0!
Hindi	48,140	0.85%		#DIV/0!
Hungarian	19,130	0.34%		#DIV/0!
Italian	151,415	2.67%		#DIV/0!
Karenic languages	265	0.00%		#DIV/0!
Korean	55,005	0.97%		#DIV/0!
Mandarin	227,085	4.00%		#DIV/0!
Nepali	4,685	0.08%		#DIV/0!
Polish	69,860	1.23%		#DIV/0!
Portuguese	104,305	1.84%		#DIV/0!
Punjabi (Panjabi)	171,230	3.02%		#DIV/0!
Russian	83,105	1.46%		#DIV/0!
Serbian	21,420	0.38%		#DIV/0!
Slovak	5,260	0.09%		#DIV/0!
Somali	13,255	0.23%		#DIV/0!
Spanish	126,500	2.23%		#DIV/0!
Tagalog (Pilipino; Filipino)	136,115	2.40%		#DIV/0!
Tamil	109,580	1.93%		#DIV/0!
Tigrinya	4,725	0.08%		#DIV/0!
Turkish	13,700	0.24%		#DIV/0!
Twi	8,490	0.15%		#DIV/0!
Ukrainian	26,550	0.47%		#DIV/0!
Urdu	128,845	2.27%		#DIV/0!
Vietnamese	48,005	0.85%		#DIV/0!
Other (incl. Dari)	413,680	7.29%	0	#DIV/0!
Total	5,643,506			

33 languages in common between Census 2016 data and Demographic Language Question.

1 Sample of table aggregating 183 other languages found in 2016 Census

2 Table aggregating Individual hospitals' 'Other' + 'Dari' data

Other Languages from Greater Toronto Area (Census 2016) Data	Frequency
Other	413,680
Blackfoot	5
Atikamekw	5
Montagnais (Innu)	5
Moose Cree	10
Naskapi	5
Northern East Cree	5
Plains Cree	10

Other' from [your organization's name]	Frequency
Other	0
Dari	

Step 2- Language: Final Tables and Graphs

- Final percentages from ‘Step 1’ are extracted into tables for final graphs



If you find that one category takes up more than 50% of responses, we recommend that you separate into a separate graph. That will allow you to display the remaining categories in a more user-friendly way.

- In the past, all Toronto Central LHIN organizations reported that over 50% of patients select 'English' as the preferred spoken language. In anticipation of a similar pattern of responses in the future, the Excel template provides a separate graph for English

