Documenting the Benefits of Comprehensive Culture Change

Summary

A 2017 study by the LeadingAge LTSS Center @UMass Boston found that comprehensive adoption of person-centered care and the household model can enhance the interactions between nursing home residents and their care partners, improve residents' dining experience, and reduce residents' depressive symptoms. There was no improvement in residents' cognitive functioning. Researchers observed residents and care partners, and reviewed residents' mental and physical well-being, in three nursing homes. Data from an "experimental" home that had adopted person-centered care comprehensively were compared with findings from two "control group" homes that had partially adopted person-centered care. The Francis E. Parker Memorial Home funded the study.

LeadingAge LTSS CENTER @UMass Boston

Research bridging policy and practice

The culture change movement seeks to improve quality of life and quality of care for nursing home residents by transforming nursing homes so they are more "person-centered."

Person-centered care focuses on ensuring that residents' needs and choices govern the daily life of the nursing home. The culture change movement often employs the "household model" to cluster a small number of resident rooms around a central kitchen, dining room and living room area, and to eliminate long hallways and "parking time" in wheelchairs. The household's physical layout is designed to permit residents and staff members, often called "care partners," to spend more quality time together.

Comprehensive vs. Partial Adoption

Only 13% of U.S. nursing homes have comprehensively adopted culture change, compared to 74% of homes that have partially implemented this approach to person-centered care delivery (Miller et al., 2014).

Nursing homes that *comprehensively adopt culture change* ensure that all aspects of nursing home care are person-centered. Comprehensive adopters often renovate old nursing homes or build new nursing homes that are structured as households or small homes. When culture change is adopted comprehensively:

- The nursing home environment is homelike,
- Residents and care partners have close relationships,
- Residents' choices and preferences guide nearly all nursing home operations, and
- Frontline care partners are empowered to make care decisions and advance their careers (Koren, 2010).

Partial adoption of culture change typically involves dividing a nursing home's existing, institutional layout into neighborhood-like clusters, incorporating some degree of resident choice in dining and sleeping options, consistently assigning staff to the same residents, and implementing some measures to empower care partners (Miller et al., 2014).

Studying the Benefits of Culture Change in New Jersey

Nursing homes are facing growing pressure to adopt culture change and, in some cases, to follow the household model. However, there is currently little evidence regarding whether the household model and comprehensive culture change improve psychosocial well-being and cognitive functioning among nursing home residents. Given the growth and popularity of person-centered care and the household model, it is important to make sure that the benefits of culture change justify the costs associated with implementing this model throughout a nursing home.

In December 2014, the Francis E. Parker Memorial Home (Parker) in Piscataway, NJ, opened and began admitting residents to Parker at Monroe (PAM), a newly constructed nursing home featuring the household model of culture change. In addition, care partners received training on person-centered care. PAM's innovations were designed to produce a range of benefits, from boosting the time that residents spend in meaningful social engagement, to slowing cognitive decline.

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Study Methodology

Beginning in late 2015, the LeadingAge LTSS Center @UMass Boston partnered with Parker to assess the effects of person-centered care and the household model on nursing home residents. The study took place in three nursing homes: Parker at Monroe (PAM), which features the household model and was the study's "experimental" home, and two control homes: Parker at River Road (PRR) and Parker at McCarrick (PMC). PMC was under different leadership than PAM and PRR during most of the study.

More than 100 residents, 180 aides and 54 nurses at the three nursing homes participated in the LTSS Center's study. PAM residents were matched with residents from the two control nursing homes so that all residents who participated in the study had similar characteristics, including their initial depression and/or dementia status, degree of mobility, major comorbidities, age range and gender.

Major Findings

The study employed a mix of research methods, including direct observation of residents and care partners by research assistants from Rutgers University, administration of the Mini-Mental State Examination (MMSE) to residents who were able, and evaluation of residents' health records.

LTSS Center researchers documented many of the benefits associated with the household model and implementation of person-centered care. Specifically, the household model at PAM:

- Helped residents achieve greater psychosocial well-being than residents in the control group, and
- Helped PAM offer more comprehensive diagnosis and treatment of depressive symptoms than the control nursing homes.

Study findings provide solid, although limited, evidence of the benefits associated with comprehensive adoption of the household model of culture change, relative to partial culture change adoption within a traditional setting.

Implementation of Person-Centered Care

More comprehensive implementation: Not surprisingly, PAM's household model implemented culture change to a greater extent than PRR or PMC. PAM achieved a total score of 34 out of 51 possible points on the study's culture change scale, compared to 16 points for each of the other two nursing homes in the LTSS Center's study. The disparity in scores can be attributed, in part, to PAM's environmental enhancements, which were not featured in the control nursing homes.

Organizational Policies:

- Culture change is reflected in Human Resources and hiring practices, including position ads.
- Culture change is reflected in organizational policies and procedures, as well as training for nurses and aides.
- Core values overlap with the principles of person-centered care, including respect for the individual and dignity for each resident.
- More culture-change oriented policies.

PRR and PMC were close to national averages in their level of person-centered care adoption, both in individual domains and total scores. All three nursing homes were similar in their adoption of resident-centered care and care partner empowerment practices. However, PAM had adopted:

- Neighborhood (unit) dining, a unique dining experience featuring restaurant style choices;
- More extensive resident-centered practices, including much greater resident choice in liberalized medication times, dining options and sleeping times;
- More measures to foster close resident-care partner relationships; and
- More culture-change organizational policies.

Greater levels of person-centered care: PAM's care partners provided residents with a greater level of person-centered care than care partners at PRR and PMC. PAM aides and nurses provided almost three times more personal care to residents than staff at PRR, and almost six times more personal care to residents than staff at PMC.

