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Developing the Green House Nursing Care Team: Variations on Development and Implementation

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Purpose of the Study: A core component of the Green House nursing home model is an altered supervisory relationship between the nurse and direct care workers. Some have expressed concern that the Green House model might weaken professional nursing oversight, threatening the quality of clinical care. This qualitative research study explores the role of the nurse as implemented in the Green House model, focusing on how variations in the nursing team influence clinical care practices. ***Design and Methods:*** Dimensional analysis, a "second generation" grounded theory methodology, was used to conduct this study. Data were collected through observations and interviews with 37 nurses, 68 CNAs, and 11 Guides working at 11 Green House sites. ***Results:*** Implementation of the nursing role within the Green House model varied both within and across sites. Four nursing model types were identified: Traditional, Visitor, Parallel, and Integrated. Care processes, CNA/Shahbaz skill development, and worker stress varied with each nursing model. ***Implications:*** Government policies have been enacted to support culture change. However, there is currently little guidance for regulators, providers, or consumers regarding variability in how culture change practices are implemented and consequences of these variations. This article outlines the importance of understanding these practices at a level of detail that distinguishes and supports those that are most promising.

Key Words: Nursing studies, Nursing homes, Qualitative research methods, Culture change, Empowerment

Background

Beginning in the 1970s, fueled by widespread published accounts of abuse, neglect, and fraud in nursing homes, Federal and State governments began raising questions about the quality of care in nursing homes. After a dismal Institute of Medicine report (1986), the Federal government enacted the Nursing Home Reform Act of 1987. The act prompted an unprecedented focus on quality of life for nursing home residents by establishing a resident bill of rights and requiring a spectrum of services that equally promoted psychosocial and mental well-being alongside physical well-being.

Culture Change

By 1997, a movement to transform nursing homes to more home-like environments for residents and to improve quality of work life for direct care staff was taking shape (Koren, 2010) Since that time, several "culture change" initiatives have emerged, all sharing a vision of improved quality of life for residents along with greater autonomy and work life quality for staff. There are generally agreed on basic principles guiding the nursing home culture change

movement (Koren, 2010), including "demedicalizing" the look, feel, and care delivery in nursing homes through environmental redesign, staff empowerment, relationship building, and resident-directed care (White-Chu, Graves, Godfrey, Bonner, & Sloane, 2009).

Staff Empowerment

Culture change innovators often implement modified CNA roles such as empowered workers, universal worker roles, or "self-managed work teams," designed to promote both resident quality of life and improved quality of work life. CNA empowerment initiatives and self-managed work teams have been linked to modest positive outcomes for CNAs and residents (Bowers & Nolet, 2011; Yeatts & Cready, 2007).

Direct care worker empowerment initiatives have sometimes created challenges for nurses. For example, nurses often struggled to adjust medication administration and treatments as CNAs allowed residents to wake at different times. They began to vocalize concerns about resident care quality and being left out of culture change efforts (Bellot, 2012; Scalzi, Evans, Barstow, & Hostvedt, 2006). Indeed, there is often little guidance to homes about how to successfully integrate nurses into culture change initiatives (Hill, Kolanowski, Milone-Nuzzo, & Yevchak, 2011; White-Chu et al., 2009). The consequence has often been to marginalize nurses (Greene-Burger et al., 2009).

The Green House Project Homes

Possibly the most comprehensive nursing home culture change is the Green House model, an evolution of the Eden Alternative (Rabig, Thomas, Kane, Cutler, & McAlilly, 2006). The model provides a home-like environment, including a physical environment that resembles a family home (usually 8–12 people), with significantly transformed care staff roles (Table 1) (The Green House Project, 2013). Most Green House homes are in clusters of two or three, sited on a campus with a larger, traditional nursing home. Direct care staff, referred to as "Shahbazim" (singular: "Shahbaz"), work in self-managed teams and are responsible for direct resident care, cleaning, laundry, meal preparation, staff scheduling, and activities, and simulating how families might organize work (Rabig et al., 2006; Sharkey, Hudak, Horn, James, & Howes, 2011). There are two Shahbazim for each house on the first and second shifts and one on third shift. Green House nurses generally cover two or three homes during first and second shifts, often covering additional homes on third shift. The description of the nurse's role in Green House homes (Table 1) is similar to that of more traditional homes, adding emphasis on coaching and person-centered care while omitting management of non–direct care activities (e.g., scheduling and conflict management).

