Sharing Lessons From Successes

Long-term Care Facilities That Weathered the Storm of COVID-19 and Staffing Crises

Nicky Martin, MPA, LNHA, QCP, CDP, IP; Barbara Frank, MPA; David Farrell, MSW, LNHA; Cathie Brady, MS; Janice Dixon-Hall, IP; Jessica Mueller, BA; Marilyn Rantz, PhD, RN, FAAN

ABSTRACT

Purpose: To identify leadership styles and staffing strategies in Missouri long-term care (LTC) facilities that stood out among their peers as "positive deviants" with regard to COVID-19 infections and staffing shortages.

Methods: Statewide survey of all LTC facilities to identify exemplar facilities with stable staffing and low rates of COVID-19. Interviews with senior leaders were conducted in 10 facilities in the state to understand the strategies employed that led to these "positive outliers." A result-based educational program was designed to describe their actions and staff reactions.

Results: Exemplar leaders used transformational leadership style. Top reasons for their success were as follows: (1) trusting and supportive staff relationships; (2) positive presence and communication; and (3) use of consistent staffing assignments. Strong statewide participation was noted in the educational programs.

Keywords: consistent assignment, COVID-19, long-term care facilities, positive deviants, staffing, staffing stability

Nursing homes (NHs) and assisted living facilities (ALFs) throughout the United States experienced 2 terribly difficult crises during the past 2 years. First, the wave of COVID-19 had a most devastating impact on NHs. The United States has experienced just over 1.1 million resident COVID-19 confirmed cases and 154 250 total COVID-19 resident deaths in 15 173 NHs reporting data as of July 24, 2022.[1] Between residents and staff, more than 201 000 died as of January 30, 2022, that is, 23% of all COVID-19 deaths in the United States, a disproportionate share affecting NHs.[2]

Second, during the spread of COVID-19, NHs were also experiencing staffing shortages that were reported at crisis levels. Remaining staff struggled to be there to care for residents, working long hours of additional time, trying to hold things together with fewer and fewer staff. Reports came from across the country, especially when surges of the virus infected so many staff members who were then unable to work, exacerbating already slim numbers of staff[3] because

__Author Affiliations:__ Sinclair School of Nursing, University of Missouri, Columbia (Mss Martin, Dixon-Hall, and Mueller and Dr Rantz); B&F Consulting, Warren, Rhode Island (Ms Frank); Alameda County Public Health Department, Oakland, California (Mr Farrell); and B&F Consulting, Charlestown, Rhode Island (Ms Brady).

This project benefitted greatly from the input of all long-term care homes in Missouri, particularly those that completed a survey, which gave us the direction to identify the exemplar homes. The authors thank and appreciate participation of the following individuals: E. W. Thompson Health & Rehabilitation Center—Kristen West, Amanda Harris, Sara Miesner; Heritage Nursing Center—Skilled Nursing By Americare—Michelle Tolbert, Lisa Tucker; Independence Care Center of Perry County—Dana Korando, Casey Ellis; Luther Manor Retirement & Nursing Center—Tim Brooks, Heather Lohmeyer; NHC Healthcare, St Charles—Seth Peimann, Denise Benson, Daphne Bollinger; Parkview Health Care Facility—Tim Francka; Shelbina Villa—Kim Thompson, Ashley Arnett, Muriah Schuman; Spring Ridge—Assisted Living By Americare—Christina Bloomer; Springfield Rehab & Health Care Center—Troy Lacey; Villages of St Peters Memory Care—Debra Tappe, Carolyn Reagan.

The authors are grateful to the QIPMO, Coaching, and ICAR teams for their support and coordination efforts from the beginning of this project: QIPMO team members—Wendy Boren, Katy Nguyen, Crystal Plank, Debbie Pool, and Melody Schrock; Coaching team members—Mark Francis and Libby Youse; ICAR team members—Shari Kist, Amy Moenning, and Sue Shumate. The authors are also grateful to their consultants, who were enormously helpful, B&F Consulting, and David Farrell.

The authors appreciate the Missouri Department of Health and Senior Services for the financial support of the QIPMO and ICAR projects, grant nos. AOC19380271 and 49240, respectively. Finally, the authors express their sincere gratitude to all the nursing home residents, families, staff, and organizations that have battled tirelessly during this pandemic.

