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Work Organization and Health Issues in Long-Term Care Centers:

Comparison of Perceptions Between Caregivers and Management

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Abstract

This qualitative study explored common and divergent perceptions of caregivers and managers regarding occupational health and safety, work organization, and psychosocial concerns in long-term care centers. Both common and differing issues were identified. Both groups agreed on the importance of ergonomic concerns, the high prevalence of stress, and receptiveness to participatory health promotion programs. However, numerous work organization issues and physical and psychosocial workplace hazards were identified by certified nursing assistants but were not mentioned by managers. The results suggest that different perceptions naturally arise from people's varying positions in the occupational hierarchy and their consequent exposures to health and safety hazards. Improved systems of communication that allow frontline workers to express their concerns would make it possible to create solutions to these problems.

The nursing home sector is reported to be the second most hazardous in the United States in terms of recognized work-related injuries and illnesses (U.S. Department of Labor, Bureau of Labor Statistics, 2004). Nursing assistants, who are predominately women of low educational level and socioeconomic status, account for 85% of nursing staff (Institute of Medicine, 1996) and provide up to 90% of frontline care in nursing homes. They engage in

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work that is both physically and psychologically demanding and juggle multiple work and family responsibilities. According to the National Nursing Assistant Survey of 3,017 certified nursing assistants (CNAs) working in nursing homes in 2004-2005, more than half incurred at least one work-related injury within the past year and almost one quarter were unable to work for at least 1 day due to the injury (Squillace et al., 2009).

Back pain and injury are very common among CNAs and have been repeatedly linked to lifting, transferring, and repositioning residents (Garg & Owen, 1992; Garg, Owen, & Carlson, 1992; Owen & Garg, 1991). Psychological stress, in the form of high demand and low control over work conditions, is also prevalent among this population. Recognized risk factors for stress include heavy workload and short staffing (Lapane & Hughes, 2007), caring for residents with dementia and cognitive impairments (Brodsky, Draper, & Low, 2003; Chappell, 1994; D.G. Morgan, Semchuk, Stewart, & D'Arcy, 2002), and work organization features such as being undervalued by management and shortage of essential resources (Dunn, Rout, Carson, & Ritter, 1994).

There is general agreement that safety culture in the work environment emerges from shared beliefs, attitudes, and values of the organization's personnel (Davies, Nutley, & Mannion, 2000). Previous studies have shown that managers' attitudes, behaviors, and support have significant influence on staff job strain, turnover, job satisfaction, and the safety climate in the environment (Anderson, Corazzini, & McDaniel, 2004; Y.H. Huang, Ho, Smith, & Chen, 2006; Sundin, Hochwalder, Bildt, & Lisspers, 2007). Therefore, the presence of shared beliefs and attitudes between caregivers and managers means a lot to the long-term care workforce.

In addition, employee involvement and management commitment are both important for improvement of workplace health and safety. However, employees' perceptions of occupational safety and health risks may be different from those of the managers. A study of 40 small local businesses reported that managers had a generally more positive perception of workplace safety culture than employees (Parker et al., 2007). Another study of intensive care units in a single facility reported that directors generally overestimated teamwork and work conditions relative to staff experience (D.T. Huang et al., 2007). The extant literature on health and safety hazards rely mostly on CNAs' perceptions (Sofie, Belza, & Young, 2003); few studies reported the health and safety concerns from managers' perspectives or compared the perceptions of CNAs and managers in long-term care centers.

Therefore, the purpose of this study was to (a) compare the perceptions between CNAs and managers regarding their views on workplace health and safety, work organization, and psychosocial concerns; (b) learn about worker-management interaction from both perspectives; and (c) assess managers' potential support of worker participatory activities for improving employee health. The study was carried out as part of a selection process to identify appropriate sites for an intervention involving both occupational health and health promotion.

Method

Study Design

We conducted open-ended individual interviews with nursing home administrators and directors of nursing and focus groups with CNAs at the same center. Both data collection activities sought qualitative information on perceptions of workplace health and safety, work organization, psychosocial concerns, and commitment to future health promotion activities. Information collected from CNAs and managers was coded from broad themes and compared. We used an exploratory qualitative design because qualitative research provides well-established methods for investigating complex and poorly understood organizational and human phenomena (Mergler, 1999).

