



DATA USER GUIDE: 2016/2017 BRITISH COLUMBIA OSA LONG TERM RESIDENTIAL CARE SURVEY

BC Office of Patient-Centred Measurement & Improvement (BC OPCM)
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This data user guide is intended as a starting point for users of the British Columbia (BC) 2016/17 OSA Long-Term Residential Care Survey data. It provides a brief overview of important information pertaining to data access, use, interpretation, and reporting of results. It also contains links to further resources (including detailed training materials) and contact information for user support. It is not meant to replace other detailed documents, such as technical reports or toolkits. All users of the data should consult with these resources when analyzing data from the survey and interpreting results.

Survey Purpose

The 2016/17 OSA Long-Term Residential Care Survey asked residents and their most frequent visitors (MFV) about both their health-related quality of life and their experiences with the quality of the care and services received as a resident in one of 292 long-term care facilities in BC.

Results are intended to be used for the following purposes:

- Enhance the performance of the long-term residential care sector in BC;
- Enhance public accountability;
- Support quality improvement initiatives; and
- Contribute information to support research.

Privacy Considerations

The survey vendor was required to demonstrate compliance with the BC Freedom of Information and Protection Privacy Act and continues to be subject to the independent oversight of the BC Information and Privacy Commissioner. A Privacy Impact Assessment (PIA) for the project was completed and approved by the Health Information and Privacy Operations Committee of BC (HIPSOC) on May 19th, 2016.

Sharing of data with Ministry and Health Authority analysts via Healthideas is outlined in an Information Sharing Plan (ISP) that was approved by each of BC's 6 Health Authorities and the Chief Data Steward of the BC Ministry of Health's central data warehouse, Healthideas, on July 9th, 2018 (Phase 1b ISP). Sharing of data with researchers via PopData BC is outlined in an ISP approved by the same parties on September 16th, 2018 (Phase 2 ISP).

Contact/Support

Resources referred to in this document are available on the BC PCM Steering Committee's website (www.bcpcm.ca).

For questions regarding the survey, the use, reporting, and interpretation of the data, or any other questions, please contact:

Benedito Chou

Senior Analyst
BC Office of Patient-Centred Measurement

 bchou@providencehealth.bc.ca

Rob Cowan-Douglas

Manager – Analytics
Office of the Seniors Advocate

 Rob.cowandouglas@gov.bc.ca

Questions pertaining to data access via Healthideas for Ministry of Health and Health Authority users should be directed to healthideas@gov.bc.ca.

Questions pertaining to data access for researchers should be directed to PopData BC at dataaccess@popdata.bc.ca

ACCESSIBILITY

The raw data is available to Ministry of Health and Health Authority analysts through the Healthideas Secure Analysis Environment. To obtain access to the data via Healthideas follow the steps outlined in the **Obtaining Access to PREMs/PROMs Data in Healthideas (Guide & FAQs)** document. Health Authority analysts may be granted level 4 access to their own data (access with Client contact information available) and level 2 access to data from other Health Authorities access with masked Client identifiers; Ministry of Health analysts may be granted level 3 access (access with unmasked Client and Business identifiers).

Researchers may request access to necessary columns of the data specific to their research through PopData BC, using PopData's existing Data Access Request (DAR) process. More information can be found on the PopData website (www.popdata.bc.ca/dataaccess/process).

DATA BACKGROUND & CONTENT

The OSA's LTC resident and most frequent visitor (MFV) survey was piloted in May and June 2016 and was in field from September 2016 to September 2017. The survey was completed by 9812 residents and 10,049 MFV of residents as a matched sample.

The Survey included items from the following Patient Experience Reported Measures (PREMs) and Patient Outcome Reported Measures (PROMs).

PREMs:

- Two versions:
 - interRAI Long Term Care Resident Quality of Life Survey (103 questions)
 - interRAI LTC Family Survey (104 questions)
- "Made-in-BC" Questions & Modules

Topics include: Personal Control, Social Life, Staff Responsiveness, Caring Staff, Food, Hand Hygiene, Physician Care, Medications, Physical Environment, Health and Well-Being, Family Council, Overall Experience

*PROMs:

- Veteran's Rand 12 (VR-12) Item Health Survey and Long Term Residential Care Version (VR-12LTRC)
 - Includes 12 items that can be scored to provide measures of physical and mental health status as well as 8 health domains: general health perceptions, physical functioning, role limitations due to physical problems, role limitations due to emotional problems, bodily pain, energy-fatigue, social functioning, and mental health.
 - A Long Term Residential Care version of the generic VR-12 was tested for the OSA's survey via in a side by side study (see PROMS, page 2).

In addition, the survey concluded with a series of demographic questions (e.g., ethnicity), other custom questions, such as spirituality questions, and an open-ended question.

*Importantly, the VR-12 items are included to provide summary measures of physical and mental health status and the 8 domains and to allow for comparisons with other populations. They are not meant to be reported and interpreted as individual questions/items. Scoring protocols for the VR-12 can be obtained from the developer (<https://www.bu.edu/sph/about/departments/health-law-policy-and-management/research/vr-36-vr-12-and-vr-6d/>) and Canadian norms are available via the following webpage <https://vr12.jameshicklin.com/interactive-calculator>. Please refer to the following publication regarding the development of the VR-12LTRC (<https://pubmed.ncbi.nlm.nih.gov/32299327/>). Further validation research of the VR-12LTRC is in progress and scoring procedures are under development.