A significant Green House innovation is the Guide role. The Guide, rather than the nurse, supervises all nonclinical Shahbazim work and provides general oversight of the homes. Clinical care oversight remains the responsibility of the nurse. How these supervisory responsibilities are shared between Guide and nurse is less well-defined as the distinction between "clinical" and "nonclinical" may not be interpreted consistently. One Guide generally oversees all Green House homes at a site. Where there are only one or two Green House homes, Guides often have an additional role (e.g., administrator and social worker). Extensive training is provided for new Green House homes including general principles, architecture, and role of the Guide and Shahbazim (Table 2). The details of how the other areas should be implemented (including the nurses' role) have had less formal guidance.

Research on the Green House Project

Early research on the Eden Alternative showed mixed results. Coleman and colleagues (2002) found a higher incidence of falls, more nutritional problems, higher rates of hypnotic prescriptions, and higher staff turnover, whereas Bergman-Evans (2004) found higher family satisfaction, lower resident depression rates, and lower levels of helplessness. Other studies found higher quality of life, higher family satisfaction, less late loss of activities of daily living, and higher levels of incontinence in Green House homes than in comparison to nursing homes (Kane, Lum, Culter, Degenholtz, & Yu, 2007; Lum, Kane, Cutler, & Yu, 2008). A study of work processes found that Shahbazim spent more time on direct resident care and engaging with residents, despite the expanded responsibilities of their universal role (Sharkey et al., 2011). Zimmerman and Cohen (2010) examined evidence regarding Green House elements, finding support for many elements, but suggesting that more evidence is needed regarding elements such as building design

Table 1. Common Staff Responsibilities and Role Sharing With Legacy[a] Home

Shahbaz	Nurse	Guide	Director of Nursing	Other clinical support (physicians, therapies, and dietary)
• Nursing assistant direct care (e.g., bathing, mobility assistance, and check vitals)	• Practice person-directed, relationship-based nursing care	• Coach Shahbazim	• Oversight of all clinical care and elder safety	• Consult on care as needed/requested
• Organize and conduct activities for elders	• Oversee direct care provided by Shahbazim	• Oversee house	• Direct supervision of nurses as a coaching supervisor	• Contribute to care plans
• Organize and lead care plan meetings	• Skilled nursing direct care (e.g., assessment, medications, and treatment)	• Direct supervision of Shahbazim		• Participate as coaching partners with Shahbazim and other team members
• Communicate with nurses to provide optimal elder care	• Care planning, physician calls, rounds, and charting			
• Schedule Shahbazim	• Communicate with Shahbaz and clinical support team to provide optimal elder care			
• Order and stock food and supplies	• Educate and mentor Shahbazim			
• Plan menus with elders and prepare meals from scratch	• Coach Shahbaz with other team members			
• Housekeeping of home				
• Personal and/or all laundry				
• Request maintenance as needed				
• Organize and conduct Shahbaz "house" meetings				
• Only works in Green House home	• Only assigned to work in Green House homes, though this sometimes varies	• Full time vs. Part time depending on number of homes	• Serves both Green House home and Legacy	• Serves both Green House home and Legacy
		• If part time, often has another role in Legacy (e.g., Administrator and Activities Assistant); should not be a nurse		

Note: This table only describes what is commonly seen in Green House Homes. Variances do occur.

[a]Commonly, the "Legacy home" is the more traditional nursing home on the same site as the Green House homes. The Legacy and Green House homes share a nursing home license. The Legacy provides shared services to the Green House homes, such as dietary and therapies. Green House homes commonly "order" supplies and food from the Legacy home.

and use of outdoor spaces. The Green House elements of a new physical plant and empowered workers are strategies consistent with the characteristics of high performance work systems, though questions remain about their applicability to long-term care culture change (Bishop, 2014).

Green House Nurses and Shahbazim

Green House nurses are described as "clinical support team" members who "visit on a schedule dictated by the clinical assessment and treatment needs of the elder and regulatory compliance

Table 2. Education and Support Provided to Adopters by the National Green House Organization

Phase	Guidance
Discovery	Financial feasibility
	Introductory workshop for community and organization
Adoption	Architectural planning
	Kick off meeting for leadership
	Coaching Approach for Leading Change workshop
	The Green House Educator Workshop
	Guide and Director of Nursing Coaching Supervision workshop
Start up	Shahbazim and Core Team Education workshop and practicum
	Role of the nurse workshop[a]
	On-site training support to educators
	Ad hoc consultation
Ongoing	Peer network
	Webinars
	Annual conferences
	Web-based educational programs
	Ad hoc consultation

[a]Newer programs. Organizations in this study have not received this education.

mandates" (Rabig et al., 2006, p. 535). Moving oversight of direct care workers from a nurse to a Guide was intended to strengthen the focus on quality of life and diminish the medicalization of elders' lives. Not surprisingly, nurses in the early Green House homes were resistant to the model, particularly to moving supervision of direct care workers from nurses to the Guide (Rabig et al., 2006). The Green House vision of empowered front line workers no longer supervised by the nurse raised concerns in the nursing community that the Green House model might result in a weakening of professional nursing oversight, threatening clinical care quality (Greene-Burger et al., 2009; Zimmerman & Cohen, 2010). The purpose of this study was to describe the role of the nurse in the Green House model and to analyze variations in the nursing role as implemented in Green House homes.