The authors declare no conflict of interest.

Supplemental digital content is available for this article. Direct URL citation appears in the printed text and is provided in the HTML and PDF versions of this article on the journal's website (www.jncqjournal.com).

__Correspondence:__ Nicky Martin, MPA, LNHA, QCP, CDP, IP, Sinclair School of Nursing, University of Missouri, 915 Hitt St, Columbia, MO 65212 (martincaro@missouri.edu).

Accepted for publication: August 17, 2022

Early Access: September 26, 2022

DOI: 10.1097/NCQ.0000000000000662

Copyright © 2022 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.

they had to quarantine for a period of time. Staff reported reluctance to take time off, because there were no replacements they could count on to care for residents. Staff also reported feeling unbelievable amounts of stress.[3]

Staffing shortages were compounded by the "unknowns" of COVID-19, how it was transmitted, what could be done to slow/stop the spread, and learning what treatments, if any, would help people recover from the infection. Fear spread throughout the long-term care (LTC) industry,[4,5] exacerbated by lack of registered nurses to guide practices to best mitigate COVID-19 infections and spread.[6] Courageous staff continued to be there for people, but the stress of COVID-19 took its toll on some staff who left their jobs. NHs experiencing severe COVID-19 outbreaks had significant drops in staffing levels, especially in nursing assistants,[7] the predominant caregiver in NHs. New employees were difficult to find as more people stayed at home to care for children whose schools closed and shifted to remote learning. Rural areas suffered the worst shortages of nursing assistants.[8] Suddenly, the supply of potential workers slowed or stopped for many employers.[3,9] More than 15% of jobs were lost in NHs, 241 000 total, from January 2020 to March 2022 in an industry that has historically been affected by high levels of direct care turnover.[9]

Throughout these staffing and COVID-19 crises, the authors learned about some NHs and ALFs that had stable staff and had low or no occurrences of COVID-19. These "outliers" or "successes," in the face of an industry-wide staffing crisis, sparked an idea to explore the topic of staffing stability in LTC by learning from those who had done better in the face of the same challenges. This spark evolved into an idea to prepare an evidence-based Staffing Stability educational program to offer statewide to all LTC facilities as well as effective strategies to best manage through likely upcoming COVID-19 outbreaks. This program aimed to help stem the tide of continued reports of staff shortages.

BACKGROUND

The *Quality Improvement Program for Missouri* (QIPMO) is a cooperative project between the Missouri Department of Health and Senior Services (MODHSS) and the MU Sinclair School of Nursing. Quality improvement nurses and leadership coaches with QIPMO contact and offer *confidential* clinical and operational consultation to LTC facilities. The content of these visits is evidence-based best practice information to help the homes and leaders improve the quality of care for their residents.

In the 1990s, faculty at the Sinclair School of Nursing, University of Missouri, in cooperation with the Missouri Division of Aging, developed and tested QIPMO to improve quality of care in Missouri NHs. With positive research results, QIPMO was adopted in 1999 as an ongoing program in Missouri[10-12] and continues today. QIPMO's foundation was a randomized clinical trial of feedback reports and on-site clinical consultation by nurses with graduate education in geriatric nursing.[10,11] Key findings were that QIPMO improves quality of care outcomes of the residents and reduces cost. Later evaluations have similar results, including a care cost savings of more than $4.7 million statewide.[12,13]

In 2013, *Leadership Coaching* was added to QIPMO to assist administrators and key management to meet NH leadership challenges. *Our licensed NH administrator (LNHA) coaches* offer assistance with complex problems in business and personnel operations.[14] The service is tailored to meet individual needs within the context of each person's unique operational situation. (Currently, there are 5 QIPMO nurses, 4 Leadership Coaches [one of whom serves as the team leader], a project coordinator, and an administrative staff member supporting the team.)

In 2020, QIPMO partnered with MODHSS with funding through the Centers for Disease Control and Prevention in response to COVID-19. In doing so, QIPMO has formed a new *Infection Control Assessment and Response (ICAR) team* with a primary goal of assisting Missouri LTC facilities to navigate the challenges of the COVID-19 pandemic and other infectious diseases. (Currently, there are 4 nurses/infection prevention experts, who work collaboratively with the QIPMO team and supported by the QIPMO project coordinator and administrative staff.)