Setting

All nursing homes participating in this study were part of a large chain that had implemented a “no-lift” or “safe resident handling” program in all of its New England facilities approximately 2 years prior to our investigation. The participating company operates 217 long-term care facilities in 12 states in the eastern United States. Some, but not all, facilities are unionized. Each facility has approximately 100 to 150 employees, 50 to 80 of whom are clinical staff members. Turnover varies widely among all facilities, from very low to up to 50% per year. The company had agreed to allow the investigators to implement independently designed, participatory programs in a few selected facilities linking employee occupational health and health promotion.

Using a list of research criteria related to management style, work organization, and managers' anticipated openness to the new program, the company's northeastern regional director for health and wellness suggested four possible intervention centers. These candidate centers did not have current health promotion programs in place. The study design also called for three “control centers” with employee wellness programs already underway. Three centers with a greater level of structured wellness activities (e.g., healthy eating, smoking cessation, stress reduction) relative to other centers in the same company were selected as the control candidates. Thus, a total of seven nursing homes in Massachusetts, Rhode Island, and Maine were chosen for this preintervention study.

Sample and Data Collection

Management Interviews—Individual interviews with center administrators and directors of nursing were scheduled for 1 hour each in their office. Management interviews were conducted to gain a better sense of managers' views on work environment and determine their interest in and commitment to the participatory health promotion program.

Focus Groups—To ensure a dynamic discussion and broad representation, CNAs at each center were recruited from different workshifts and units. Each focus group met twice, for 90 minutes each, at 2-week intervals. At most sites, two separate focus groups were recruited to allow representation from all shifts. Focus groups were limited to 10 participants in a private room to provide an atmosphere in which conversation could flow freely. Each

focus group participant was compensated \$20 for completing the first session and another \$30 for completing the second session.

One experienced lead researcher (M.F.) and one research assistant conducted both the interviews and focus groups. The key topics were similar for the focus groups and management interviews (Table 1), covering health and safety concerns and the no-lift program, worker participation, and health promotion programs. The study's purpose and procedure were explained first, and participants were asked to sign a consent form. All interviews and focus groups were audiorecorded. Each focus group participant chose a pseudonym to protect his or her identity. The electronic versions of the interviews (i.e., audio materials and transcripts) were stored on password-protected computers. Recordings were transcribed by a professional, with both recordings and transcripts locked in a secure place. The study was approved by the university's Institutional Review Board.

Data Analysis

A provisional “start list” of codes was developed based on the existing literature, question categories for focus groups and interviews, and the researchers' experience. This code structure was used to organize the first two transcripts and was then reviewed for logic and breadth and revised as necessary by the research team, which included a lead researcher (M.F.) and three research assistants (Y.Z., L.B., S.Q.). The primary codes included workplace health and safety, work organization, psychosocial concerns, and health promotion programs. Transcripts were then imported into NVivo 7 (QSR International, Victoria, Australia) for coding and analysis. Two research assistants, who had received 4-hour intensive training in NVivo 7, read the transcripts, identified subthemes and emergent themes, and coded relevant direct quotes in the software. The code structure and quotes were then discussed by the research team. No glaring discrepancies were found. Small discrepancies between team members were resolved through interpretive discussions, consensus building, and refinement of code definitions as needed. The resulting data were output from NVivo 7, and a summary of codes and quotes for focus groups and management interviews was generated separately. The summary of focus group codes and issues in each center was then mailed to the same focus group participants for interpretation and validation.

Results

Sample

Fourteen individual interviews with center administrators and directors of nursing were completed in June 2007. Four of 7 administrators and 5 of 7 directors of nursing were women. All administrators and directors of nursing were White, non-Hispanic. The average length of tenure for administrators and directors of nursing was 4 years.

Twenty-seven focus groups were conducted at seven centers from July 2007 to March 2008. The average number of CNAs participating in each focus group was 6. A total of 81 CNAs participated in focus groups: 94% were women, 69% were White, 27% were Black, 3% were Asian, 1% were American Indian, and 30% were Hispanic.

Workplace Issues

No focus group participants expressed any disagreement with the list of mailed codes and issues. There were no important differences between topics or opinions from administrators and directors of nursing in the same facilities, so management interview data were combined to compare with the focus groups. The same four primary categories were retained at the end of analysis: workplace health and safety, work organization, psychosocial concerns, and health promotion programs.