Methodology

In this study, dimensional analysis, a "second generation" grounded theory, was used (Bowers & Schatzman, 2009). Dimensional analysis follows the grounded theory framework, is embedded in the social–psychological tradition of Symbolic Interaction (Blumer, 1969), and is suited to the analysis of complex social processes in which actors may hold varying perspectives. The strength of this methodology is in defining a phenomenon from the perspective of the respondent, promoting an understanding of the phenomenon as it is experienced and understood by the respondent(s), and eliciting the social processes involved in creating and sustaining the phenomenon under study.

Recruiting

Following Institutional Review Board approval, the national Green House office provided the research team with a list of all 14 skilled nursing care Green House sites operating for at least 6 months. The research team sent an e-mail, followed by a phone call, to invite the Green House Guides (supervisors of the homes) at each of the 14 sites to participate in the study. Eleven of the 14 Guides agreed to participate.

Data Collection Phase I

Data were collected in two phases. Phase I consisted of telephone interviews with Guides in all 11 participating sites to assist in general model understanding, interview question development, and sample selection for site visits. Interview questions evolved from less to more structured, both within each interview and as the study progressed (Bowers & Schatzman, 2009). Guides were first asked to "talk about their experience with being part of the Green House model." Interviewers used probes to gain detailed descriptions of topics raised by the Guides, encouraging participants to provide explicit examples of their general impressions of the model and to provide specific examples of their experiences, including the processes used currently and over time, to implement the model. This participant-guided exploration was followed by researcher-generated questions related to specific issues (e.g., reporting relationships between the Shahbazim and nurses) identified prior to the interview. The PI, an experienced interviewer and qualitative researcher, conducted the telephone interviews. Interviews were recorded and transcribed.

Data Analysis Phase I

Analysis of Guide interviews provided insights into significant differences among the sites as well as common implementation strategies and challenges. Areas of difference and similarity identified during phase I included challenges implementing the program, the selection and role of the Guide,

and the number of individual homes on a single site the Guides were responsible for supervising.

Data Collection Phase II

Based on analysis of these initial interviews, eight Green House sites were selected for follow-up site visits. The decision about which sites to visit was made to maximize the variation in size of the Green House site, strategies for model implementation (particularly around the nurse/shahbazim relationship), apparent difficulty implementing the model, and degree of change in the model since initial implementation. A two-member research team went to all eight sites. Guides posted study information sheets in Green House homes and distributed volunteer sign-up sheets. Guides did not engage in recruitment.

Observation was used to direct the research team to relevant additional topics that were included in the interviews and to validate interview data (e.g., if shift change activities were described in interviews, researchers were able to compare this to what they observed). Observation was also used to validate nursing model differences such as nurses engaged in direct care or interacting with Shahbazim. Researchers had meals with residents and staff and participated in house activities. No personal care was observed.

Interviews were conducted with administrators, Directors of Nursing, dietary and therapy staff. These interviews were used primarily to learn how Green House homes related to the larger organization and how support services were integrated into the Green House homes. The interviews, and observation, were useful in determining additional relevant areas to include in interviews with direct care staff.

Consistent with the Grounded Theory methodology, the researchers met each day to conduct analysis, revise interview questions, and determine subsequent theoretical sampling, seeking staff with experiences that would provide comparative sampling opportunities. The Guides served as the primary source of information for theoretical sampling options. Site visits took place over six6 months, each lasting 2–3 days.

Data Analysis Phase II

All interviews from site visits were recorded and transcribed. Field notes were typed and made available for data analysis sessions. Transcripts were analyzed using dimensional analysis (Bowers & Schatzman, 2009; Strauss, 1987), a line-by-line analysis that assists in maintaining the researchers' focus on how participants describe their experiences and identify what is salient in their experience. Comparisons across sites, homes within each site, and shifts within each cottage led to insights into the consequences of differing implementation strategies. Participant observation, specifically the ability to compare staff descriptions to researcher observations, was particularly useful in guiding the analysis.

Saturation

In grounded theory, saturation is achieved when there are no additional conceptual discoveries within the core categories or in the link between core categories and salient conditions. In this study, saturation of core categories was achieved when no new care team implementation strategies and no new conditions influencing implementation were identified in ongoing interviews.