Similar to the QIPMO and Coaching teams, members of the ICAR team are available for voluntary, *no-cost visits* (virtual and/or in-person) to any Missouri residential care, ALF, and NH. Visits are confidential and are intended to be consultative and collaborative in nature with a nonregulatory focus to evaluate infection control practices. Facilities interested in assessing

Copyright © 2022 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.

their infection prevention programs and partnering to enhance patient safety through facility assessment, staff education, and training contact the ICAR team for services.

The QIPMO and ICAR teams generated the spark for the statewide Staffing Stability and COVID Update Educational Program. They searched for people with expertise in staffing stability and effective leadership and management practices, experience with statewide educational program development, as well as expertise in managing COVID-19. B&F Consulting and David Farrell were hired to work with the teams to learn from the exemplars and design a statewide series of educational programs.

Topics were to include staffing stability and leadership practices that not only stabilize staffing but also promote use of evidence-based best practices for leadership and clinical care. These topics were to be presented within the context of evidence-based management of COVID-19. To make the program more relevant to participants, the expert consultants and the QIPMO and ICAR teams decided to base the content on lessons learned through interviews with 10 exemplar facilities within the state, both NHs and ALFs, doing exceptionally well with stable staff and managing COVID-19 infections.

METHODS

The methods used to guide identification of successful NHs and ALFs that managed to maintain staffing stability and low or no occurrences of COVID-19 are based on the theory of Positive Deviance.[15]

> Positive Deviance is an approach to social change that enables communities to discover the wisdom they already have, and then act on it . . . in every community there are certain individuals whose uncommon practices or behaviors enable them to find better solutions to problems than their neighbors who have access to the same resources. These individuals are called "positive" because they were doing things right, and "deviants" because they engaged in behaviors that most do not.[15(pxviii)]

Statewide survey

To identify the "positive deviants" or "successes," a statewide survey was drafted and refined by members of the QIPMO and ICAR teams, then reviewed by the consultants, pilot-tested among team members, and refined before sending out electronically to all LTC facilities in the state. Advertising via electronic statewide newsletters of NH and ALF associations, the Department of Health and Senior Services, and QIPMO helped spread the word that administrators would be receiving an email about the survey with a link to participate.

The survey was conducted in February 2022 and consisted of 7 questions covering turnover of leaders (administrators and director of nursing) since January of 2020, reliance on agency staffing, and numbers of COVID-19 cases among residents during specific time frames after January 2021. An additional open-ended question asked about innovations that help in managing infection control and staffing stability; the last question asked about any struggles they wanted to share. Demographic information was solicited so that we could contact administrators, if willing, for a potential interview for more details about their experience to better understand strategies they may have discovered that worked well.

Snowball sampling[16] was used by QIPMO and ICAR staff to contact some administrators they observed whose facilities appeared to have stable staff in addition to low or no COVID-19. They encouraged administrators to complete the survey so that their data could be compared with others in the state to locate the best performing "successes."

A total of 99 administrators completed the survey, 91 NHs and 8 ALFs. The survey results were summarized, both quantitative and qualitative data. Facilities were scored for their leadership turnover (1-10), use of agency staff (1-5), COVID-19 rate (1-5), and vaccination rate (1-5), with a scoring rubric (total 5-25) indicating higher scores are better. Facilities were rank-ordered from the best into 2 groups, NHs and ALFs. Results were iteratively reviewed by the QIPMO and ICAR teams and consultants using Zoom so that all could participate in 3 sessions. Additional information was added between sessions as the team wanted to consider size of each facility, location within the state, urban and rural locations, and answers to open-ended innovations question. By the third team discussion, they were satisfied that the state was well represented and exemplar performing facilities had been located, based on the data collected. Final sample of exemplars selected were 7 NHs and 3 ALFs, with an average survey total score

Copyright © 2022 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.

of 20, varying in size and location: NHs ranged from 64 to 146 beds, with 5 rural, 1 urban, 1 metro; ALFs ranged from 21 to 44 beds, with 1 rural and 2 urban.

