



## KEY POINT SUMMARY

### OBJECTIVES

The purpose of the study is to examine the effect of the Green House (GH) model on quality of care in nursing home and to compare the quality of life of GH residents with those in conventional nursing homes. The key study hypothesis is that resident quality of life and satisfaction would be greater in the GH than in comparison settings and that functional status and quality-of-care indicators would be at least equal to those of conventional nursing homes.

## Resident Outcomes in Small-House Nursing Homes: A Longitudinal Evaluation of the Initial Green House Program

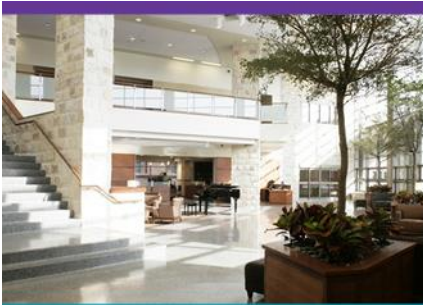
Kane, R. A., Lum, T.Y., Cutler, L.J., Degenholtz, H.B., Yu, T.  
 2007 | *Journal of the American Geriatrics Society*  
 Volume 55, Issue 6, Pages 832-839

### Key Concepts/Context

Since 1995, there has been a huge emphasis on transforming the culture of long term care facilities as a way to improve the quality of care provided to elderly residents. The focus has shifted from a provider centered model to an individualized resident-centered model where the staffing, policies as well as the physical environment are designed to support the needs of the resident. There has been a movement towards designing physical environments that are smaller scale with more private rooms and baths and household-type neighborhoods for dining and occasional cooking. The Green House puts forth a set of principles to bring about this transformation and envisages a radically reconfigured nursing home.

### Methods

The study used a longitudinal quasi-experimental study design. Forty residents each were recruited from the Green Houses (all residents from the four 10-resident GHs) and two comparison sites - the sponsoring nursing facility for the GHs and another nursing home in a nearby location run by the same owner. The study was conducted over two years - data was collected at baseline and at three 6-month follow up intervals after the first 40 residents moved to the GHs from the existing nursing facility. The Green House alters the physical environment by creating smaller scale neighborhoods of 7-10 residents, providing private rooms and bathrooms, dining rooms and hearth. Additionally, the GH model includes a change in the staffing model for professional and certified nursing assistants, and the philosophy of care. Data regarding resident quality of life, emotional well-being, satisfaction, self-reported health status, and functional status was collected through in-person



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interviews with residents, family members and line staff. Quality of care was measured using indicators in derived from the Minimum Data Set (MDS) assessments.

## Findings

The residents in the GHs reported better outcomes on the quality of life dimensions as compared to the residents from the other settings when other baseline resident characteristics (e.g. age, sex, date of admission) were controlled for. Specifically the GH residents reported better quality of life than both comparison settings on the following quality of life subscales - privacy, dignity, autonomy and food enjoyment. The quality of care outcomes in the GHs at least equaled, and for change in functional status exceeded, the outcomes in the comparison settings. Further, the GH residents equaled comparison groups in seven areas of social activity thus addressing concerns that the GH model offers insufficient resident stimulation.

## Limitations

The limitations identified by the authors include:

- The sample was small
- The study could not be randomized and though the samples were similar in important ways, they differed in age and race.
- Things likely changed with the intervention during the course of the study because the model was still evolving.
- It is difficult to isolate the effects of the physical environment - because other factors such as staffing, philosophy of care and programming also changed simultaneously.
- The study results may potentially have varied if residents moving from their own homes (versus a nursing home) had been studied.

## Design Implications

- Providing smaller scale environments (7-10 residents) for vulnerable elderly residents may result in better outcomes
- Private rooms and bathrooms for elderly residents may help in improving privacy, dignity and autonomy for residents
- Providing spaces and opportunities to engage in daily activities such as dining and cooking may improve functional status and quality of care for elderly residents