Rigor

Analysis sessions were conducted in a team setting, with researchers who had varying levels of familiarity with the Green House model and with long-term care. Particularly important during early analysis, the addition of outsiders facilitates the elimination of interpretations that cannot be supported by data. Second, as analysis evolved, analytic matrices of concepts and conditions were shown to subsequent participants. These later participants were asked to comment on the emerging matrix, noting where it might confirm or diverge from their experience. Divergent examples were followed up by reexamining the data, recontacting prior participants, and/or altering the developing matrix.

Setting

Data were collected at eight Green House sites, most with multiple Green House homes on site, totaling 20 Green House individual homes. All were skilled facilities. Each home had 10–12 elders. Administrative staff, including the Guide, had offices in other buildings on the same site. Site descriptions are listed in Table 3.

Sample

Participants included Shahbazim and Green House nurses across shifts and from multiple

Table 3. Phase II: Number of Homes on Each Site, Interviews, and Observations

	Number of Green House homes on site[a]	U.S. region	DoN	Nurses	Shahbazim	Guide	Other (e.g, human resources and dietary)	Approximate number of participant observations
Site A	≤2	South	1	4	10	1	1	20
Site B	≤2	South	1	3	9	1	1	40
Site C	≥4	East	1	5	5	1		18
Site D	≤2	Midwest	1	4	12	1		25
Site E	≤2	Midwest	1	2	10	1		35
Site F	≥4	West	1	6	6	1		20
Site G	≥4	South	1	8	15	1	1	28
Site H	≤2	Midwest	1	5	2	1		20
Total	22		$N = 8$	$N = 37$	$N = 68$	$N = 8$[b]	$N = 3$	$N > 200$

[a]The number of homes on each site is not precise in this table to protect the identity of the homes.
[b]Three additional Guides were interviewed in phase one. This table only reflects sites that were part of Phase II.

homes, as well as Guides, Assistant Directors of Nursing, Directors of Nursing (DoNs), and administrators (Table 3). At some sites, social workers, therapists, and dieticians were also interviewed, depending on their involvement in the Green House in relation to the nursing role. These other interviews provided both specific areas to probe during Shahbazim and nurse interviews and a source of confirmation for Shahbazim and nurse interview data.

Findings

This study revealed significant differences across Green House sites in how nurses and Shahbazim understood their roles, the boundaries between nurse and Shahbaz work, responsibility for initiating contacts with family members, responsibility for making referrals to professionals, the range of decision authority over residents' daily lives, and oversight of Shahbaz activities. Based on these differences, a typology of four nursing care implementation models was developed: Traditional, Parallel, Integrated, and Visitor. Significantly, differing nursing care models were found not only across sites but also across homes at a single site and even within the same homes across individual nurses and Shahbazim. Although one model was often dominant at a single site, variations were found at all sites. Therefore, the nursing model typology provides a heuristic to better understand variations in implementation strategies and their consequences, rather than a comprehensive description of individual sites or a description of how the various models are distributed across Green House homes. Interviews with staff who had long tenures in the Green House homes suggested that the model had generally changed over time. For example, although the Visitor model might have been dominant initially at one site, it was now uncommon. Table 4 outlines the characteristics of the four models.

Traditional Nursing Model

> Interviewer: "Is working with the nurses any different than working with nurses in the nursing home?"
>
> Shahbaz: "Not a whole lot. We're the main caregivers, you know. We have a nurse who goes back and forth and she's still the nurse, who still oversees everything."

The Traditional model was found where nurses had not been well oriented to the Green House model and in sites that implemented the model prior to development of the extensive nurse education program. Nurse oversight of Shahbaz work encompassed both delegated nursing tasks (ambulation, symptom monitoring, and vital signs) and nonnursing activities (cleaning rooms and stocking linen shelves), as well as resolving conflicts among Shahbazim. Overlap in responsibilities occurred in delegated tasks as nurses continued to monitor these activities closely. Nurses tended to give direction to Shahbazim, check up at the end of each shift to make sure the work had been completed, referee conflicts between Shahbazim, and comment on the quality of the housekeeping.

> Shahbaz: "If they [nurses] go in and see a spill or something, they ask, 'Can you go clean that up?'"

