Summary of findings

An exploratory study on renovations of a special needs dementia unit

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Background

In the summers of 2017 and 2019, a team of researchers from the Centre on Aging at the University of Manitoba conducted a research project on the renovations to the special care unit at Riverview Health Centre. During this project, we were fortunate to have many staff, family and residents participate in the various aspects of the project. We are grateful to all participants who were very generous with their time.

Please note that all elements of the renovated spaces were not fully functional during this research project. This was due in part to technology implementation and renovation delays at Riverview. We had hoped to do an evaluation of all the new spaces in 2020 with family and staff. However, the pandemic prevented this from happening. This means that we were not able to assess the use of the new pavilion and courtyard spaces.

The completed renovation and technology elements included:

- smaller dining and lounge spaces,
- new lighting,
- image films on doors (resident rooms and exit),
- flooring and wall coverings,
- murals,
- staff communication technology, and
- re-location of the nursing station.

This summary will highlight research findings associated with the new elements and how they impacted residents and staff. Research findings come from surveys, resident statistics, observations of the residents and how the spaces were used. In addition, we made physical measurements of lighting and noise levels.

What did we find?

Overall, the physical spaces on the special care unit were found to be quieter and have brighter lighting. Where circadian lighting was installed in the dining room, the colour of the resulting light in the space better matched natural lighting. Visually, spaces on the unit were felt to have a more appealing look. The addition of door films added interest, reduced repetition and decreased the institutional feel.

The bookcase film placed on the exit door is one of the changes made during the renovation.

Circadian lighting was added to dining rooms to better match natural lighting throughout the day.

Dining rooms and lounges

The smaller spaces for the dining rooms and lounges were found to have benefits and drawbacks. Conflicts could be lessened by separating some residents. This was possible because only five residents were intended to be using each dining room, intead of 15 (as in the previous dining space).

The dining room at the end of the unit is used less frequently due to its location in the wing.

However, we also heard that the spaces could increase conflict because they were too small so residents could be closer together. The small spaces made visiting and leisure activities more challenging. A final issue created by the increased number of dining spaces within each wing and their specific locations related to safety. The safety issue related to meal-time supervision likely explains why we observed that the dining room near the end of the unit was not used as much as the others (e.g., two of three dining spaces were used most frequently on each wing).

Nursing station

The new nursing station location was believed by one family member to symbolize openness/ connection. However, we also heard that the plexiglass made it difficult to communicate, and that there were still blind spots, particularly down the hallways.

Although more open, the plexiglass at the nursing station makes communication difficult.

Hallways

Hallways are important spaces for the special care unit, and it was found that they were more in use after the renovations. Though the new decor made hallways feel less like an institution, it was expressed that these were still not fully home-like. On the positive side, it was recognized that hallways are important places for residents to be mobile.

A hallway after the renovations with its new decor.

New technologies

We heard mixed reactions to the new technologies that were implemented with the renovations. Glitches seemed to be common (e.g., devices for resident photos), and may even have reduced enthusiasm for the renovation in general. On the plus side, most feedback on the new staff communication technology system was positive.

Impacts on residents and staff

Ultimately it was hoped that the renovations would have positive impacts for residents, staff and family. Unfortunately, we did not have enough data from families after the renovations to assess the renovation's effects on them. Below we will outline what was found for residents and staff.

Residents: Overall, it appears that the renovations to the special care unit had limited effects on the residents. It should be pointed out that even before the renovations, the residents generally had a good quality of life. This was determined by interviews with family members using the Quality of Life in Late-Stage Dementia (QUALID) tool.

Resident engagement did not improve. This was true whether we examined resident indicator data (RAI-MDS) or observations of residents by research staff. In fact, it was found that there was less leisure, talking, and moving around after the renovations. Being stationary was higher after the renovations. Vocalizing (speaking out loud) increased, but residents appeared to make fewer attempts to exit the unit after the renovations. Aggressive behaviours, pain and depression remained the same.

Staff: Dozens of staff members participated in the research project before and after the renovations. They did this by completing online surveys, and a small group gave their input through interviews. A majority of staff reported that the renovation had a positive or very positive impact on their enjoyment of time with the residents. Job satisfaction and demands remained similar according to self-reports of staff. We did observe and see from surveys that staff were spending more time providing care to residents.

However, we do not know if this change in resident care was due to the renovations, or to the new care model that was brought in around this time, or if it the residents' needs for care had increased.

Some staff said they were dissatisfied with the process to determine the design of the renovated spaces. In particular, they thought that there was not enough consultation with frontline staff about the design. They also felt that some of the design changes were not suitable for the residents of the special care unit, because of their advanced dementia.

Final thoughts

Even though we were not able to assess the fully realized Alzheimers Centre of Excellence, the results presented above provide good information on the renovations to the living spaces of the special care unit. More research is needed to examine the possible benefits of the added activity spaces (the pavillion).

Future renovation projects would benefit from enhanced consultations with staff, families, and residents. Also, a clearer connection between design-based information and the planned measurable outcomes is needed. This is particularly true when the residents have advanced dementia.

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