



## **Evaluating a New Approach to Provide TREC Context Data Final Report to Study Participants**

Dr. Lori Weeks Associate Professor, School of Nursing, Dalhousie University

Dr. Lisa Cranley, Assistant Professor, University of Toronto

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### **Background and Rationale**

The purpose of this study was to gain insights from long-term care (LTC) home Directors of Care and Unit Managers about how best to provide leadership teams with data about their organizational context. Drs. Weeks and Cranley are part of the Translating Research in Elder Care (TREC) program of research, led by Dr. Carole Estabrooks, Professor, Faculty of Nursing, University of Alberta. TREC focuses on developing solutions for improving the quality of care provided to those living in LTC, enriching the work life of their caregivers, and enhancing system efficiency. Since 2007, we have been collecting survey data from staff on work environment, best practice use, and outcomes from individuals living in LTC using the Resident Assessment Instrument – Minimum Data set 2.0 (RAI-MDS 2.0) data. We have been collecting this data at the home and the unit level from 94 LTC homes in Alberta, British Columbia, and Manitoba. Further details about TREC can be found on this website: <https://trecresearch.ca>.

To collect the staff survey data, we use a tool called the Alberta Context Tool (ACT) which measures 10 dimensions of organizational context: Leadership, Culture, Evaluation, Social Capital, Informal Interactions, Formal Interactions, Structural/ Electronic Resources, Staff, Space, and Time. In the past, we have shared survey results to participating leadership teams of LTC homes using what we refer to as the red/green approach. This is a cluster analysis approach that displays the 10 ACT scores of an entire LTC home and at the unit level within a home. The clusters are green (high context) or red (low context) and show aggregated scores from the unregulated care provider survey data. While there are several strengths to using this approach (e.g., it is easy to present and explain the data), there are also some limitations (e.g., loss of information due to dichotomizing data into two groups).

To address these limitations, the TREC research team has developed a new way to provide organizational context data to the leadership teams of LTC homes. Using what we refer to as the vector approach, for each of the 10 ACT dimensions, a quartile group is calculated for each unit and in the whole home with 4 being the highest quartile. A vector can be created for each home indicating the quartile rank for each of the 10 ACT dimensions for each unit and the home as a whole in one table. The vector can be used to compare between homes and between units within a home. After quartile scores are calculated for each of the 10 dimensions, a context rank can be calculated by adding the quartile scores for each unit and

home. Home and unit context rank can range from a high of 40 (in the top rank for all 10 ACT dimensions) to a low of 10 (in the lowest quartile rank for all 10 dimensions).

### **Study Purpose**

The purpose of the focus groups was to receive input from leadership team members about the two approaches to reporting survey results.

### **Methods**

Research Ethics Board approval was obtained through an amendment at the University of Alberta (for the TREC study), and new applications at the University of Toronto (34386) and Dalhousie University (2017-4145). Recruitment for this study purposively occurred in areas where TREC researchers do not currently collect data. These LTC homes are not involved in TREC survey data collection, and leadership team members therefore are not currently provided with these data from the TREC research team.

Three focus groups were conducted by Drs. Lisa Cranley or Lori Weeks between December, 2017 and June, 2018. Two were conducted in the Maritimes and 1 in Ontario. There were a total of 16 leadership team member participants, including 4 in Ontario and 12 in the Maritimes. These individuals represented a total of 7 LTC homes. The focus group sessions lasted approximately one hour and written informed consent was obtained from all participants. Participants included Chief Executive Officers, Directors of Nursing, and Unit Managers. Each participant had several years of experience in management in the LTC sector, and many had over 10 years of experience. Participants were shown the two approaches to reporting the data: red/green and vector, and were asked to comment on to what extent each approach is understandable, meaningful and relevant to leadership teams. They were also asked which approach might potentially be more useful if they were to receive this organizational data about their LTC home. Each focus group was recorded digitally, transcribed, and then the advantages and disadvantages of each of the two approaches were summarized through thematic analysis.

### **Results**

The leadership team members overall indicated that receiving data from both the red/green and vector approaches would be advantageous. In general, they liked red/green as a starting point, but also liked the greater precision with the vector approach. More specific results are included below.

- **Red/Green Advantages:** The leadership team members identified several ways in which they believed the red/green approach was advantageous, and recommended that we continue to utilize this approach. Overall, they indicated that it was simple and easy to visualize. They also believed it was useful for quickly and easily comparing data across homes, and to prioritize areas for change within a home.
- **Red/Green Disadvantages:** Leadership team members also identified challenges to using the red/green approach. They indicated that the data was not specific enough,

needed more explanation, and that it may not be enough data to inform change in some cases. Some individuals identified that they would be very concerned if they received a red (low context) rating. In addition, several individuals indicated that they wanted a color (e.g. yellow) between the red and green categories.

- **Vector Advantages:** Leadership team members were quite positive towards the vector approach. They indicated that it was a more precise measurement that more accurately pinpointed areas to improve. Many suggested that compared to the red/green approach, it could better inform decision-making, such as targeting human and material resources. In particular, they believed that the data from the vector approach could help administrators to advocate for specific resources in areas where vector scores were lower. They further indicated that having the vector data presented as a specific number was advantageous.
- **Vector Disadvantages:** There were no disadvantages of the vector approach identified.

### **Recommendations**

In this section, we summarize various recommendations the leadership team members made regarding various aspects of reporting and presenting the results to LTC personnel.

- Provide not only a summary report of the results, but also a full detailed report that could be used as a reference on certain results of interest.
- In addition to the numerical and graphical display of the results, provide a written narrative of key trends or results, including additional details or insights about the results, such as qualitative data.
- Provide results for the whole home and then results by unit for both the red/green and vector approaches.
- Rather than presenting data as scatter plots, use clearer graphics, such as pie charts.
- Provide both an electronic copy of the results and schedule an in-person meeting to present the results and provide opportunities to ask further questions. This presenter would need to be knowledgeable about both the methods used and analysis of the results and the practical or clinical application of the results.

We thank all those who volunteered their time to share their perspectives in the focus groups. If you have any questions, please contact Dr. Lisa Cranley at [lisa.cranley@utoronto.ca](mailto:lisa.cranley@utoronto.ca) or Dr. Lori Weeks at [lori.weeks@dal.ca](mailto:lori.weeks@dal.ca).