In-depth interviews

QIPMO and ICAR staff who were familiar with each facility identified as exemplar contacted administrators and asked whether they would be willing to participate in an interview for about an hour. Staff explained they would come onsite at a convenient time for both administrator and director of nursing, if possible. The QIPMO or ICAR team member would bring a computer with Zoom capabilities and ensure connections were working properly for an interview that would be conducted by the consultants. All 10 administrators were informed consented verbally, as approved by the institutional review board, and agreed to participate and expressed their appreciation in being asked to participate.

Interview questions were prepared by the consultants to solicit the experiences of leaders and direct care staff during the early days of the COVID-19 pandemic through the present and how they managed both infection control and staffing issues precipitated by the pandemic. Probes helped explore strategies tried and discovered that worked, as well as those that did not.

Extensive field notes were taken so that content analysis could guide development of the educational program and provide real-world examples of individual innovations, insights, and common practices that were keys to their successes. Interviews typically took place in the administrator's office or conference room with computer equipment that the QIPMO/ICAR staff made sure was working well before each interview. Most interviews lasted a few minutes more than 1 hour, as leaders (administrator and director of nursing) were willing to talk and explain what they experienced and what they thought had worked well or did not work well to retain and help staff stay resilient during their stressful work.

There were positive spillover effects, triggered by the interviews, for the exemplars' leadership teams. The first effect was cathartic. Participants have been through and are continuing to operate in a crisis that has had loss and hardship. For many, this was the first time they were telling their story and grieving. It was also the first time that they were hearing how well they performed compared with their peers. They were able to reflect on keys to their success and to hear perspectives from one another. At conclusion of the interviews, we asked that they share the news with their staff about how well they have performed and to cement the best practices and strategies to support future success.

After the interview data were reviewed for key points of consistent agreement, results and impressions were discussed at 3 iterative meetings with the QIPMO/ICAR team and consultants. A plan resulted for a series of 3 educational programs tailored to statewide needs with multiple exemplar leadership and COVID-19 management examples to encourage dissemination of best practices.

KEY QUALITATIVE RESULTS OF INTERVIEWS

Interviews provided firsthand accounts of leadership styles of exemplar homes' leadership teams. All leaders of the 10 exemplar facilities used transformational leadership style. Transformational leadership style, a term first coined by James MacGregor Burns and transformed by Bernard Bass,[17] encompasses characteristics such as team first attitudes, trusting, open communication, and a high tolerance for risk.[18] Most of the senior leaders interviewed were the first to suit up and enter COVID-19 care areas and last to leave. These leaders could have chosen to watch their team members enter an area that had potential to change their lives forever or to be the first to enter and lead their teams through the biggest challenge of their careers; these exemplars chose the latter.

The following are quotes from leaders that are representative of the consistent views and perspectives across the exemplar facilities' leadership teams that we interviewed. The leadership practices illustrated in these quotes were keys to their better outcomes:

> The only things I did differently were to have heart and flexibility.
>
> We saw what was happening to the facilities around us, so we planned for what would happen to us too. We educated, shared information timely, and didn't lose their trust. (Administrator at a skilled nursing facility [SNF] in the suburbs of a major city)
>
> In our daily huddles, I told the staff that if the residents must stop their lives, then we need to

Copyright © 2022 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.

> stop ours outside of work. The staff didn't go anywhere. They did their part outside of work. (Administrator at an ALF in a rural community)

> There were no set rules. We made it work each day. We let people swap shifts to make it work. Staff saw our flexibility and effort and they stepped up. (Administrator at an SNF in a rural community)

> Our charge nurses went around to personally thank each CNA at the end of the shift. (Administrator of an SNF in a mid-sized city)

> Used to be staff needed to impress the boss; now the boss needs to impress the staff. (Administrator at an ALF in an urban community)

Some facilities incentivized some actions that seemed particularly important in the context of COVID-19, such as giving raises for vaccinations. Other facilities provided staff referral bonuses, mentor and mentee incentives, raffles, and encouraged staff to "give a star" to another coworker so their coworker received a couple hours of paid time off. The Supplemental Digital Content, Table (available at: http://links.lww.com/JNCQ/B41) summarizes other insights of exemplar leadership teams.