Detailed information regarding the data background and content can be found in the **2016/17 OSA LTC Survey Toolkit** and the **2016/17 OSA LTC Survey Technical Report** (includes a copy of the approved question text fragments in the appendices – the full text wording of the interRAI LTC Resident and Family Survey questions are not available due to restrictions of the province of British Columbia's license agreement; reporting of results from



secondary analysis must comply with this restriction and only the approved text fragments can be included in reports and publications.

A **Data Dictionary** is available through the Ministry of Health Metaspace (<http://meta.healthideas.gov.bc.ca/>).

DATA ANALYSIS

Scoring

Scoring for the 2016/17 OSA LTC Survey PREMs' sections can be done at the item level, or at the domain/dimension level. For PROMs, scores should only be interpreted at the domain level as the individual items are meant only as indicators of the more general domains.

A common form of scoring used in the provincial reports is *percent positive scoring*. Further information regarding scoring and how percent positive scores are calculated and used in the OSA's public reports can be found in the **2016/17 OSA LTC Survey Toolkit**, **2016/17 OSA LTC Survey Technical Report**, and the **Scoring Primer**.

Weighting

There are no survey weights for this survey as it used a census approach by approaching and attempting to engage all residents in each of the 292 care homes in a face-to-face interview; surveys were mailed to each resident's MFV for completion by paper and mail return or online. For further information regarding weighting in general, see the OPCM **Weighting Primer**.

Missing Data

Missing data is a common issue that occurs with the implementation of large-scale surveys and can potentially have effects on the analysis of data and interpretation of results. If analysts and/or researchers wish to make generalizations from the sample of data to the target population (i.e., produce estimates of population parameters), it is highly recommended that they adopt a method for treating the missing data (e.g., multiple imputation, alternate estimators). Not accounting for missing data may lead to biased estimates. Further information regarding missing data can be found in the OPCM **Missing Data Primer**.

Qualitative Comments

Comment boxes were included at end of each section of the survey interview for trained volunteers to invite and record any additional comments the residents offered during the interview. Residents and MFV were also asked to respond to a question at the end of the survey, asking: "Is there anything else you would like to tell us about your experience living here?"

Open-ended comments can be analyzed in a variety of ways. Textual analysis can be conducted to identify frequencies of occurrences of key words, phrases, or other particular content. Open-ended comments can also be used to illustrate findings in the closed-ended responses. Alternatively, a more iterative and "ground-up" and/or interpretive approach could be taken wherein themes, categories, or codes are identified and interpreted based on the content of the comments. If choosing to take this latter approach, it is highly recommended that you consult with an expert in qualitative methodology as there are various standards of qualitative research practice that should be met to ensure scientific rigor.

Further information regarding collection and reporting of qualitative comments can be found in the **2016/17 OSA LTC Survey Toolkit**, **2016/17 OSA LTC Survey Technical Report**.

Using the Healthideas Secure Analysis Environment (SAE)

This sub-section pertains only to Ministry of Health and Health Authority analysts as researchers will conduct analytics within the PopData [Secure Research Environment](#).

All analyses conducted with the raw data by Ministry of Health and Health Authority analysts will be conducted within the Healthideas SAE (unless permission has been granted to remove data from the SAE via a managed transfer process).



All health authority users of the Healthideas SAE must acknowledge and familiarize themselves with the **Healthidea Data Warehouse Standards for Third Parties**. This document, and other documents that include instructions for accessing and using the Healthideas SAE, can be found at [this link](#).

RESTRICTIONS

If an analyst or researcher wishes to report or publish results based on data from a health authority to which they do not belong, as per the PCM to Healthideas Governance and Access Framework, they must seek out the Data Steward of the relevant data set(s) from the “other” health authority and allow the reviewer 45 days to review the results of the analyses/research prior to reporting/publication. Requests can be forwarded to the Office of PCM. Note: The above restriction is intended solely for the purpose of awareness and review of analysis and interpretation; it is not intended to obstruct publication.



LIST OF RESOURCES

[Unlinked sources can currently be attained by contacting Ben Chou at bchou@providencehealth.bc.ca]

Access – Healthideas

- Obtaining Access to PREMs/PROMs Data in Healthideas (Guide & FAQs)
- [Healthideas Data Warehouse Standards for Third Parties](#)
- [Secure Analysis Environment User Guide for Third Party Users](#)
- [Frequently Asked Questions](#)
- [Remote Access service User Guide](#)

Access – PopData BC

- [PopData Direct Access Request Process](#)
- [PopData Secure Research Environment](#)

Data Background

- 2016/17 OSA LTC Survey Toolkit
- 2016/17 OSA LTC Survey Technical Report (includes approved question text fragment and codebook)
- 2016/17 OSA LTC Survey At a Glance
- Data Dictionary – accessible through the Metaspace
- SQL queries – accessible through the Metaspace

OPCM Statistical Primers

- Scoring Primer
- Weighting Primer
- Confidence Intervals & Margin of Error Primer
- Missing Data Primer