

The Green House Project: Changing the Way that Nursing Home Care is Delivered

Larry Polivka, PhD

Lori Moore, PhD

Providing elders with medical care while maintaining their personhood, dignity, and a meaningful life has been a challenge in the long term care industry. This is perhaps most evident in the traditional nursing home with its long hallways, medicine carts, overhead call systems, lack of privacy, unpleasant odors and dehumanizing treatment. When frail elders are asked about their preference—nursing home or death—most choose death (Temkin-Greener and Mukamel, 2002; Mui & Burnette, 1994). Fortunately, the long term care industry is beginning to pick up on the preferences of seniors and their families, in part due to the deinstitutionalization and culture change movements. These movements are forcing the industry to rethink the traditional nursing home and to develop ways to provide long term care in a home-like setting that values the lives of elders. This paper reviews the research literature on the Green House Project, a radical diversion from the traditional nursing home model.

The Green House Concept

The first Green House was opened in 2003 in Tupelo, Mississippi. Today there are approximately 140 Green Houses in over 30 states. The concept was developed by William Thomas who envisioned a long term care setting where elders could live a meaningful life in a place that they could call “home.” (The Green House Project, 2013). The Green House concept also removes the staff hierarchy that exists in traditional nursing homes, allowing those who have the most contact with the elders to make decisions about care.

Green Houses are purposefully designed to provide elders with a home while they receive skilled nursing care. Green Houses are located on a single campus or are spread throughout the community (Rabig et al., 2006). They provide care within Medicaid reimbursement rates and hold a nursing facility license (Rabig et al., 2006). Most Green Houses are licensed as skilled nursing facilities or Assisted Living Facilities (ALFs) and some are registered as adult group homes (The Green House Project Webinar, 2013). Each elder has their own private bedroom and bathroom. There is a hearth area with a fireplace and a dining room with a table where staff and residents share meals (see Figure 1 for a view of the hearth area in Florida's first Green House). Residents are encouraged to decorate the Green Houses as they like. The kitchen is open and residents can eat what they want, when they want to and some even help with cooking. There are unlocked doors that lead to a safe outdoors space. The staff are respectful of residents and behave like they are visitors in the elders' home (The Green House Project, 2013). In sum, the Green House looks and feels like a real home.

Figure 1. "Newly Opened Jax "Green House"



Credit: Anneliese Delgado/WJCT

The Green House model reworks the traditional hierarchy that exists in nursing homes. Instead of reporting just to a head nurse, Certified Nursing Assistants who have had an additional 128 hours of training in things like food preparation, CPR and teamwork building (called Shahbazim) coordinate care with Guides (Green House administrators), nurses, and other members of the health care team. In addition to health related tasks, Shahbazim perform other tasks like grocery shopping, cooking and cleaning. This staff organization gives Shahbazim the ability to interact with residents on a social level and to work directly with the health care team to coordinate care (Rabig, et al., 2006; The Green House Project, 2013). The intended result of this type of organization is to empower Shahbazim to provide quality care and to encourage social interaction for a more meaningful life for residents.

Observations from the First Green Houses

In their 2006 article, Rabig and colleagues describe the transition from nursing home to the first Green Houses in Tupelo, Mississippi. They observed several favorable outcomes relating to cost, quality of life and staffing. With regard to cost, they found that the amount that it would cost to renovate the existing facility or to build a new traditional nursing home was higher than the cost of building the Green House. In terms of quality of life, they found that the shorter distances from place to place in the house allowed some elders to stop using wheelchairs, that elders were frequently outdoors or in common areas, and that elders and their families valued the private bedrooms and bathrooms. Finally, Rabig and colleagues (2006) found that the Green Houses had lower rates of staff turnover and absenteeism than the traditional nursing home settings.

Green Houses in the Research Literature

There are few studies in the long term care literature that examine Green Houses, presumably because the Green House concept is fairly new. However, the studies that do exist show favorable results in terms of quality of life, staff job satisfaction, and cost. We discuss these findings below.

Quality of Life

Most studies have focused on quality of life and have found that residents and their families are satisfied with the quality of life that Greenhouses provide. In a 2007 study, Kane and colleagues compared the first four ever built Green Houses to two groups: 1) a nursing home that shared the same administration (on-campus), and 2) a smaller nursing home in the same region (off-campus). The researchers found, after controlling for things like residents' health and functioning, demographics, date of admission, and ADLs, that residents in the Green Houses were either more satisfied or as

equally satisfied with their quality of life as the other two comparison groups. In particular they found that Green House residents were more satisfied than the on-campus nursing home on the following measures; relationship, food enjoyment, autonomy, individuality, privacy, dignity, and meaningful activity. There was no statistical difference between the two groups in terms of comfort, functional competence, spiritual well-being and security. When comparing Green House residents to the smaller, off-campus nursing home, they found that Green House residents were more satisfied with privacy, dignity, autonomy, and food enjoyment (Kane et al., 2007).

