



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

The Green House Model of Nursing Home Care

Sheryl Zimmerman, PhD

University Distinguished Professor and Co-Director
Program on Aging, Chronic Illness, and Long-Term Care
Cecil G. Sheps Center for Health Services Research
University of North Carolina at Chapel Hill

Culture Change

Improve resident quality of life and quality of care by emphasizing the deinstitutionalization of nursing home culture and focusing on person-centered care

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Improve resident quality of life and quality of care by emphasizing the deinstitutionalization of nursing home culture and focusing on person-centered care

Includes resident direction, home environment, close relationships, staff empowerment, collaborative decision-making, and systematic quality improvement

THE GREEN HOUSE® Project:

*Meaningful Transformation That Creates
Lives Worth Living*



THE GREEN HOUSE PROJECT
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Green House Transformation

- Builds on the Eden Alternative
 - Greenhouse: nurtures plants
 - Green House: nurtures people
- Radical paradigm shift about how we think about care, within current regulatory and reimbursement structures
- Simultaneous transformation
 - Architecture
 - Philosophy
 - Organizational structure



Core Value 1: Real Home

- Warm; open-living plan
- Similar to surrounding community
- Private rooms and baths
- Residential finishes
- Intentional community



Key Element: Private Bedrooms and Bathrooms



Key Element: Kitchen

- Open access to elders except at busiest times
- Elders can prepare food with supervision
- Built-in safety features allow kitchen to be part of elder's life



Key Element: Dining Room



Key Element: Central Living Room and Hearth



Key Element: Easy Access to Outdoors



Core Value 2: Meaningful Life

- Place decisions with elders or as close to them as possible
- Facilitate deep knowing and reciprocity
- Support a life worth living: engagement, enjoyment, purpose, continued growth