Staff were heroic, often going to extremes to ensure "their residents" were cared for: working amazing amounts of overtime, being very careful when away from work to consistently protect themselves from the virus to avoid bringing it into their facility, and coming up with creative ways to help residents and staff cope with the experience of isolation without family or other visitors. One administrator actually moved into the building and lived there 24 hours a day for weeks, so she was there to lead staff and help with residents who experienced infection or impact of isolation.

Leaders described themselves as "obsessive compulsive" about infection control. They went above and beyond the guidelines, educated and supported their staff, and held everyone to high standards. This vigilance helped staff feel safe coming to work and staff were extremely committed to doing their part. Leaders were persistent and consistent in their communication, making sure every staff member's every question was answered. They were flexible with staff about time off for family needs and generous in supporting staff when they or their family had COVID-19. Caring for staff, going the extra mile to support them, and being flexible with staff's situations generated reciprocity. Staff, in turn, took the extra shifts to cover for workmates and pitched in to make each day work. Leaders' commitment generated staff's commitment.

The exemplar homes knew that their actions, both at work and outside of work, would affect the lives of residents. One infection preventionist at a large urban SNF said, "We all knew that actions in our personal lives affected resident safety and we had personal accountability. What we did outside of work kept residents safe." A resounding, "We don't expect our staff to do anything we won't do," was a common theme among successful leaders.

These leaders were certain that they would be the ones who their staff turned to for guidance and support and they were up to the challenge. The administrator in an SNF said, "Communication was key to ensuring my staff felt safe." She and her leadership team shared information on at least a daily basis and she was "very up front" with her staff as the regulations and recommendations were ever-changing and evolved and how they would ensure both resident and staff safety.

Many of the homes were quite advanced in their infection prevention and control practices and their approaches to staffing stability. One leader shared, "If they were absent because of COVID, we sent home masks, gloves and food to keep their family safe and well. And they had a paycheck." When COVID-19 ravaged NHs, these positive deviants were already in a stable, positive place, unlike most of their counterparts. They all practiced transformational leadership styles, sound clinical approaches, and relationship building with staff. They stepped up during COVID-19 by heightening their practices, educating themselves, testing their leadership skills, and trusting their instincts so that they could ensure their residents were well cared for and the staff they worked alongside were safe.

EDUCATIONAL PROGRAM

General description

The content of the 3-part educational series, *What You Do Matters: Applying Lessons Learned From the Pandemic to Staff Stability and Resident Safety*, was developed on the basis of survey findings and interviews with exemplar homes. The series was designed and presented by the consultants who provided valued knowledge on the topic of staffing stability. Short video

Copyright © 2022 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.

clips and quotes from exemplars were spaced throughout all 3 sessions to illustrate key points. Participants heard directly from their peers and identified with them. All 3 sessions shared concepts and best practices learned from exemplar homes that others could quickly implement. Handouts of key points and tools for implementation were provided and are available on the QIPMO website (https://nursinghomehelp.org/?s=what+you+do+matters).

Outline of the program

The first of the 3-part series focused on strategies to prevent and mitigate the spread of COVID-19 and was the educational program foundation. The initial session introduced leadership practices that contributed to better COVID-19 outcomes by exemplar homes. Shared strategies included overcoming vaccine hesitancy, sheltering in place, maximizing air flow, testing and treatment practices, and strategies to keep residents connected with their loved ones during the early days of the pandemic. Leaders emphasized constant communication with staff, staff education, availability to answer questions, and regular staff involvement in problem solving.

Session 2 was highly concentrated on staffing stability. It explained the phases of disaster recovery[19] and how important it was to act in ways that created stability and community among staff to build the foundation for recovery. It described how exemplar homes created the conditions for staff stability by building trust and safety. The session highlighted leaders' high standards for staff attendance and, at the same time, flexibility with staff's schedules to accommodate their family needs. Tips were shared from exemplars and consultants about screening and hiring for character and helping new staff get off to a good start. It introduced "stay interview" to check in with new staff frequently and deliberately. The consultants compared practices that perpetuate instability, such as sign-on bonuses, with practices that reinforce stability, such as "refer a friend" bonuses. Also included were ways exemplars avoided using agency staff or to maximize agency staff, if they must be used. Valuing staff was the underlying theme of the session.