Another study (Lum et al., 2008) used the same focus and control groups as the previously described Kane et al., 2007 study to uncover family members' perceptions of Green Houses. The researchers used longitudinal data from interviews of family members and the Minimum Data Set. They found that, over time, Green House residents' family members were more satisfied than the on-campus nursing home families with general amenities (including meals and housekeeping), the environment and privacy, autonomy, health care, family experience and global ratings (place to live, place to get care, and would recommend to others). Compared to the off-campus families, Green House families were more satisfied with the physical environment and privacy, autonomy, and health care (Lum et al., 2008). Lum and colleagues' (2008) qualitative analyses reinforced the quantitative findings in that families mentioned that they valued the privacy, dignity, home-like feel and other positive aspects of their elder's Green House.

Finally, a Post-Occupancy Evaluation study (Cutler and Kane, 2009) examined the intended design of the first four Green Houses and how residents eventually ended up

using the spaces inside the homes. Cutler and Kane (2009) found that residents and their families liked the private bedrooms and bathrooms, that residents felt like they lived in a home, that families liked to visit the Green Houses because they did not look or feel like traditional nursing homes, and that personal possessions were found throughout the home (not just in the private rooms). The researchers also noted some areas for improvement including reminding head nurses of the flattened Green House staff structure, adjustments to lighting and fixtures to make them easier for residents to use, and providing more space for medical equipment storage. Despite these suggestions, Culter and Kane's (2009) findings were positive.

Staffing

Other studies on Green Houses have focused on staffing outcomes and in particular, on Shahbazim. These studies and their outcomes are important because Shahbazim have the most direct contact with elders in the home. We describe the findings of these studies below.

A study of 14 Green Houses and 13 traditional skilled nursing facilities used survey, interview, and observational data to examine care giving practices in each type of setting (Sharkey et al., 2010). When looking at time spent on caregiving, Sharkey and colleagues (2010) found that overall staff time was 18 minutes less in Green Houses than in traditional nursing homes, which indicates that staffing in Green Houses are more efficient. Despite finding that total staff time was lower, the researchers also found that CNAs in the Green Houses (Shahbazim) were spending more time on direct care (ex: help with ADL activities, eating, communication with residents and families, paperwork, etc.). This finding is positive because it indicates that elders in Green Houses receive

more day-to-day care from Shahbazim, who are still able to provide indirect care (ex: laundry and preparing meals) on top of traditional CNA tasks (Sharkey et al., 2010). The Sharkey and colleagues (2010) study also had qualitative findings that revealed differences in how CNAs versus Shahbazim viewed their work. CNAs tended to respond that they felt hurried, while Shahbazim tended to respond to the interviewer that they had time to focus on the elders' needs (Sharkey et al., 2010:5).

Another study (Loe and Moore, 2012) interviewed CNAs about their transitions from traditional nursing homes to a Green House in New York found that the nurses felt more empowered, stronger ties to elders, and less guilt and stress about their jobs in the Green House. For example one CNA said:

“In the nursing home it is a rush and your head spins and you get a headache. People take half-steps (like ignoring mouth-care or washing without applying ointment) and that doesn't do anyone any good” (2012: 758-759).

Another CNA responded:

“With less residents there will be a little more time to spend with each elder. And that's important because this is a family house... They see us every day, and they see their family maybe once a week... We hold their hands when they are passing and we laugh with them... This is their home, and we help them feel like they matter” (759).

These responses highlight the strong ties that Shahbazim form with residents.

In sum, existing studies show that overall, total staffing time is lower in Green Houses (although direct care performed by Shahbazim is higher) and that Shahbazim view their work more positively than CNAs.

Cost Effectiveness

Green Houses have been shown to have comparable costs to other skilled nursing facilities. In a comparison of financial data from the Centers for Medicaid and Medicare

Services, Green House operators, and other public sources, Jenkins and colleagues (2011) demonstrated that total expenses (including nursing, dietary, laundry, housekeeping, plant operations, administration and other expenses) were \$199.13 per resident in Green Houses compared to \$197.51 in the skilled nursing facilities. They also found that private pay is higher in Green Houses (which could offset some of the burden on Medicaid) and that Green Houses had higher occupancy rates (95% compared to 88.5% in 2009). This comparison indicates that Green Houses, compared to other skilled nursing facilities might cost less, although more studies will need to make similar comparisons and control for key variables (ex: number of residents, resident characteristics and outcomes, size of the facility, number of staff, quality of services provided, etc.).