Although there was overlap in responsibility, there was minimal sharing of work. As in traditional

Table 4. Green House Homes Nursing Model Typology

Nursing model	Nurse-Shahbaz boundaries/work sharing	Collaboration and communication	Nurse oversight of nonnursing work	Work life quality	Care processes
Traditional	Clear/Minimal overlap	Nurses make most decisions about care and home operations Frequent communication	Yes	Nurse: high, with high work load Shahbaz: unchanged	Nurse directed
Parallel	Clear/Minimal overlap	Shahbaz reports to nurse on resident care. Shahbazim manage operations of the home/unit Moderate communication	No	Nurse: high Shahbaz: high	Nurse directed
Integrated	Blurred/ Considerable overlap	Collaboration on many issues Highest level of reciprocal communication	No	Nurse: high, with high work load Shahbaz: high	Collaborative
Visitor	Clear/No overlap	Communication only when seen as necessary from Shahbaz to nurse Lowest level of communication; primarily through Guide	No	Nurse: low Shahbaz: high	Shahbazim directed

skilled nursing facilities, nurses rarely answered resident lights. Instead, they responded to a light by indicating to Shahbazim that a resident light needed to be answered. If there was no Shahbaz available, nurses either sought out a Shahbaz or asked what the resident wanted and then found a Shahbaz to do the work, unless the request required a nurse. When Shahbazim observed a change in resident condition, the nurse was summoned to determine what needed to be done and whether a referral needed to be made. Resident care problems were referred to the nurses who integrated changes into the care plan, often with minimal input from Shahbazim.

Nurses were responsible for initiating family contacts. Shahbazim might suggest to a nurse that a family member would want to be notified about something but did not make the contact. This is consistent with traditional settings where CNAs interact with families during visits to the home but rarely initiate contact with families outside visits.

Nurses and Shahbazim generally agreed that nurses were "in charge" of the homes and the care. The nurses viewed themselves as ultimately responsible for both their own and Shahbaz work. These nurses consistently expressed the belief that it was their responsibility to oversee all Shahbaz work to make sure Shahbazim completed their work.

Nursing Staff Replacements.—In this model, selection of new Green House nurses was primarily based on past attendance record, clinical skills, ability to multitask, and ability to work independently as they often worked alone, particularly at sites with only a single Green House home. In the Green House homes using a Traditional model, past team collaboration, quality of relationships with CNAs, and views about the Green House philosophy were not prioritized as new nurses were selected. In these homes, those in charge of hiring nurses could not identify any differences between the nurses they would hire into the Green Houses and those they would hire into their nursing home.

Work Life Quality.—Most nurses practicing within this model were comfortable with their role, describing relationships with Shahbazim as quite positive. These nurses described their workload as greater than in nursing homes where they had previously worked, attributing the heavier load to being (often) the only nurse, with no one to back them up in an emergency. Shahbazim working in this model were mixed regarding work life quality. They were less excited about their work than were Shahbazim working in the other nursing models, expressing disappointment that the Green House had not turned out as they had expected. In particular, they noted

the failure to achieve greater autonomy, objecting (not openly) that nurses continued to be authoritarian and "bossy," and that much of the oversight from nurses was unnecessary or even demeaning. As one Shahbaz said,

> *"I don't think it's right that a nurse asks me at the end of the shift whether I have gotten my vitals. I have been doing this for 15 years. I have gotten vitals every day. Why wouldn't I get vitals? Why does she have to ask me that?"*

Resident Care Processes.—The care processes, decision authority, lines of communication, and accountability were much like those generally operating in nursing homes. Shahbazim reported to nurses and nurses took responsibility for responding. Green House–related improvements in quality of life were described anecdotally by staff, mainly in terms of physical environment, residents' ability to make choices about daily activities, and the belief that families were more comfortable and visited more often.

The role of the Guide in the Traditional model was to support a shift in balance between medical and social aspects of residents' lives. Guides felt unsure of their role or reported lacking the necessary skills. At these sites, Shabazim were left to determine how elder care and home operations would be managed and how the nurses and Shahbazim would relate to each other, including resolving conflicts, filling gaps in staffing, and dividing the labor. Under these conditions, the approach of the nurse working at the time largely determined how the model would be implemented on that shift. As nurses were often not familiar with the Green House model, they approached their work as they would in a traditional nursing home, creating a Traditional model in the Green House. These homes had the widest variation in model implementation, often varying across shifts, as the nurses changed.

Visitor Model

> "He had a fractured hip so he should've been turned or repositioned because he's in his room and he was like, 'I don't want to,' and nobody (Shahbazim) was taking care of it. At that time, I (nurse) called the Guide to come down and take care of it."

The Visitor model was found at only one site. This model has the clearest boundaries between Shahbaz and nurse work. In this model, Shahbazim are responsible for resident quality of life, whereas nurses are responsible for responding to "medical/clinical needs." There is little interaction between them. Shahbazim described themselves as "empowered" to determine whether a resident condition required nursing intervention or referral to other professional. Shahbazim viewed themselves as "in charge" of the home, using nurses as consultants when they chose to. Shahbazim saw nurses as having no authority over Shahbaz work.