Session 3 focused on organizational systems for leadership communication with staff. It explained why and what the exemplar homes did to huddle, round, and routinely engage with staff as part of their everyday operations to navigate the ever-changing landscape of COVID-19 and how this steady communication was key to their good outcomes. The session explained the theory of relational coordination[20,21]—that NHs perform better when they have frequent, timely, accurate, problem-solving communication between staff closest to residents and clinical and management leaders. Examples included rounding to "check in" on people, not to "check up" on them, pitching in and working side by side, huddling, bringing quality improvement onto units, and the importance of consistent assignment both for staffing stability and for capturing staff's intimate knowledge of residents to catch emerging problems and treat them quickly. It introduced "watch list huddles," where staff and leaders discuss the residents who "keep them up at night" and problem solve for those most vulnerable residents. Consultants explained that the exemplars triggered employees' "discretionary effort" because these leaders constantly went the extra mile to make sure their staff were okay.

Participation

All 3 sessions had successful turnouts, increasing with each session. Session 1 had 100 attendees, 2 had 118 attendees, and 3 finished with 122 attendees. Many participants had multiple facility staff members on one line. All sessions were recorded so that others could view them at a later date and are readily available, with handouts, on the QIPMO website; an additional 63 people have used this option at this time.

Participant evaluations

The 181 evaluations from participants were summed showing an overwhelmingly positive reaction to the sessions. They felt the sessions effectively relayed their peers' successes, evidence-based practices were successfully shared, and the sessions effectively taught practical strategies that could be used in other facilities. Some reactions to the sessions were as follows:

> I found it very useful to have the interviews with administrators on best practices.

> Loved the meeting information and questions to ask CNAs.

> I thought the learning provided fantastic tools for leadership success during stressful times.

Copyright © 2022 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.

CONCLUSION

The educational series asked and answered questions about why exemplars did better than their peers: "Did they have advantages or resources that other facilities didn't?" "Was it the physical structure and layout of their facility?" "Did it have to do with the acuity or age of the residents?" or "Were they just lucky?" The answer was the leadership approaches the senior leaders practice within the exemplar homes. They did not lay blame, they were the first to suit up, and they all had an open and consistent communication style that provided their staff with comfort knowing they were valued.

Exemplar SNFs and ALFs that we interviewed beat the odds. Like their peers, everything was stacked against them. Insights gleaned from these exemplar homes demonstrate that SNFs and ALFs can prevent and mitigate COVID-19 outbreaks even when they are in counties with exceptionally high positivity rates and low vaccination rates through consistent supportive high involvement leadership practices, because staff trusted their leaders. Our findings highlight the actions taken by exemplars' leadership teams that are replicable by other SNFs and ALFs across Missouri and the United States.

Other states would be wise to take a similar approach. Find your own exemplar SNFs and ALFs who beat the odds, find out how they did, and spread it to their peers. The power of the 3 webinars was the words and videos of exemplars speaking directly to their peers to illustrate key points.