Discussion

The Green House Project, given these initial findings and its focus on person centered care, could have one of the most positive impacts on long term care that we have ever seen. For too long, long term care has been delivered in a dehumanizing environment. The Green House model not only provides quality care for elders, but it reorganizes long term care into a setting that recognizes that it is human beings who are taking care of human beings. It is in this type of setting where elders thrive and where staff gain empowerment over their work. Early evidence even suggests that a human approach to long term care won't cost much more than traditional nursing home care. This concept has caught on with over 30 states having built (or in the process of building) over 140 Green Homes. It is our hope that the Green House concept continues to spread across the nation.

Conclusion

This paper described the Green House model and provided a review of the literature on Green Houses. Existing research reveals that Green Houses provide quality care in a home-like environment and that it is about on par with traditional nursing home care in terms of cost. The research also showed that staff in Greenhouses, especially frontline workers, find empowerment, meaning and satisfaction in their work.

The Green House concept is fairly new considering that the first Green House being built in 2003. More research will certainly emerge over the next few years. Future research should try to accomplish several things. The first would be to conduct studies with samples of Green Houses that are located in different states. Much of the research we reviewed focused on the first four Green Houses build in Tupelo, Mississippi. The second would be to examine how features of different types of Green Houses affect quality of care, cost, resident and family satisfaction, etc. The Green House Project encourages Green House architects to build structures that not only meet state and federal nursing home regulations, but that are homelike and reflect the local culture (Green House Project Webinar, 2013). So, for example, an architect might design a single family, one story style Green House in the rural south and a multifamily, multiple story style Green House in the urban north. A third area of research would be to examine outcomes for residents who are suffering with Alzheimer's or dementia. The homelike environment, with its accessible outdoor spaces and low staff turnover are intended to reduce anxiety and behavior problems- especially in those suffering from dementia (The Green House Project, 2013). Finally, researchers should examine the characteristics of Green House residents and compare those to elders who ended up in other long term care

settings to see if there are differences in things like race/ethnicity, gender, age, disability status, presence of chronic conditions, and ability to pay (ex: private pay vs. Medicaid). In sum, there are many areas open for research given that Green Houses are so new and that there are over a hundred across the country.

In conclusion, we found many favorable outcomes for residents and staff in Green Houses. We believe that they are a cost effective way to deinstitutionalize the traditional home and that Green Houses are among several of long term care options that truly seek to focus care around elders. We hope to see the long term care industry develop similar models in the future.

REFERENCES

Cutler, Lois J. and Rosalie A. Kane. 2009. "Post-Occupancy Evaluation of a Transformed Nursing Home: The First Four Green House Settings." *Journal of Housing for the Elderly*. 23. 304-334.

Jenkins, Robert, Terri Sult, Newell Lessell, David Hammer, and Anna Ortigara. 2011. *Senior's Housing & Care Journal*. 19:1. 3-22.

Kane, Rosalie, Terry Y. Lum, Lois J. Cutler, Howard B. Degenholtz, and Tzy-Chyi Yu. 2007. "Resident Outcomes in Small-House Nursing Homes: A Longitudinal Evaluation of the Initial Green House Program." *Journal of the American Geriatrics Society*.

Loe, Meika and Crystal Dea Moore. 2012. "From Nursing Home to Green House: Changing Contexts of Elder Care in the United States." *Journal of Applied Gerontology*. 31:6. 755-763.

Lum, Terry Y., Rosalie A. Kane, Lois J. Cutler, and Tzy-Chyi Yu. 2008. "Effects of Green House Nursing Homes on Residents' Families." *Health Care Financing Review*. 30:2. 35-51.

Mui, A. C., & Burnette, D. 1994. "Long-term Care Service Use by Frail Elders: Is Ethnicity a Factor?" *The Gerontologist*. 34:2. 190-198.

Rabig, Judith, William Thomas, Rosalie A. Kane, Lois J. Cutler, and Steve McAlilly. 2006. "Radical Redesign of Nursing Homes: Applying the Green House Concept in Tupelo, Mississippi." *The Gerontologist*. 46:4. 533-539.

Sharkey, Siobhan, Sandra Hudak, Susan D. Horn, Bobbie James, and Jessie Howes. 2010. "Frontline Caregiver Daily Practices: A Comparison Study of Traditional Nursing Homes and The Green House Project Sites."

Temkin-Greener H., and Mukamel D.B. 2002. "Predicting Place of Death in the Program of All-Inclusive Care for the Elderly (PACE): Participant versus Program Characteristics." *Journal of the American Geriatrics Society*. 50: 125-135.

The Greenhouse Project. <http://thegreenhouseproject.org/> Accessed 11/2013.

WJCT. Anneliese Delgado. <http://news.wjct.org/post/newly-opened-jax-green-houses-seniors-first-their-kind-florida>