STEP 2: FINAL TABLES AND GRAPHS

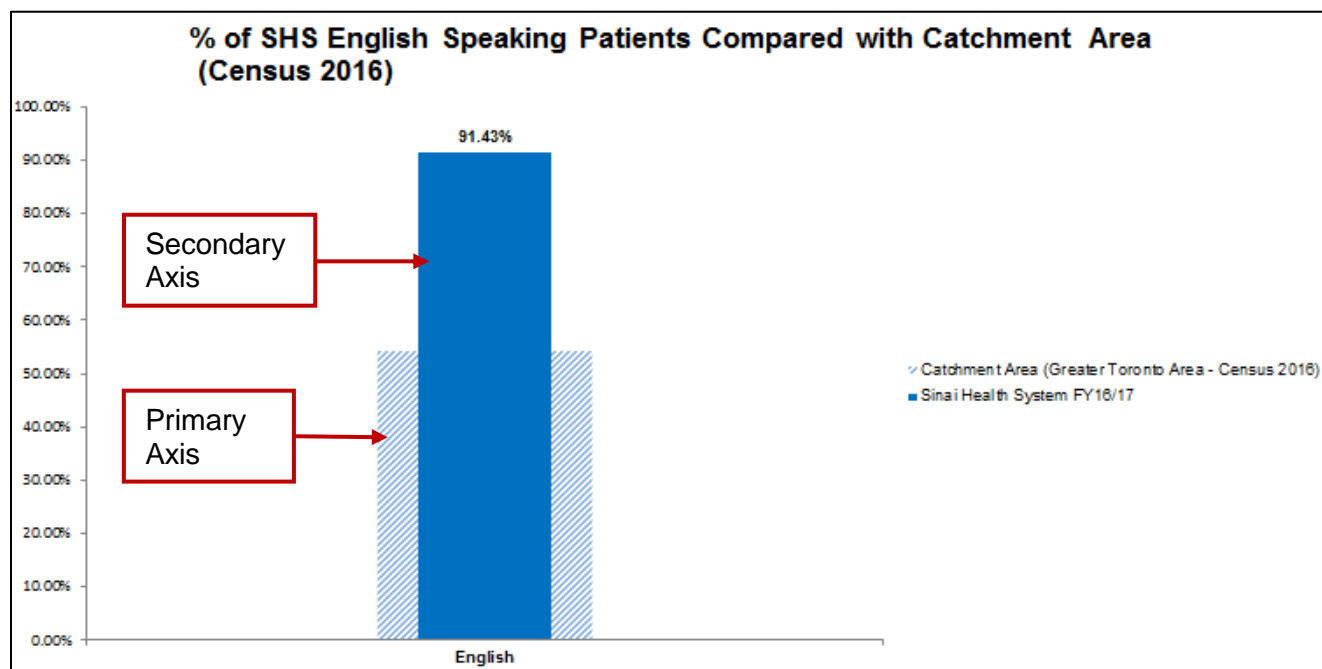
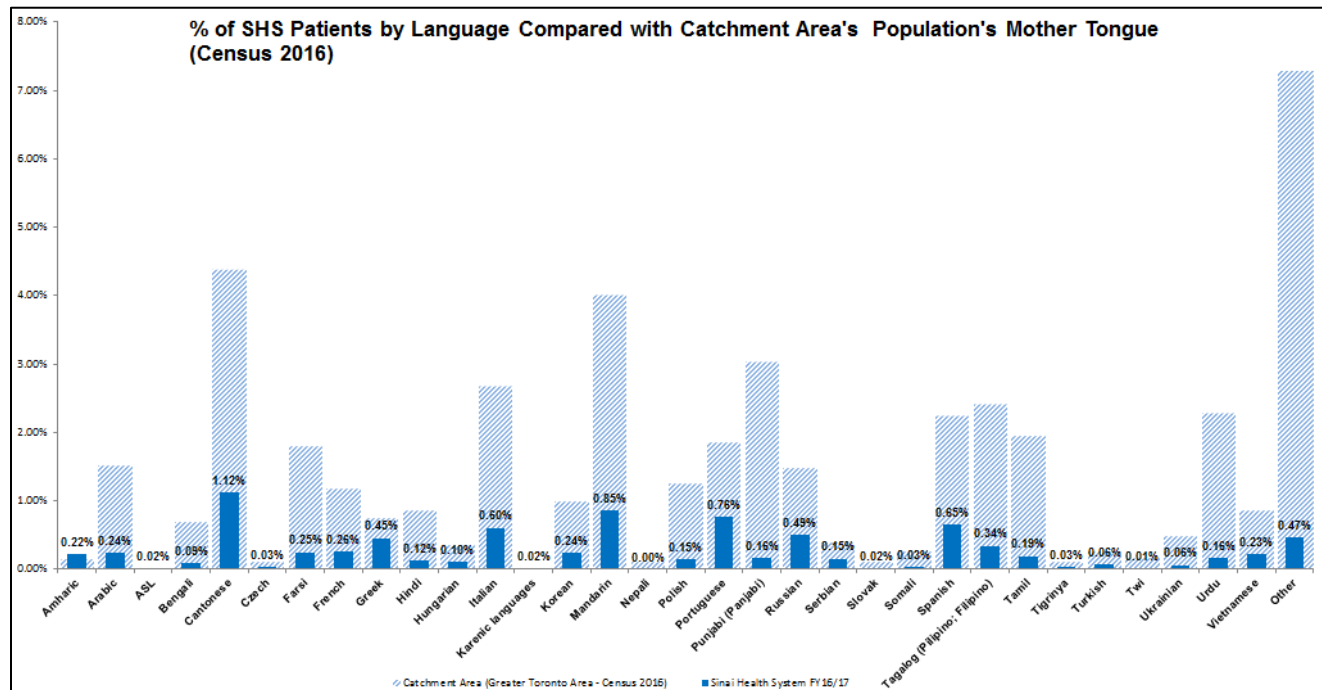
Language	Greater Toronto Area (Census 2016)	[your organization's name]
Amharic	0.13%	#DIV/0!
Arabic	1.50%	#DIV/0!
ASL	0.01%	#DIV/0!
Bengali	0.68%	#DIV/0!
Cantonese	4.37%	#DIV/0!
Czech	0.08%	#DIV/0!
Farsi	1.77%	#DIV/0!
French	1.16%	#DIV/0!
Greek	0.73%	#DIV/0!
Hindi	0.85%	#DIV/0!
Hungarian	0.34%	#DIV/0!
Italian	2.67%	#DIV/0!
Karenic languages	0.00%	#DIV/0!
Korean	0.97%	#DIV/0!
Mandarin	4.00%	#DIV/0!
Nepali	0.08%	#DIV/0!
Polish	1.23%	#DIV/0!
Portuguese	1.84%	#DIV/0!
Punjabi (Panjabi)	3.02%	#DIV/0!
Russian	1.46%	#DIV/0!
Serbian	0.38%	#DIV/0!
Slovak	0.09%	#DIV/0!
Somali	0.23%	#DIV/0!
Spanish	2.23%	#DIV/0!
Tagalog (Pilipino; Filipino)	2.40%	#DIV/0!
Tamil	1.93%	#DIV/0!
Tigrinya	0.08%	#DIV/0!
Turkish	0.24%	#DIV/0!
Twi	0.15%	#DIV/0!
Ukrainian	0.47%	#DIV/0!
Urdu	2.27%	#DIV/0!
Vietnamese	0.85%	#DIV/0!
Other	7.29%	#DIV/0!