Psychosocial Well-Being

Less idle time: Overall, residents at PAM spent significantly less time idle. PAM residents were idle only half as much as residents at PRR, and one-third as much as residents at PMC. PAM residents also spent less time idle and blankly staring, and parked in the hallway or at other wheelchair hubs.

Closer relationships: PAM residents and care partners spent more time in task-related interactions than residents and staff at the control nursing homes. There was also some evidence that PAM residents spent more time in non-task-oriented social interactions. However, there was no difference between residents at PAM and the other two homes regarding the amount of time they spent:

- Engaging in social-expressive activities, such as playing cards and participating in planned activities,
- Displaying active engagement in activities, and
- Sleeping during the day.

Improvements in residents' dining experience: PAM residents did not spend the most time in the dining area. Residents at PMC spent the most time in the dining area. However, PAM residents did spend a greater portion of their dining-area time displaying positive affect, showing active engagement and interacting with staff members. The dining area was the only part of the environment in which residents' visible affect indicated pleasure and enjoyment significantly more often at PAM than at the other nursing homes. These improvements may be associated with a combination of factors at PAM, including:

- Higher quality food;
- More intimate dining spaces;
- Much greater resident choice in dining times and food options;
- Greater closeness to care partners; and
- The tendency of care partners to cluster around the dining area, which people tend to do in their own homes.

PAM care partners spent most of their time in the dining area, which may have been faciltated by PAM's household layout, and may have reflected time spent preparing meals or retrieving snacks for residents, as well as time spent in the dining room while residents were eating.

Few improvements in other areas of the household environment: Residents at PAM did not differ significantly in the time they spent in the living room/common area, television area or patio garden. PAM residents did spend less time than PRR residents staring blankly in the television area.

Study findings provide solid, although limited, evidence of the benefits associated with comprehensive adoption of the household model of culture change, relative to partial culture change adoption within a traditional setting.

Depression

Effective diagnosis and treatment of depression: Depressive symptoms among PAM residents decreased over time, while depressive symptoms increased over time at PRR, and stayed the same at PMC. Additionally, more PAM residents had depression diagnoses and were taking antidepressants earlier in the study, although these findings were not statistically significant. Depression diagnoses did not decrease significantly over time at PAM, but depressive *symptoms* did decrease significantly over time. This was apparently because of effective identification and treatment of depression at PAM.

Fewer antipsychotic medications: Residents at PAM were prescribed fewer antipsychotics than residents at PRR. However, residents at PMC were prescribed fewer antipsychotics than residents at PAM. The lower number of antipsychotic prescriptions at PMC may be due the fact that more PMC residents who were taking antipsychotics at the beginning of the study passed away during the course of the study. When compared with the other three nursing homes, PMC had the highest number of residents taking antipsychotics at the start of the study.

Dementia

Mixed results on cognitive decline: All study participants with early- to mid-stage cognitive impairment completed the Mini-Mental State Examination (MMSE) when they were able. Examination results showed that the cognitive function of residents at PAM was significantly sustained over the course of the study, compared with residents at PRR, and non-significantly sustained, compared with residents at PMC.

Findings differed when the evaluation included residents with severe cognitive impairment, for whom staff completed an assessment of cognitive function. When researchers evaluated cognitive function scores from both groups—residents who completed the MMSE and residents for whom care partners completed an assessment—there was no improvement in the cognitive functioning of residents at either PAM, PRR or PMC, and no difference was detected across the nursing homes.

Benefits and Room for Improvement

Benefits: Findings from this research study suggest that comprehensive person-centered care and the household model can provide a distinct set of enhancements to the daily lives of nursing home residents. For example, the household model enhances:

- **Interaction:** The model increases the closeness and interactions between residents and care partners in the dining area and in the delivery of personal care and other task-related care.
- **Dining:** The household model provides the clearest support for improvements to the dining area, where residents displayed evidence of place-attachment interactions. The redesigned dining area and resident-choice policies may have played an important role in producing the desired psychosocial dynamics.
- **Depression treatment:** The model helps PAM treat depression and reduce depressive symptoms more effectively than the control nursing homes.
- **Cognitive health:** The household model benefits the cognitive health of residents who are sufficiently cogent and communicative to take the MMSE. This benefit may have arisen partly from closer relationships between care partners and residents, and the fact that PAM residents spent more time in social interactions and less time idle.

Room for improvement: Study findings also suggest areas for improvement. For example, the study did not find improvements in affect or active engagement beyond the dining area. This raises questions as to why comprehensive culture change and the household model did not affect other areas of the nursing home. It is important that residents have maximal choices in doing what they want, and in deciding where and with whom they will carry out activities and interactions.

Residents of Parker at Monroe:

- Received a greater level of person-centered care
- Spent less time idle
- Spent more time interacting with staff
- Were more active and engaged in the dining area
- Had fewer depressive symptoms
- Were prescribed fewer antipsychotic medications

All of the nursing homes received similar scores for the degree to which they had adopted staff empowerment practices. Potential strategies for increasing staff empowerment might include assigning different ratios of care partners to residents, involving frontline care partners in decision-making, or including frontline care partners in quality improvement teams.

Conclusion

This study's findings suggest that nursing homes lacking the capital to undertake a complete physical redesign can still reap most of the benefits of the household model of culture change. These nursing homes should consider enhancing residents' psychosocial well-being by:

- Investing in neighborhood dining,
- Implementing resident choice to a larger degree, and
- Taking measures to foster closer resident-care partner relationships, including implementing consistent assignment.

The study's findings also suggest that organizations can implement policies, practices and training mechanisms to reflect culture change, and can support care partners as they integrate components of person-centered care into practice.

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