> Shahbaz: *"Basically, I just see her (nurse) pass pills and if somebody wants, pain meds, or some thing, then we'll call her. . . ."*
>
> Nurse: *"They (Shahbazim) made a referral to the speech therapist. No one told me anything. I was the last one to know."*

Nurses were discouraged from, and were not comfortable with, directing Shahbazim in these homes. The Guide did not bring nurses and Shahbazim together to discuss either resident care or interpersonal issues. Nurses who observed care quality problems with Shahbazim, either said nothing, corrected the problem themselves, or talked to the Guide, rarely approaching Shahbazim directly.

> Nurse: *"I kind of stepped on people's feet because I went directly to the Shahbaz on certain occasions and was met with a bit of resistance. I was told, 'If you are having problems with so and so, please go through the Guide.'"*

Nursing Staff Replacements.—New nurses were selected primarily for their clinical ability and experience. Team collaboration and quality of past relationships with CNAs were not considered central when hiring new Green House nurses. Nurses who were "able to make decisions on their own" were seen as desirable.

Work Life Quality.—Shahbazim and nurses had very different perceptions of how well the model was working. Shahbazim were quite positive, particularly about their independence. However, some were dissatisfied with the expansiveness of their work (e.g., shopping and scheduling). In sharp contrast, the nurses described work life quality as poor, as feeling like visitors rather than integral to resident care. They felt marginalized and unappreciated, providing many examples of resident care decisions that had been made without their input, leaving them generally uninformed, feeling unwelcome in the homes, and as "often the last ones to know" what was going on.

Resident Care Processes.—In addition to being generally unhappy and feeling unappreciated, nurses working in the Visitor model were concerned about the quality of care in the homes, describing themselves as having no authority to direct or intervene in Shahbaz work and as often being "out of the loop on what was going on with residents." Nurses offered several examples of clinical problems that had not been brought to their attention and were consequently not addressed in a timely manner. During both interviews and field work with Shahbazim, the nurse on the research team identified clinical situations that were clearly in the domain of nursing care that were not shared with the nurses.

Parallel Nursing Model

> "A resident was having difficulty . . . you report it to the nurse and your responsibility is done."

In this model, nurses and Shahbazim worked in parallel, each having clear tasks, with minimal overlap in their work. However, both groups were invested in resident care issues and communicated frequently about what and how residents were doing. In this model, nurses had very little, or no, involvement in the daily operation of the homes or how the Shahbaz worked. Nurses did not check up on Shahbazim to be sure they were doing their work (weights and vitals) and did not intervene in conflicts between Shahbazim. They provided direction to Shahbazim only when it involved a resident safety issue. Nurses indicated that all other issues were addressed either among the Shahbazim or between them and their Guide.

> Nurse: "*We do our nursing duties and don't pay a whole of attention to what the Shahbazim are doing care-wise. I mean, we do, in a sense that if I see that there is a safety issue or I'm concerned about pressure relief or things like that, but for the most part their Guide is responsible for discipline.*"

Generally, nurses working within a Parallel model maintained responsibility for contacting families about resident concerns although this was not universal. In some homes, Shahbazim were comfortable contacting families, and nurses sometimes made that suggestion if the Shahbaz had a particularly close relationship with the family. Nurses also took responsibility for making referrals and contacting physicians. Both nurses and Shahbazim agreed that clinical problems should be immediately referred to the nurse and that nurses were responsible for informing Shahbazim about resulting changes in care. Shahbazim did not expect nurses to inform them about the outcome, unless it had relevance for Shahbaz work. In general, the Shahbazim and nurses felt their relationships were quite positive. However, some Shahbazim were disappointed that nurses did not share any of the work.

> Shahbaz: "*They're just like 'we give the meds.' Sometimes they're right in front off a light and the resident just needs like water. I mean, something really basic.*"

Nursing Staff Replacements.—When selecting nurses for work in the Green House, nurses who were familiar with the Green House philosophy and approach and who were known to "get along" with CNAs were preferred. A calm demeanor was seen as helpful to managing relationships with the Shahbazim and fitting the tenor of the house.

Work Life Quality.—Nurses practicing within the Parallel nursing model were generally extremely positive about the work and felt quality of life for the residents was superior to that in the more traditional settings where they had worked. They particularly appreciated no longer having to monitor direct care workers, spending more time doing "nursing" work and having more direct resident contact. Some nurses working within this model described the workload as greater than in a traditional nursing home, if they covered more than one home or covered both the Green House (or two) and units in the nursing home at the site, and were frequently paged to another home to assess a resident or answer questions from families or physicians. This was particularly the case when nurses were responsible for multiple homes and described difficulty completing their work as they were frequently called to another home.