Automatically extracted percentages from Step 1

Language	Greater Toronto Area (Census 2016)	[Your organization's name]
English	53.96%	#DIV/0!

English category separated as predicted to be higher than 50%

- Final graphs are automatically generated into an overlapping column graph with catchment area in the primary axis and individual hospital in the secondary axis
- Below is an example using Sinai Health System data



QUESTION: BORN IN CANADA

Table 2.1. Compiling data on ‘born in Canada’ variable

Source	Question(s)	Notes
Toronto Central LHIN	Born in Canada: Where you born in Canada?	<ul style="list-style-type: none"> Toronto Central LHIN uses one question
Census 2016	Immigrant status and period of immigration (Question 12) Where was this person born?	<ul style="list-style-type: none"> Born in Canada is captured in 1 question in the 2016 Census. The 2016 Census identifies two groups: <ul style="list-style-type: none"> Non-immigrants: includes persons who are Canadian citizens by birth. Immigrants: includes persons who are, or who have ever been, landed immigrants or permanent residents. Immigrants who have obtained Canadian citizenship by naturalization are included in this category. In the 2016 Census of Population, 'Immigrants' includes immigrants who landed in Canada on or prior to May 10, 2016.

Step 1- Born in Canada: Compile original data summary

Tables: ‘Greater Toronto Area’ (Census 2016)

- Table is populated with Toronto Central LHIN data (8 questions)

Tables: Individual hospital (i.e. your organization)

- Table should be populated with Toronto Central LHIN data (8 questions)
- Enter your organization’s patient demographic data for ‘Born in Canada’ in the ‘Frequencies’ column
- Based on data entered, the table will automatically calculate the percentages

STEP 1. COMPILE ORIGINAL DATA SUMMARIES				
Place of birth	Greater Toronto Area (Census 2016) Data by Frequencies	Greater Toronto Area (Census 2016) Data by Percentages	[your organization's name] Data by Frequencies	[your organization's name] Data by Percentages
Non-immigrants (born in Canada)	3,020,405	52.75%		#DIV/0!
Immigrants* (not Born in Canada)	2,705,550	47.25%		#DIV/0!

