GERIATRICS EDUCATION AND
INNOVATION (GErI) CORNER

Development and implementation of a novel skilled nursing facility certified nursing assistant leadership academy

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BACKGROUND

Certified Nursing Assistants (CNAs) are vital workers in skilled nursing facilities (SNFs). According to the Institute for Healthcare Improvement, CNAs spend more time with residents in nursing homes than any other workers.[1] CNAs face many challenges in the workplace, including workforce shortages, high job turnover, and burnout, all intensified by the COVID-19 pandemic.[1] Furthermore, due to the brief nature and limited scope of certification training, CNAs are often unfamiliar with infection control procedures and quality improvement (QI) processes and often excluded from Quality Assurance and Performance Improvement meetings.

Project Extension for Community Healthcare Outcomes (ECHO™) is an educational model that provides telementoring to healthcare workers. It has been successfully used across a variety of topic areas, trainee and provider types, healthcare settings, geographic areas, and patient populations. It has shown promise as a rapid means to disseminate best practices in SNFs across a variety of topics for the education and training

of nurses and healthcare administrators.[2,3] However, in prior published work, CNAs have not been the main target group for training.

Given the important role of CNAs in SNFs, providing training and empowerment for CNAs to enact organizational changes within their facilities to support residents and promote better health outcomes can be an important way to address gaps in healthcare for SNF residents, promote age-friendly SNFs, and address social determinants of health. We describe the development and implementation of a novel educational intervention, entitled CNA Leadership Academy, utilizing Project ECHO™ to teach geriatrics principles, QI, and leadership skills to CNAs in SNFs.

METHODS

We used Kern's 6-step approach[4] for curriculum development and mixed-methods pre-post surveys and qualitative analysis for curriculum evaluation. The (i) *problem identification and general needs assessment*, was outlined in the background section. The (ii) *targeted needs assessment* was

conducted in the form of informal interviews with CNAs, other SNF staff, nursing education experts, and geriatricians to gather opinions on the most important topics for the curriculum as well as educational strategies. (iii) *Goals and objectives* for the entire series were drafted based on needs assessment results and underwent iterative edits by the core curriculum development team. (iv) *Educational strategies* were developed based on the Project ECHO™ model and included didactic lectures, case discussions, and real-world application of QI principles at each session. Participants were asked to describe their best quality as an icebreaker and self-empowerment tool in the first session. Session didactic topics were: Introduction to ECHO and Age-Friendly Care & Communication; COVID-19 Health Disparities, Vaccine Hesitancy; Transitions of Care & Documentation; Dementia; Depression & Social Isolation; Advance Care Planning; Maintaining & Promoting Mobility; and Resilience Techniques. CNAs learned and participated in self-care exercises including relaxation, meditation, and journaling. Leadership was emphasized through role modeling de-identified real work experiences. (v) *Implementation*: CNAs from multiple SNFs participated in eight 60-min weekly sessions via videoconferencing. Sessions were led by a nurse-educator and geriatrician. Sessions consisted of a 20-min didactic, followed by QI education, and participant case discussions of real-life situations with residents. (vi) Evaluation: Participants completed pre-post surveys with Likert Scale and free-text responses regarding self-efficacy and confidence. Data collection was approved by the institutional review board, and consent was waived as all identifiers were removed. Participants were offered a financial stipend ($250 after the first session, $750 at series end, contingent on: (1) Attending five of eight sessions; (2) Completing pre-post surveys; (3) Presenting a case/operational challenge/QI project) to boost engagement and offset time requirements.

RESULTS

General and targeted needs assessments demonstrated high CNA turnover, low job satisfaction, and need for professional development opportunities. Goals and objectives were developed focusing on leadership and QI skills. The educational strategy utilized was Project ECHO™ telementoring. Implementation included an initial series (Cohort 1) with seven CNA participants to pilot the curriculum and collect feedback for educational QI, followed by a finalized series (Cohort 2) with 16 CNA participants who also developed QI projects. Participants were mostly African American (Cohort 1: 57%, Cohort 2: 69%), seasoned CNAs (Cohort 1: average years as a CNA = 17.1; Cohort 2: average years as a CNA = 14.2), and female (Cohort 1: 100%, Cohort 2: 81%). Participants described their best qualities in an icebreaker as "empathy," "team player," and "able to work short [with limited staff]."