Shahbazim working in the Parallel model were also generally positive about their work life. They described themselves as empowered to make decisions about their work, identified many new skills they had developed, felt the work was more rewarding than previous CNA work had been, and could "not imagine going back." There was a high level of excitement about the work and the ability to provide high quality care and a more satisfying life for residents. They felt positively about being responsible for completing their daily work without oversight from the nurses. Like Shahbazim working in the other nursing models,

they sometimes felt challenged to complete all their work with their added responsibilities.

Resident Care Processes.—Shahbazim saw themselves as responsible for identifying changes in residents' conditions and notifying the nurse. They were comfortable communicating directly with nurses about residents' conditions and saw it as an important part of their role. Although there was minimal nurse to Shahbaz or Shahbaz to nurse shift change reporting, researchers observed many instances of Shahbazim and nurses communicating about residents during the shift.

Integrated Nursing Model

> Shahbaz: "We have a resident that has been declining and falling. So we (nurses and Shahbazim) talked about how we are going to stop this and try to get her out more . . . we started drawing up papers to get check on her every 30 minutes, bring her out to watch TV more with everybody else, and we're getting the family to come in more. So we've been communicating on that and getting ideas back and forth. We started finding a pattern. The nurse and us called the family up and talked to them to get ideas . . . "

The Integrated model represents the highest level of collaboration between nurses and Shahbazim and is characterized by a high level of ongoing interaction and considerable shared responsibility. For example, the nurses were generally quite willing to do "Shahbaz" work. Nurses were seen assisting with feeding and toileting. If a resident asked for assistance and the Shahbaz was not present, they often responded to the resident's request. Sometimes nurses and Shahbazim engaged in resident care together. For example, nurses and Shahbazim were observed walking elders together and then later discussing what they had noticed, what assessments might be needed, referrals made, and care plan alterations needed. This was the only model where nurses were observed actively teaching Shahbazim. As in the other models, Shahbazim viewed nurses as responsible for most clinical decision making.

This model differed from the others in that both nurses and Shahbazim initiated contacts with family members. Similar to the other models, nurses always initiated contacts to discuss serious clinical events.

Nursing Staff Replacements.—Shahbazim and nurses expressed a strong preference for nurses with Green House experience, insisting that only Green House trained staff could fill even temporary positions, and were not accepting of nurses who took a hierarchical approach to working with Shahbazim. Although the DoN was always concerned about nurses' clinical skills, sites that were careful about selecting nurses who supported the philosophy and were known to be respectful and good "teachers" of CNAs had more consistent opportunities to use an Integrated model than when nurses were not selected this way.

Work Life Quality.—Work life quality and job satisfaction were high for both nurses and Shahbazim. Nurses liked the greater resident contact and felt the shared work led to higher quality care. For example, one nurse described how she answers lights, takes residents to the toilet, gets them food and drink, and walks with them. In the process, she has been able to conduct much better assessments, identify subtle (earlier) change in condition, and teach Shahbazim things that make them better observers and care partners.

Though nurses working in the Integrated model were satisfied, many believed that the model resulted in a significantly increased workload. The workload increased because nurses (willingly) shared in some of the Shahbaz work, either instead of Shahbazim (in the spirit of partnership) or along with them (to teach or to gather clinical information about the resident). At the same time, nurses in the Integrated model felt more comfortable with less nurse staffing on the night shift, as they highly trusted Shahbazim to quickly summon a nurse when needed. They also described rarely being called to a home for "trivial" issues.

Resident Care Processes.—The Integrated model facilitated the timely identification of change in resident condition, resulted in the greatest collaboration between Shahbazim and nurses, and provided important embedded learning opportunities for Shahbazim. Shahbazim saw it as their role to participate actively in identifying resident clinical needs and were more likely than in the other models to offer their opinions. For example, in one home with a predominantly Integrated model, a Shahbaz was observing a resident as the nurse was helping the resident take a medication. The Shahbaz observed that the resident seemed to be "leaning to the right," while taking the medication, and that this was unusual for this resident. She continued to observe the resident as the nurse

escorted the resident back to her room, and then went to share her observations with the nurse. This led to very early identification and treatment of an infection.

Several, but not all, of the nurses in this model engaged in some teaching of the Shahbazim as they worked together. Although the nurses did not see themselves as responsible for educating the Shahbazim, they often explained what they were doing and why, described new treatments, and demonstrated techniques for lifting, moving, and transporting.