Extracted Census 2016 data

‘Born in Canada’ data collected by your organization

Automatically calculated percentages

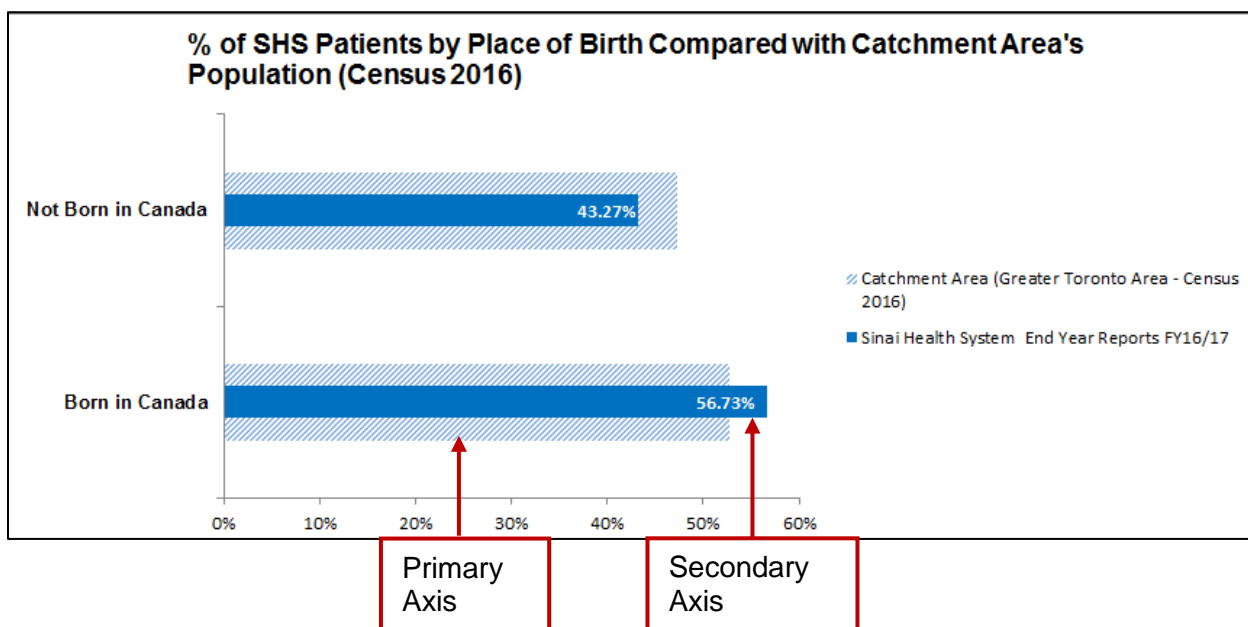
Born in Canada Step 2: Comparison Graph

- Final percentages from 'Step 1' are automatically extracted into tables for final graphs

STEP 2: FINAL TABLES AND GRAPHS		
	Greater Toronto Area (Census 2016)	[Your organization's name]
Born in Canada	52.75%	#DIV/0
Not Born in Canada	47.25%	#DIV/0

Automatically extracted percentages from Step 1

- Final graphs are automatically generated into an overlapping bar graph with catchment area in the primary axis and individual hospital in the secondary axis
- Below is an example using Sinai Health System data



QUESTION: RACE/ETHNICITY

Table 3.1. Race/Ethnicity questions

Source	Question(s)	Notes
Toronto Central LHIN	Racial/Ethnic group (question 3): Which one of the following best describes your racial or ethnic group?	<ul style="list-style-type: none"> Toronto Central LHIN uses one question Respondents select one response only
Census 2016	<p>Ethnic origin (question 17): What were the ethnic or cultural origins of this person's ancestors?</p> <hr/> <p>Aboriginal person (question 18): Is this person an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit)?</p> <hr/> <p>Visible minority (question 19): Is this person: [Mark more than one circle or specify, if applicable]</p>	<ul style="list-style-type: none"> Race/ethnicity is captured in 3 questions Respondents can select multiple responses <ul style="list-style-type: none"> Census 2016 data represents the total number of responses (1 person could select multiple responses) We recommend using data from two questions <ul style="list-style-type: none"> “Aboriginal” person “visible minority population”



Important note on Indigenous Data:

Based on Toronto Central LHIN guidelines, data on indigenous categories can be shared internally within your hospital but should not be shared externally in any capacity. This is an interim solution until the LHIN work with the indigenous community on developing more specific guidelines on data sharing and use.

