# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Trends in mental health service utilization in immigrant youth in Ontario, Canada, 1996 to 2012: a population-based longitudinal cohort study.
AUTHORS	Saunders, Natasha; Lebenbaum, Michael; Lu, Hong; Stukel, Therese; Urquia, Marcelo; Guttmann, Astrid

# **VERSION 1 – REVIEW**

REVIEWER	Sean D. Cleary, PhD, MPH
	George Washington University, Epidemiology & Biostatistics
REVIEW RETURNED	14-Mar-2018

GENERAL COMMENTS	Overall excellent and timely research. This manuscript describes trends in mental health service use among immigrant youth in Canada. Strengths include the ability to link mental health services records, the ability to abstract ICD codes for specific mental disorders, a large sample size, and follow-up over time for a 15 year time period. Weakness have been identified by the authors including lack of data on alternative mental health services and additionally lack of generalizability outside of Canada or countries with similar immigration policies, lack of data on other factors that impact mental health service use (cultural, support, need), and information about the target population.
	To better understand context, some information from which the sample is drawn in terms of gender, age, and race/ethnicity. For example, a flow chart (not linkage of datasets) that breaks down the target population, all Ontario youth, to the sample population with information on reasons for exclusion at the source and eligible levels. While the authors state the data represents all youth in Ontario some data to support that claim provides context. Table II and Table II should have a footnote listing variables adjusted for in the analysis. Although this study is unique in size and design, results from other studies, perhaps from Europe, should be integrated more completely into the discussion. These results serve as a great baseline against which mental health service utilization in Ontario, Canada among the more recent waves of immigrants (2012-2017) can be compared.

REVIEWER	A.Pham
	Florida International University
REVIEW RETURNED	08-Apr-2018
GENERAL COMMENTS	The manuscript discusses a longitudinal study examining mental
	health use rates in immigrant populations in Ontario. This is a timely
	study and I am glad to see that the authors spent time examining

variables and reporting challenges of under-utilization of services given the sociological, cultural and political factors that are at play. I
recommend acceptance.

### **VERSION 1 – AUTHOR RESPONSE**

### Reviewer 1:

1. Overall excellent and timely research. This manuscript describes trends in mental health service use among immigrant youth in Canada. Strengths include the ability to link mental health services records, the ability to abstract ICD codes for specific mental disorders, a large sample size, and follow-up over time for a 15 year time period. Weakness have been identified by the authors including lack of data on alternative mental health services and additionally lack of generalizability outside of Canada or countries with similar immigration policies, lack of data on other factors that impact mental health service use (cultural, support, need), and information about the target population.

To better understand context, some information from which the sample is drawn in terms of gender, age, and race/ethnicity. For example, a flow chart (not linkage of datasets) that breaks down the target population, all Ontario youth, to the sample population with information on reasons for exclusion at the source and eligible levels. While the authors state the data represents all youth in Ontario some data to support that claim provides context.

To better understand the context of the sample population compared with those of all Ontario youth, we have now added a Supplementary Figure with a flow chart with the number of individuals excluded and the reasons for exclusion. As these cohorts are longitudinal and change slightly with each cohort period, we have used cohort period 2011-2012 (i.e. the most recent cohort) as an example of how exclusions were applied.

2. Table II and Table II should have a footnote listing variables adjusted for in the analysis.

Footnotes have been added to these tables listing the variables adjusted for in the analysis.

3. Although this study is unique in size and design, results from other studies, perhaps from Europe, should be integrated more completely into the discussion. These results serve as a great baseline against which mental health service utilization in Ontario, Canada among the more recent waves of immigrants (2012-2017) can be compared.

In the Discussion, we have added and elaborated on mental health trends, mental health prevalence and health system use in both the general population of youth and immigrants and refugees in Denmark, Sweden, Australia and in the United States.

#### Reviewer: 2

1. The manuscript discusses a longitudinal study examining mental health use rates in immigrant populations in Ontario. This is a timely study and I am glad to see that the authors spent time examining variables and reporting challenges of under-utilization of services given the sociological, cultural and political factors that are at play. I recommend acceptance.

Thank you.