Evaluation with pre-post surveys demonstrated improved self-efficacy across multiple domains including the ability to escalate care with concerns, advance care planning, and QI (Table 1). Case presentations included: challenging resident behaviors (dementia symptoms, illegal drug use), mealtime and eating issues, and lack of leadership support. Participants partnered at sites on QI projects including the following: improving laundry access for residents, improving communication with nursing on observed clinical changes, improving meal-time efficiency, and developing a preceptor program for new CNA training to promote teamwork. Qualitative analysis highlighted participants' self-perceived skill development and reduction of professional isolation. One participant remarked they enjoyed, "Feeling part of a movement to make positive changes in our facilities." Another responded, "How everyone engaged in the conversation and shared their personal stories relating to the topics we were talking about. I also

TABLE 1 Pre- and post-training self-efficacy of clinical skills for certified nursing assistants (CNAs).

Self-efficacy on clinical skills (7-Point Likert Scale[a])	Avg. Pre-	Avg. Post-	Δ	*p*-value
Ability to manage behaviors in residents with dementia	5.5	6	0.5	0.178
Ability to recognize depression in residents	5.7	6.3	0.6	0.082
Ability to help new residents feel welcome and secure	6.1	6.7	0.5	0.088
Ability to mobilize residents safely	6	6.5	0.5	0.088
Ability to escalate care when I am concerned about a resident	5.9	6.5	0.7	**0.027****
Ability to describe advanced care planning to residents	5.1	6.2	1.1	**0.002****
Ability to participate in quality improvement efforts in my facility	5.5	6.3	0.8	0.054

[a]7-Point Likert Scale: 1 = "none or no skill at all", 2 = "vague knowledge, skills, or competence ", 3 = "slight knowledge, skills or competence", 4 = "average among my peers", 5 = "competent", 6 = "very competent", 7 = "expert, teach others".

**Significant *p*-value at <0.05, Paired *t*-test.

liked how everyone was very supportive of others and not judgmental."

DISCUSSION

We demonstrated that a CNA Leadership Academy is feasible to implement, and a welcomed program to empower CNAs with new skills. Participants were eager to continue QI efforts at their facilities. Icebreaker activities suggest that seasoned CNAs self-identify positive leadership traits as their best qualities and may be an untapped resource as agents of positive change and QI. Mixed methods evaluation data suggest that using Project ECHO™ to train CNAs may improve CNA self-efficacy in job-related skills and reduce professional isolation. This study is limited by the short duration of follow-up. Additionally, we observed a ceiling for self-efficacy scores; nonetheless, the pre-post evaluation did demonstrate a change and by series end we expected those who felt confident in their skills to reach a level of expertise above competency.

CONCLUSION

This is a replicable and scalable educational model for CNAs in SNFs, which may help impact workforce challenges. Future directions include evaluating longer-term workforce retention after this intervention.

AUTHOR CONTRIBUTIONS

Study concept and design: Lauren J. Gleason, Katherine Thompson, Monica Long, and Jeffrey Graupner. Acquisition of data: Lauren J. Gleason, Jeffrey Graupner, Patrick Gower, Kanika Mittal. Analysis and interpretation of data: Jeffrey Graupner, Katherine Thompson, and Lauren J. Gleason. Drafting of the manuscript: Lauren J. Gleason, Katherine Thompson, and Jeffrey Graupner. Critical revision of the manuscript for important intellectual content: Lauren J. Gleason, Monica Long, Jeffrey Graupner, Renee Kroplewski, Patrick Gower, Kanika Mittal, Daniel Johnson, Monica Long, and Katherine Thompson.

CONFLICT OF INTEREST STATEMENT

The authors have no competing interests or conflicts to declare.

SPONSOR'S ROLE

The funding sources were not involved in the design, analysis, or reporting of the results.

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