Workplace Health and Safety—The workplace health and safety category included reports in five subcategories: Ergonomic concerns, infectious diseases, trip hazards, combative residents, and needle sticks.

Resident handling was one of the biggest concerns in both focus groups and management interviews. Participants in the focus groups repeatedly mentioned the physical risks associated with lifting and transferring residents and the resultant injuries to their backs and shoulders. Both CNAs and managers agreed the corporate-wide no-lift program had improved conditions and reduced injuries.

One CNA said, “The lifts [machines] are pretty good, and so there is less stress on your back with lifting people.” The managers agreed that there had been “a significant decrease in injuries of employees” after introduction of the no-lift program. Both CNAs and managers believed the staff had received sufficient training about how to use lifting equipment correctly.

CNAs and managers agreed in part about the causes of injuries with resident handling. Managers expressed that workers were still getting injured because of manually lifting residents, which might be quicker than using lifts or coaxing “residents afraid of [the mechanical] lifts.” Similarly, CNAs said that time strain and residents becoming combative during lifting were some reasons for noncompliance with the lift equipment. One CNA said, “We are a no-lift facility...but we do lift, because sometimes you just don't have the time to do it, to go and get the machine.” However, some managers also attributed the injuries to “people [weren't] following the plan of care,” while in contrast “not having enough people to do the lifting” (staffing issue) and “work[ing] with somebody that doesn't know the floor” were cited by CNAs as the major causes of injuries.

When asked about workplace health and safety concerns, most managers focused only on ergonomics issues and the no-lift program. However, CNAs also discussed a number of other occupational hazards, none of which were acknowledged in management interviews. For example, focus group participants mentioned that a number of residents had infections such as methicillin-resistant *Staphylococcus Aureus*, vancomycin-resistant *Enterococci*, tuberculosis, or shingles. CNAs believed that failure of nurses to transfer information regarding residents' infectious disease status was common and put them in possibly hazardous situations. One participant said, “I would have a patient for a year; I didn't know for that all year she had something in her eyes that is contagious.”

Trip hazards were mentioned in five centers. CNAs stated that they frequently tripped over electrical wires and cords and struggled with the power cords from the newly installed electrically operated beds. One participant said, “You're tripping over the wires. Some staff could fall, and they've fallen. That is dangerous. We've complained about this frequently and nothing has been done so far.” Participants also attributed falling and getting hurt to “hurrying” and “rushing.”

CNAs stated that they and their coworkers were frequently beaten, hit, or kicked while bathing, shaving, and feeding combative residents or those with dementia. The resident assaults made them feel both physically and psychologically stressed. One participant said, “Sometimes what they do is scratch your hand when they are [demented], or your face sometimes. They can kick you if you are [alone].... I got hit in the face before.” However, participants stated that the centers took no measures to handle such situations. In two centers, CNAs even reported being suspended after being abused by residents. One participant described her coworker's situation: “There's no need for her to be suspended. She doesn't get paid for it until they find out it's not her fault, it's the resident's fault. She loses 3 days' pay.”

Both CNAs and managers agreed that needle sticks and chemicals were not big concerns for nursing staff in the centers. Participants in focus groups said that “nurses pretty much dispose of their [sharp] items very quickly” and “they don't leave many things hanging around”; therefore, “the risks are very minimal.”

Work Organization—Both common and different opinions were voiced between CNAs and managers about opportunities for worker participation, such as staff suggestions and follow up, and involvement in decision making (Table 2). CNAs and managers also differed in their perceptions of other work organization issues, such as workload and staffing, work schedules, communications, teamwork, and respect and appreciation.

Double workloads, short staffing, and time strain were frequently mentioned by CNAs in the focus groups. One participant said, “If two people are called out... it's like doing a double job. It's not only your job, [but] you're doing another person's job.” Another said, “You don't even have the time. You have to hide and eat your meal. Quick, quick, get it down, get it down. So, time is an issue.” Managers did not mention these issues in the interviews.

CNAs in four centers described “set schedule” and difficult schedule switches as problems. Focus group participants said, “If you call out on the weekend then you have to make it up the next weekend” and “I got it switched, but I had to wait until they found somebody to fill my position. And it's like pulling teeth to get a day off.” None of the managers in the four centers identified scheduling as a problem for employees, while scheduling in the other three centers seemed to be more flexible and responsive to employee needs.