Step 1- Race/Ethnicity: Compile original data summary

Tables: ‘Greater Toronto Area (Census 2016)’



Census 2016 data for ‘not a visible minority’ category (1 in image below) includes ‘Aboriginal person’ responses

- Tables in Excel template have been populated with Census 2016 data
- Steps to calculate race/ethnicity data in the ‘Greater Toronto Area (Census 2016)’ table:
 - Pull Census 2016 data for two questions: “aboriginal person” (Q 18) and “visible minority” (Q 19)
 - Perform additional calculations for “White (not a visible minority or Aboriginal person)” data

Formula:
‘White’ responses =
 total # **‘not a visible minority’** responses – total # **‘Aboriginal person’** responses

STEP 1: COMPILE ORIGINAL DATA SUMMARIES

Greater Toronto Area (Census 2016) [Table 1/2]	
Race/Ethnicity	Frequency
South Asian	973,225
Chinese	631,050
Black	442,020
Filipino	254,475
Latin American	132,945
Arab	105,610
Southeast Asian	83,535
West Asian	123,760
Korean	69,670
Japanese	20,655
Visible minority, n.i.e.	77,780
Multiple visible minorities	97,190
Not a visible minority (Includes persons who reported 'Yes' to the Aboriginal person question (Question 18), as well as persons who were not considered to be members of a visible minority group)	1,950
Aboriginal person	315
White (Not a visible minority - Aboriginal Identity)	2,804,635

Greater Toronto Area (Census 2016) [Table 2/2]	
Aboriginal person	Frequency
First Nations (North American Indian)	27,800
Métis	15,240
Inuk (Inuit)	690
Multiple Aboriginal responses	1,130
Aboriginal responses not included elsewhere	1,455
Total	45,315

“Visible minority” (Q19) data for ‘Greater Toronto Area’

“Aboriginal person” (Q18) data for ‘Greater Toronto Area’

Formula to calculate ‘White’:
 ① - ②
 2,804,635

Tables: Individual hospital (i.e. your organization)

- Table should be populated with Toronto Central LHIN data (8 questions)
- Enter your organization’s data on patient demographic information

[Your organization's name]	
Race/Ethnicity	Frequency
Asian - East	
Asian - South	
Asian - South East	
Black - African	
Black - Caribbean	
Black - North American	
Indian - Caribbean	
Latin American	
Middle Eastern	
White - European	
White - North American	
Mixed Heritage	
Indigenous [First Nations + Inuit + Metis + Indigenous not included elsewhere]	
Other	

“Race/Ethnicity” data collected by your organization

Important: When sharing externally, roll up ‘Indigenous Identity’ with ‘other’

Step 2- Race/Ethnicity: Align Census Questions with LHIN Questions

- After data is filled out in ‘Step 1’ tables, the next step is to identify a format for comparing the two data sets
- Below is a recommended format for combining and aligning race/ethnicity categories, developed by the Human Rights & Health Equity team

Table 3.2. Data Aggregation Guidelines (by Human Rights & Health Equity Office team)

Toronto Central LHIN questions	2016 Census questions
South Asian Formula: Asian – South + ‘Indian – Caribbean’	South Asian
East Asian	East Asian Formula: Chinese + Filipino + Korean + Japanese
South East Asian	Southeast Asian
Black Formula: Black - African + Black - Caribbean + Black - North American	Black
Latin American	Latin American
Middle Eastern	Middle Eastern Formula: Arab + West Asian
Indigenous Identity Formula: First Nations + Inuit + Metis + Indigenous not included elsewhere	Indigenous Identity [‘Aboriginal person’ question] Formula: First Nations (North American Indian) + Métis + Inuk (Inuit) + Multiple Aboriginal responses + Aboriginal responses not included elsewhere
Other	Other: ‘Visible minorities; n.i.e’
Mixed Heritage	Multiple visible minorities
White Formula: ‘White - European’ + ‘White - North American’	White Formula: ‘Not a visible minority’ - ‘Aboriginal person’