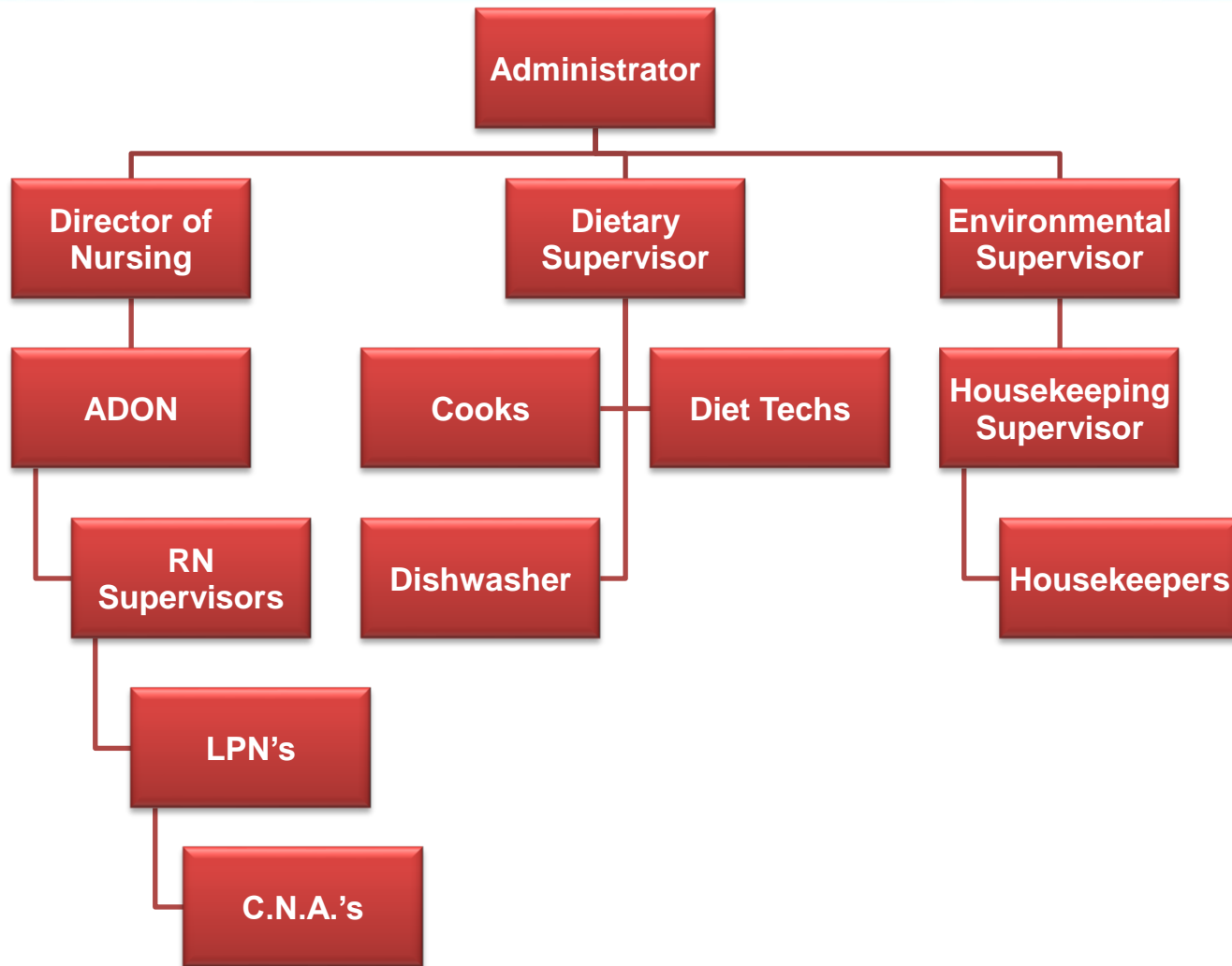


Core Value 3: Empowered Staff

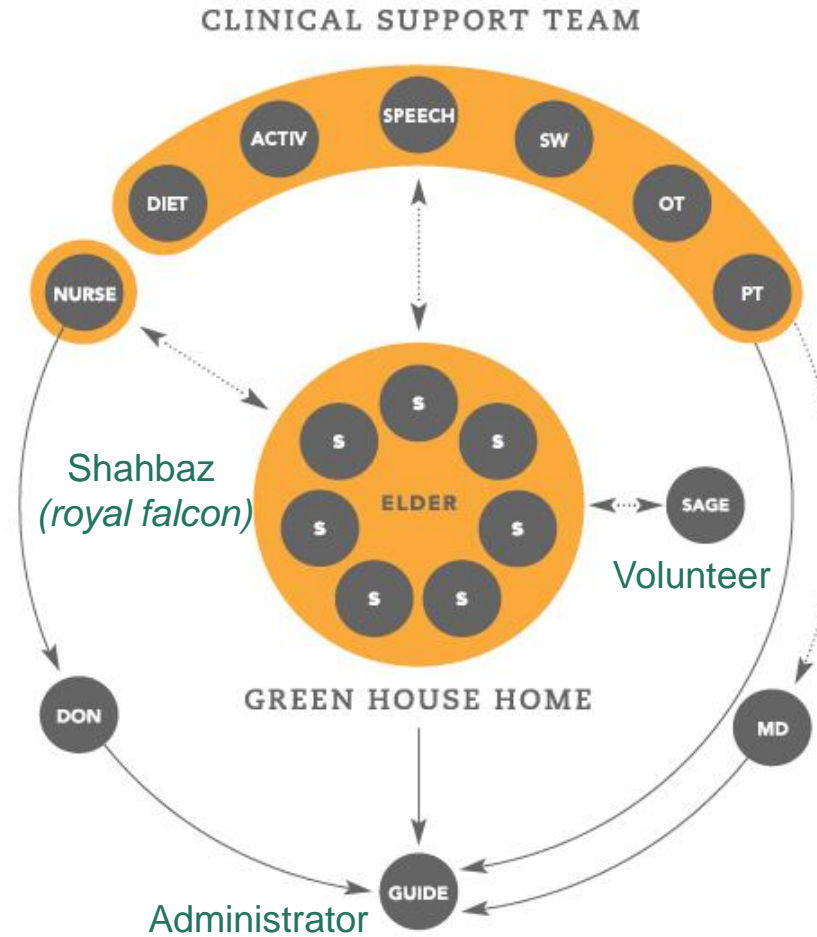
- Places the elder at the center of the organizational chart
- Radical change in leadership style
- Redefines roles and responsibilities of all core staff



Organizational Transformation



Organizational Redesign



Growth of Green House Homes

2003: First home opened

2024: 401 homes, 35 states
8 in South Australia



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<http://www.thegreenhouseproject.org/>



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Evidence Related to Green House Homes

Green House Elements

True or False?

T/F Evidence supports private rooms and bathrooms

T/F Evidence supports non-institutional dining

T/F Evidence supports normalized engagement

Green House Elements

True or False?

True Evidence supports private rooms and bathrooms

True Evidence supports non-institutional dining

False Evidence supports normalized engagement

Green House Residents

True or False?

T/F Residents rate quality of life better in GH homes

T/F GH residents are more socially engaged over time

T/F GH residents have less depression over time

Green House Residents

True or False?