REFERENCES

1. Centers for Medicare & Medicaid. Medicaid services data. Accessed August 4, 2022. https://data.cms.gov/covid-19/covid-19-nursing-home-data
2. Chidambaram P. *Over 200,000 Residents and Staff in Long-term Care Facilities Have Died From COVID-19*. Kaiser Family Foundation; 2022. Accessed August 7, 2022. https://www.kff.org/policy-watch/over-200000-residents-and-staff-in-long-term-care-facilities-have-died-from-covid-19
3. Chatterjee R. The pandemic pummeled long-term care—it may not recover quickly, experts warn. *NPR*. February 22, 2022. Accessed August 4, 2022. https://www.npr.org/sections/health-shots/2022/02/22/1081901906/the-pandemic-pummeled-long-term-care-it-may-not-recover-quickly-experts-warn
4. Pool D, Boren W. Second responders: answering the call for help in long-term care. *McKnights Long-Term Care News*. August 2020. Accessed August 7, 2022. https://www.mcknights.com/blogs/second-responders-answering-the-call-for-help-in-long-term-care
5. Popejoy L, Vogelsmeier A, Boren W, et al. A coordinated response to the COVID-19 pandemic in Missouri nursing homes. *J Nurs Care Qual*. 2020;35(4):287-292. doi:10.1097/NCQ.0000000000000504
6. Kolanowski A, Cortes TA, Mueller C, et al. A call to the CMS: mandate adequate professional nurse staffing in nursing homes. *Am J Nurs*. 2021;121(3):24-27. doi:10.1097/01.NAJ.0000737292.96068.18
7. Shen K, McGarry BE, Grabowski J, Gruber J, Gandhi AD. Staffing patterns in US nursing homes during COVID-19 outbreaks. *JAMA Health Forum*. 2022;3(7):e222151. doi:10.1001/jamahealthforum.2022.2151
8. Yang BK, Carter MW, Nelson HW. Trends in COVID-19 cases, deaths, and staffing shortages in US nursing homes by rural and urban status. *Geriatr Nurs*. 2021;42(6):1356-1361. doi:10.1016/j.gerinurse.2021.08.016
9. Bureau of Labor Statistics. *Nursing Homes Have Lost 241,000 Caregivers Since Start of the Pandemic. AHCA and NCAL Report*. Washington, DC: US Bureau of Labor Statistics; 2022. Accessed August 7, 2022. https://www.ahcancal.org/News-and-Communications/Fact-Sheets/FactSheets/BLS-MARCH2022-JOBS-REPORT.pdf
10. Popejoy LL, Rantz MJ, Conn V, Wipke-Tevis D, Grando V, Porter R. Improving quality of care in nursing facilities: the gerontological clinical nurse specialist as research nurse consultant. *J Gerontol Nurs*. 2000;26(4):6-13. doi:10.3928/0098-9134-20000401-04
11. Rantz MJ, Popejoy L, Petroski GF, et al. Randomized clinical trial of a quality improvement intervention in nursing homes. *Gerontologist*. 2001;41(4):525-538. doi:10.1093/geront/41.4.525
12. Rantz MJ, Vogelsmeier A, Manion P, et al. A statewide strategy to improve quality of care in nursing facilities. *Gerontologist*. 2003;43(2):248-258. doi:10.1093/geront/43.2.248
13. Rantz MJ, Cheshire D, Flesner M, et al. Helping nursing homes "at risk" for quality problems: a statewide evaluation. *Geriatr Nurs*. 2009;30(4):238-249. doi:10.1016/j.gerinurse.2008.09.003
14. Phillips LJ, Oyewusi C, Youse E, Rantz MJ. Impact of survey readiness training on nursing home quality of care. Paper presented at: The Gerontological Society of America's 70th Annual Scientific Meeting; November 14-18, 2018; Boston, MA. Accessed August 7, 2022. https://agingmo.com/wp-content/uploads/2021/05/IA-Impact-of-Survey-Readiness-2S1-2018.pdf
15. Singhal A, Buscell P, Lindberg C. *Inviting Everyone: Healing Healthcare Through Positive Deviance*. PlexusPress; 2010.
16. Etikan I, Alkassim R, Abubakar S. Comparison of snowball sampling and sequential sampling technique. *Biom Biostat Int J*. 2016;3(1):6-7. doi:10.15406/bbij.2016.03.00055
17. Bass BM, Riggio RE. The transformational model of leadership. In: *Leading Organizations: Perspectives for a New Era*. Vol 2. Sage Publishing; 2010:76-86. doi:10.5860/choice.36-5182
18. Robbins B, Davidhizar R. Transformational leadership in health care today. *Health Care Manag*. 2020;39(3):117-121. doi:10.1097/HCM.0000000000000296
19. Tierney K, Oliver-Smith A. Social dimensions of disaster recovery. *Int J Mass Emerg Disasters*. 2012;30(2):123-146.
20. Bolton R, Logan C, Gittell JH. Revisiting relational coordination: a systematic review. *J Appl Behav Sci*. 2021;57(3):290-322. doi:10.1177/0021886321991597
21. Gittell JH, Seidner R, Wimbush J. A relational model of how high-performance work systems work. *Organ Sci*. 2010;21(2):490-506. doi:10.1287/orsc.1090.0446

Copyright © 2022 Wolters Kluwer Health, Inc. Unauthorized reproduction of this article is prohibited.