Example of the final table in Step 2 for 'Greater Toronto Area (Census 2016)

STEP 2: ALIGN CENSUS QUESTIONS WITH LHIN QUESTIONS

Greater Toronto Area (Census 2016)	
Race/Ethnicity	Frequency
South Asian	973,225
East Asian	975,850
Chinese	631,050
Filipino	254,475
Korean	69,670
Japanese	20,655
Southeast Asian	83,535
Black	442,020
Latin American	132,945
Middle Eastern	229,370
Arab	105,610
West Asian	123,760
Other (visible minority; n.i.e)	77,780
Indigenous Identity	46,315
Mixed Heritage (Multiple visible minorities)	97,190
White (Not a visible minority - Aboriginal Identity)	2,804,635
Total	5,862,865

“East Asian” category is automatically calculated by aggregating data for Chinese + Filipino + Korean + Japanese

“Middle Eastern” category is automatically calculated by aggregating data for Arab + West Asian

Step 3- Race/Ethnicity: Comparison Table- Frequencies & Percentage Rates

- Compile aggregated data and categories in ‘Step 2’ into a single comparison table
- Table will automatically calculate the data elements below based on ‘Step 1’/‘Step 2’:
 - Frequencies (i.e. a summary of the number/volume of responses)
 - Percentages

STEP 3. COMPARISON TABLE: FREQUENCIES & PERCENTAGE RATES

Race/Ethnicity	Greater Toronto Area (Census 2016) Data by Frequencies	Greater Toronto Area (Census 2016) Data by Percentages	[Your organization's name] Data by Frequencies	[Your organization's name] Data by Percentages
East Asian	975,850	16.6%	-	#DIV/0!
South Asian	973,225	16.6%	-	#DIV/0!
South East Asian	83,535	1.4%	-	#DIV/0!
Black	442,020	7.5%	-	#DIV/0!
Latin American	132,945	2.3%	-	#DIV/0!
Middle Eastern	229,370	3.9%	-	#DIV/0!
White	2,804,630	47.8%	-	#DIV/0!
Mixed Heritage	97,190	1.7%	-	#DIV/0!
Indigenous	46,315	0.79%	0	#DIV/0!
Other	77,780	1.33%	0	#DIV/0!
Total	5,862,860			

Final combination of categories for comparisons

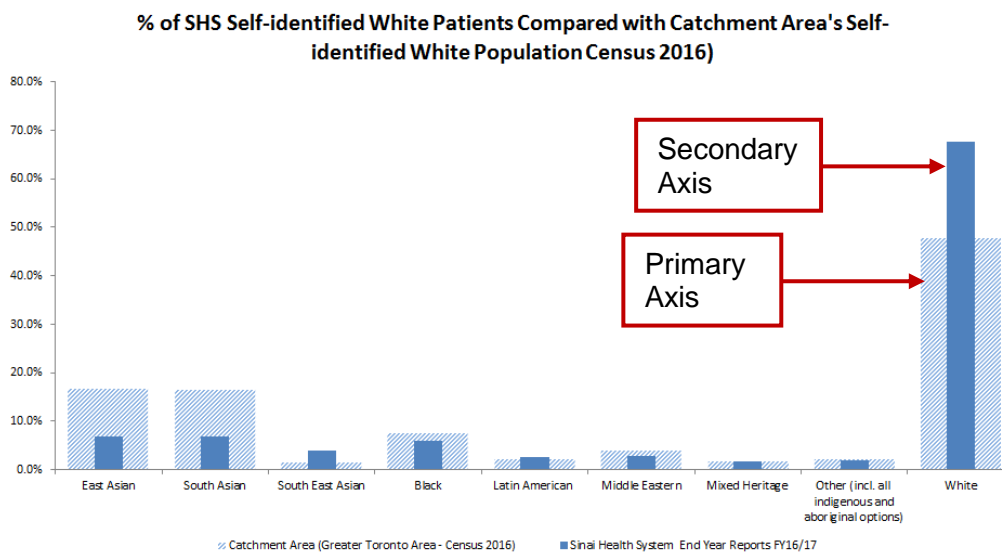
Step 4- Race/Ethnicity: Comparison Graph