True Residents rate quality of life better in GH homes

True GH residents are more socially engaged over time

False GH residents have less depression over time

Outcomes

Impact of Green House Adoption on Nursing Home Quality and Medicare Expenditures

Secondary data analysis of 72 Green House nursing homes compared to 223 nursing homes matched on state, chain, ownership, size, and resident acuity

- Controlled for resident characteristics, facility payer mix
- Used Minimum Data Set (MDS) data, Medicare enrollment files and claims data, Online Survey Certification and Reporting (OSCAR) System data
- Conducted difference-in-difference analysis

Outcomes

Quality and utilization/spending

Quality

- Hospitalization
- Readmission
- MDS composite measure
 - Bedfast
 - Incontinence, low risk
 - Catheter
 - Pain
 - Physical restraints
 - Pressure ulcer, high risk
 - Pressure ulcer, low risk
 - Urinary tract infection

Utilization/Spending

- Acute hospitalization
- SNF (skilled nursing facility)
- IRF (inpatient rehabilitation facility)
- LTCH (long-term care hospital)
- Hospice

Green House Homes

Lowered hospital readmissions (59%) and presence of bedfast (16%), catheter (45%), and low-risk pressure ulcers (38%) indicators



Green House Homes

Decreased Medicare spending \$7,746
(or 30%) per resident/year



- Hospitalization spending is a big-ticket item; it stands to reason this is the pathway to lower spending
- In other projects, better care management relates to lower hospital spending and fewer readmissions (e.g., INTERACT, Evercare)
- Green House results may be due to a similar process -- by which close contact of Shahbazim coupled with a person-centered model of care leads to fewer readmissions, lower Medicare spending, and fewer bedfast/catheters/pressure ulcers






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Outcomes

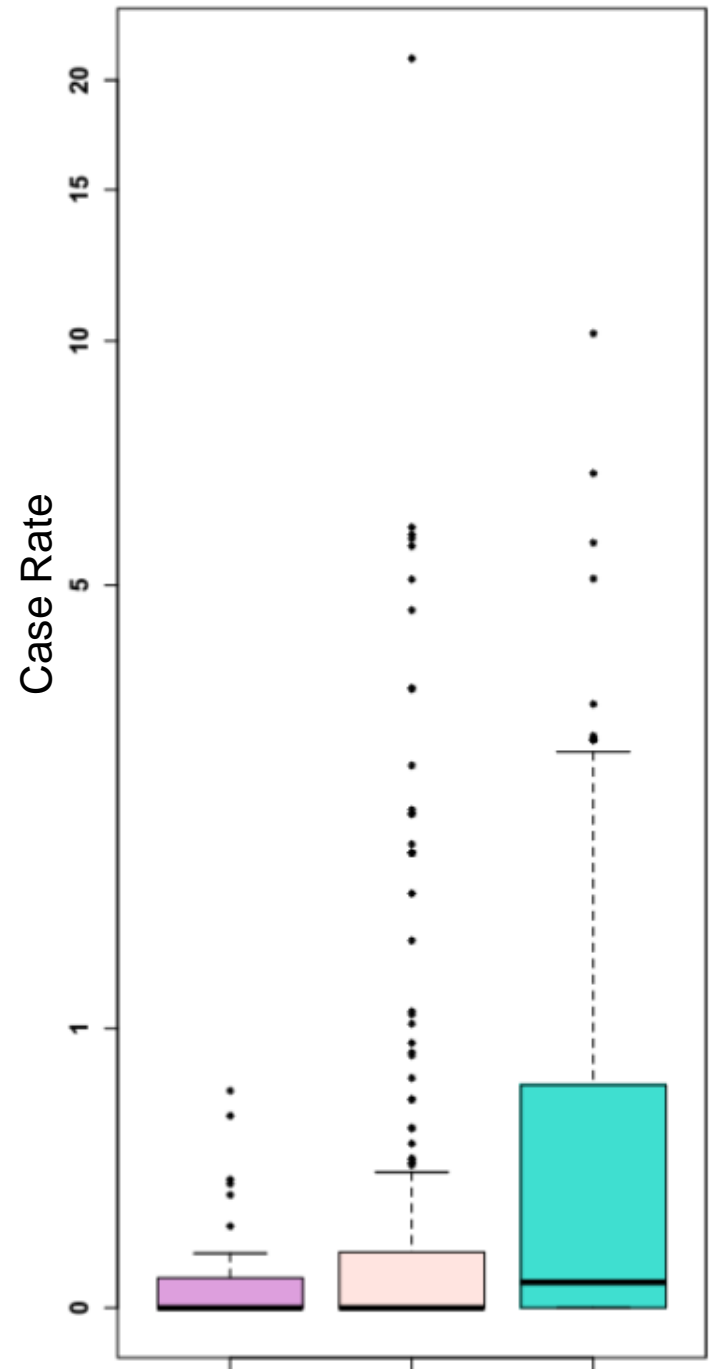
Nontraditional Small House Nursing Homes Have Fewer COVID-19 Cases and Deaths

Zimmerman S, Dumond-Stryker C, Tandan M, Preisser JS, Wretman CJ, Howell A, Ryan S.
J Am Med Dir Assoc. 2021;22(3):489-493.