> Shahbaz: "*When I worked up at (legacy home), I never did the glucose scans and she kind of expects that here, you know, like at 4:00 two of them might need a glucose scan and she's over at the other house.*"
>
> Interviewer: "*Do you feel comfortable doing that?*"
>
> Shahbaz: "*It's no big deal.*"
>
> Interviewer: "*So how did you learn to do those?*"
>
> Shahbaz: "*The nurse showed me.*"

Some of the Shahbazim talked about how they were taking on increasing responsibility for learning about clinical conditions and becoming better collaborators with the nurses, describing their skill levels as increasing over time.

> Shahbaz: "*We know when she's (elder) starting to act a little restless, and she's on the light all the time, we quickly check her blood sugar or her oxygen, because we know that's a sign of . . . maybe blood sugar or an oxygen issue.*"
>
> Interviewer: "*How did you learn that might be a sign of that?*"
>
> Shahbaz: "*The nurse, actually. We work very, very closely with the nurses. . . . so if someone just isn't acting normally, I'll say, 'Hey (nurse), this person over here has been crying a lot lately, or they're very restless . . . ' and the nurse will come over and say, 'Well, hey, this is usually the case when this happens . . . ' Especially when you work so closely with the nurses, you learn.*"

A nurse working in this model described how taking a resident to the toilet with one of the Shahbazim allows her to observe the clinical skills of the Shahbaz and to teach the Shahbaz about more effective strategies. It also gives the nurse an opportunity to teach the Shahbazim about new treatments and clinical problems with a specific eye to clarifying what the nurse should be informed about.

Discussion

This study describes licensed nurse oversight Green House homes in a way that has not been previously understood. The Green House program offices provided general guidance to early Green House adopters, leading to variation in how the nurse's role was implemented and evolved in each organization. Each nursing model identified in this study has differing implications for dimensions of work life and care quality. The Integrated and Parallel nursing models in this study are promising in terms of quality of work life, communication, collaboration, and care processes, but balancing workloads remains a challenge to nurses. The Integrated model was the only model where the staff were able to provide frequent examples of nurses teaching Shahbazim, thereby increasing the skill capacity of Shahbazim and increasing the likelihood of improved resident outcomes. For example, nurses taught Shahbazim to test glucose levels, described by both as an example of collaborative problem solving, while appropriately managing the division of labor between them. The "Visitor" model identified in this study raises concerns about resident safety and care quality but was described as a "past practice," and changes toward appropriate oversight were found in interviews and observation.

The Green House model promotes staff familiarity with elders and presents an opportunity for a high level of collaboration in providing social and clinical care. This could potentially lead to earlier identification of change in condition and possibly reductions in preventable hospitalizations. If these associations were confirmed, the financial gains may outweigh any additional costs of implementation. However, given the variations observed in this "single model" of culture change and variations reported across other culture change homes (Elliot, Cohen, Reed, Nolet, & Zimmerman, 2014), caution is needed in linking resident and staff outcomes to any model without carefully exploring internal variations (e.g., lines of authority and flow of communication). Researchers are cautioned to attend to such variations when making cross-model comparisons.

Replication of nursing home culture change initiatives continues to be a challenge to providers. Even where innovations have documented impressive improvements, innovators have had difficulty describing what they actually did and how it might be replicated somewhere else. The level

of guidance available to culture change adopters is evolving. For example, the Green House program has implemented a "Role of the Nurse" education program and is developing more guidance for Directors of Nursing. This study suggests that improved implementation guidance about the role of nurses may lead to greater consistency in outcomes. However, it remains unclear how much stringent guidance is feasible or desirable. Future research may assist with understanding the feasibility of fidelity to rigorous culture change guidelines.

The findings of this study are useful for states developing pay-for-performance incentive systems. Clearly, it cannot be assumed that "the same" culture change program will always result in the same outcomes. Greater attention to specific replication guidance and implementation fidelity are vital in determining whether a particular culture change program is effective and an appropriate pay-for-performance investment.

Limitations

Participation in the study was voluntary and the sample size small, limiting the generalizability of findings. Although it is possible an organization may have encouraged "positive" staff to participate in interviews, the data do not reflect such a practice occurring. As the focus of the study was on implementation processes, and there was no effort to identify the frequency of perspectives held by either Shahbazim or nurses, the relevance of findings for any particular shift, home, or site cannot be determined. Observational data did not confirm all self-reported practices though findings are supported via observation or asking other staff about examples and comparing their "stories." These findings, however, should be treated as preliminary. More extensive and formal observations are necessary to confirm study conclusions. Finally, the Green House model continues to evolve as educational and support programs are updated and expanded. Continuing relevance of the models cannot be anticipated as the context continues to evolve.

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