- Final percentages from 'Step 3' are extracted into tables for final graphs

Race/Ethnicity	Greater Toronto Area (Census 2016) Data by Percentages	[Your organization's name] Data by Percentages
East Asian	16.6%	#DIV/0!
South Asian	16.6%	#DIV/0!
South East Asian	1.4%	#DIV/0!
Black	7.5%	#DIV/0!
Latin American	2.3%	#DIV/0!
Middle Eastern	3.9%	#DIV/0!
Mixed Heritage	1.7%	#DIV/0!
Indigenous Identity	0.79%	#DIV/0!
Other	1.3%	#DIV/0!
White	47.8%	#DIV/0!

Percentages automatically extracted from Step 3

- Final graphs are automatically generated into an overlapping column graph with Census 2016 data in the primary axis and individual hospital data in the secondary axis.
- Below is an example using Sinai Health System data



QUESTION: INCOME

Table 4.1. 'Income' question

Source	Question(s)	Notes
Toronto Central LHIN	Income: What was your total family income before taxes last year?	<ul style="list-style-type: none"> Toronto Central LHIN uses one question
Census 2016	Income of individuals in 2015 <hr/> Income of households in 2015 <hr/> Low income in 2015	<ul style="list-style-type: none"> The Census 2016 form does not include a direct question on income Income data is extracted from tax revenue information (source: Canada Revenue Agency) We recommend using data from one variable to capture 'income': <ul style="list-style-type: none"> "Income of household in 2015"

Step 1- Income: Compile original data summary

Table: 'Greater Toronto Area (Census 2016)'

- Tables are populated with Census 2016 data (see below)

STEP 1: COMPILE ORIGINAL DATA SUMMARIES

Greater Toronto Area (Census 2016)	
Household total income groups in 2015	Frequency
Under \$5,000	47,170
\$5,000 to \$9,999	32,275
\$10,000 to \$14,999	50,900
\$15,000 to \$19,999	75,725
\$20,000 to \$24,999	73,110
\$25,000 to \$29,999	74,910
\$30,000 to \$34,999	76,830
\$35,000 to \$39,999	78,800
\$40,000 to \$44,999	78,620
\$45,000 to \$49,999	77,375
\$50,000 to \$59,999	150,140
\$60,000 to \$69,999	141,320
\$70,000 to \$79,999	131,390
\$80,000 to \$89,999	122,205
\$90,000 to \$99,999	113,055
\$100,000 to \$124,999	229,055
\$125,000 to \$149,999	167,755
\$150,000 to \$199,999	200,605
\$200,000 and over	214,660
Total	2135900

2015 CRA data used by 2016 Census

Tables: Individual hospital (i.e. your organization)

- Table should be populated with Toronto Central LHIN data (8 questions)
- Enter your organization's data on patient demographic information

'Income' data collected by your organization

[Your organization's name]	
Family income before taxes	Frequency
\$0 to \$29,999	
\$30,000 to \$59,999	
\$60,000 to \$89,999	
\$90,000 to \$119,999	
\$120,000 to \$149,999	
\$150,000 or more	
TOTAL	0

Step 2- Income: Align Census Questions with LHIN Questions

- After data is filled out in 'Step 1' tables, the next step is to identify a format for comparing the two data sets
- Below is a recommended format for combining and aligning income categories, developed by the Human Rights & Health Equity team

Table 4.2 Data Aggregation Guidelines (by Human Rights & Health Equity Office team)