COVID-19 Cases Per 1000 Resident Days

-  Green House/small homes
-  Traditional homes < 50 beds
-  Traditional homes ≥ 50 beds

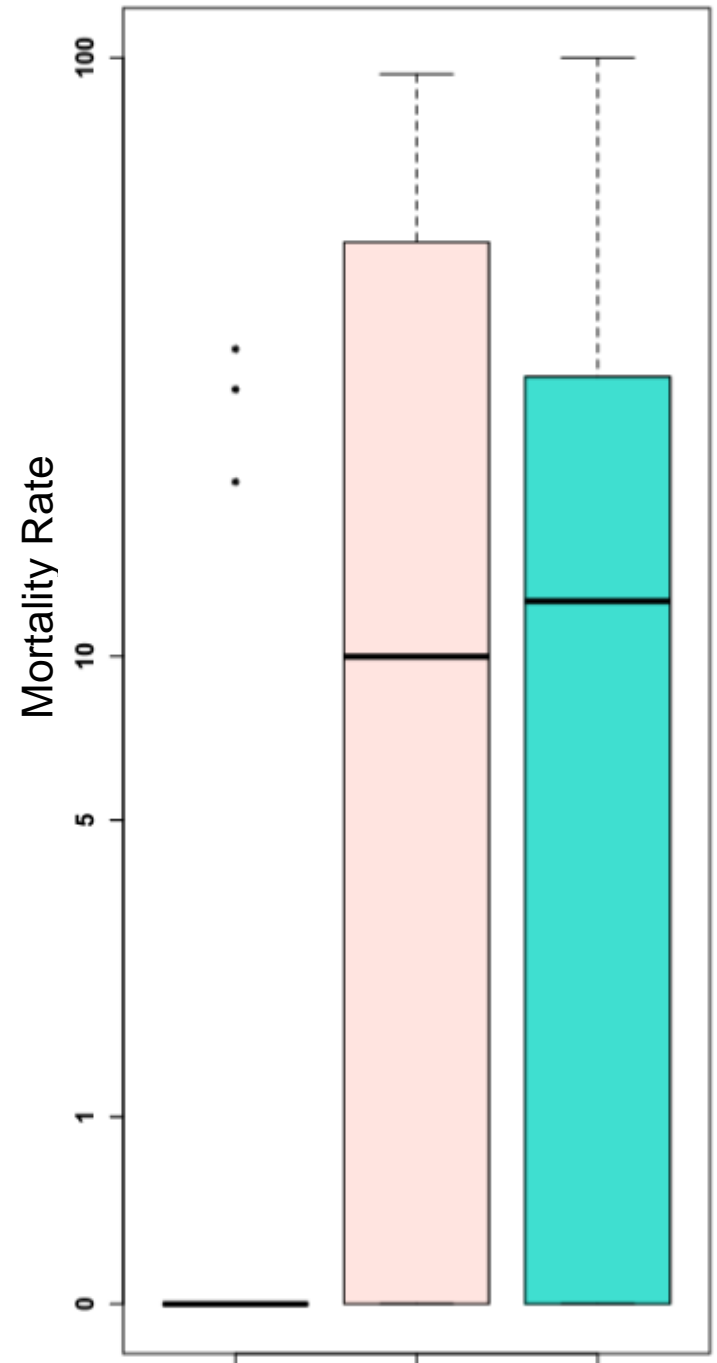
$p < 0.001$



COVID-19 Mortality Per 100 Positive Cases

-  Green House/small homes
-  Traditional homes < 50 beds
-  Traditional homes ≥ 50 beds

$p = 0.016$



Mechanism of Action

- Private bedrooms and bathrooms, limited ancillary staff, and fewer admissions may have limited COVID-19 cases
- Psychosocial well-being may have benefitted due to consistent universal staffing, more staff hours per resident day, and perhaps more outdoor visits from family, and so reduced COVID-19 mortality
- Finally, differences may also relate to Green House homes more likely being not-for-profit, tending to pay their staff more, and having fewer residents who are black, bedfast, and catheterized



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*Thank
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Sheryl_Zimmerman@unc.edu