Toronto Central LHIN questions	Census 2016 questions – Catchment Area
\$0 to \$29,999	\$0 - \$29,999 Formula: Under \$5,000 + \$5,000 to \$9,999 + \$10,000 to \$14,999 + \$15,000 to \$19,999 + \$20,000 to \$24,999 + \$25,000 to \$29,999
\$30,000 to \$59,999	\$30,000 - \$59,999 Formula: \$30,000 to \$34,999 + \$35,000 to \$39,999 + \$40,000 to \$44,999 + \$45,000 to \$49,999 + \$50,000 to \$59,999
\$60,000 to \$89,999	\$60,000 - \$89,999 Formula: \$60,000 to \$69,999 + \$70,000 to \$79,999 + \$80,000 to \$89,999
\$90,000 or more Formula: \$90,000 to \$119,999 + \$120,000 to \$149,999 + \$150,000 or more	\$90,000 or more Formula: 90,000 to \$99,999 + \$100,000 to 124,999 + \$125,000 to \$149,999 + \$150,000 to \$199,999 + \$200,00 and over

Example of the final table in Step 2 for 'Greater Toronto Area (Census 2016)

STEP 2: ALIGN CENSUS QUESTIONS WITH LHIN QUESTIONS

“\$0 - \$29,999” category is automatically calculated by aggregating data for Under \$5,000 + \$5,000 to \$9,999 + \$10,000 to \$14,999 + \$15,000 to \$19,999 + \$20,000 to \$24,999 + \$25,000 to \$29,999

Greater Toronto Area (Census 2016)	
Household total income groups in 2015	Frequency
\$0 - \$29,999	354,090
Under \$5,000	47,170
\$5,000 to \$9,999	32,275
\$10,000 to \$14,999	50,900
\$15,000 to \$19,999	75,725
\$20,000 to \$24,999	73,110
\$25,000 to \$29,999	74,910
\$30,000 - \$59,999	461,765
\$30,000 to \$34,999	76,830
\$35,000 to \$39,999	78,800
\$40,000 to \$44,999	78,620
\$45,000 to \$49,999	77,375
\$50,000 to \$59,999	150,140
\$60,000 - \$89,999	394,915
\$60,000 to \$69,999	141,320
\$70,000 to \$79,999	131,390
\$80,000 to \$89,999	122,205
\$90,000 or more	925,130
\$90,000 to \$99,999	113,055
\$100,000 to \$124,999	229,055
\$125,000 to \$149,999	167,755
\$150,000 to \$199,999	200,605
\$200,000 and over	214,660

Step 3- Income: Comparison Table- Frequencies & Percentage Rates

- Compile aggregated data and categories in 'Step2' into a single comparison table
- Table will automatically calculate the data elements below based on 'Step 1/Step 2':
 - Frequencies (i.e. a summary of the number/volume of responses)
 - Percentages

STEP 3. COMPARISON TABLE: FREQUENCIES & PERCENTAGE RATES

Total Family Income Before Taxes	Greater Toronto Area (Census 2016) Data by Frequencies	Greater Toronto Area (Census 2016) Data by Percentages	[Your organization's name] Data by Frequencies	[Your organization's name] Data by Percentages
\$0 - \$29,999	354,090	16.6%	-	#DIV/0!
\$30,000 - \$59,999	461,765	21.6%	-	#DIV/0!
\$60,000 - \$89,999	394,915	18.5%	-	#DIV/0!
\$90,000 or more	925,130	43.3%	-	#DIV/0!
Total	2,135,900		-	

Final combination of categories for comparisons

Step 4- Income: Final Tables and Graphs

- Final percentages from 'Step 3' are extracted into tables for final graphs



If you find that one category takes up more than 50% of responses, we recommend that you separate into a separate graph. That will allow you to display the remaining categories in a more user-friendly way.

Total Family Income Before Taxes	Greater Toronto Area (Census 2016)	[Your organization's name]
\$0 - \$29,999	16.6%	#DIV/0!
\$30,000 - \$59,999	21.6%	#DIV/0!
\$60,000 - \$89,999	18.5%	#DIV/0!
\$90,000 or more	43.3%	#DIV/0!

Automatically extracted percentages from Step 3

- Final graphs are automatically generated into an overlapping bar graph with catchment area in the primary axis and individual hospital in the secondary axis
- Below is an example using Sinai Health System data