Focus group participants in six centers mentioned communication problems between departments, shifts, nurses and CNAs, and managers and employees. One CNA expressed her opinion about the communication with upper-level employees: “We're not getting answers. You cannot bring anything up to them. They don't want to hear it. They don't care.”

Another CNA said, “Because since nobody listens I would think let me write a note to someone.... And I stick it in her [unit manager] board and never get answers.” However, most managers in the six centers expressed different opinions: “[We] certainly have an open door policy so that people feel very comfortable coming down to either complain or to suggest things.”

Lack of teamwork was described in focus groups at five centers. CNAs expressed that it was “hard to work in teams” because of short staffing and time strain. One participant said:

I don't think we work as a team. If you're on the B side, nobody will go to the A side to answer a call, or nobody in A side will come to the B side, to help you. If there's a light going on...for 5, 10 minutes, and nobody will answer it.

But the manager in the same center expressed different views: “I think the way that the team works together here is something that really makes me proud.” Most managers did not mention teamwork in the interviews.

Managers in all seven centers expressed their respect for the CNAs' work. They mentioned that CNAs are “the most valued employees in the building” and they usually “listen and treat people fairly.” But CNAs still seemed to feel a lack of respect and appreciation from upper management. One participant said, “I feel like nobody. I feel like I'm not a CNA. They [nurses] treat me like a CNA is nothing.” Another said:

I'm pretty sure just everywhere you go, not the time to forget that we're here for the residents, not to be their [nurses'] slaves or for them to tell us, you need to do this.... We do not need you [nurses] in back of us, hounding us, going after us, to make our work harder than what it already is...why are you treating us like...we're dogs.

Psychosocial Concerns—Stress was mentioned as a prevailing concern by both CNAs and managers in all seven centers. One focus group participant described the apparently overwhelming stress: “When I go home, and I can still hear call lights. I took a nap the other day, and I was waking up...because I'm thinking we have to put people to bed. I was walking out to go to my car, and I can hear ‘beep, beep.’”

Work-family conflict was recognized by CNAs as one of the major reasons for stress. Focus group participants mentioned stress resulting from “scheduling, managing time, homes” and “trying to balance work life, home life.” A few managers noticed that personal issues could contribute to stress but did not link it to the time conflict between work and home needs.

CNAs expressed other sources of stress, which managers did not mention in their interviews. Work organization issues cited frequently as the major sources of stress in the work environment included poor teamwork, lack of respect and appreciation, no control of the work schedule, poor communication, and little involvement in resident care planning. Physical risks associated with infectious diseases and combative residents were also discussed by CNAs as making work more stressful. One participant said, “With job stress, I notice a lot of times with the nurses, they like to take their anger out on CNAs; if they're

having a bad night, they're trying to make us do more work than we're supposed to do in a timely manner.”

Health Promotion Programs—In line with our selection criteria, substantial differences were identified between potential intervention centers and control centers regarding their past and ongoing wellness activities. In the three candidate control centers, a number of health promotion activities had been implemented: Staff could buy food from the kitchen or cafeteria at a reduced price; vending machines offered fresh and healthy salads and sandwiches, yogurt, and juices; stress classes, stress reduction therapy, and a hotline to psychologists were offered; many employees participated in *The Biggest Loser*-type or WeightWatchers® programs; and smoking cessation programs helped some employees quit smoking. Most managers expressed their pride about these activities, and CNAs reported strong willingness to continue or restart these programs.

At four candidate intervention centers, a number of informal well-ness programs had been initiated but then stopped due to time not being convenient or people losing interest. However, both CNAs and managers showed great interest in and willingness to initiate participatory health promotion programs in these centers. Healthy eating, stress reduction, weight control, smoking cessation, and onsite exercise were five major areas in which interest was expressed in all centers. However, both groups realized that time was the biggest challenge for any workplace program. Employees only have a half hour lunch at work, so “15 to 20 minutes” was seen by managers and CNAs to be the maximum time allowable for any onsite health promotion activities.

Discussion

In this large qualitative study of nursing home employees, both common and differing issues were identified between CNAs and managers. There was agreement on the importance of ergonomics concerns, especially resident handling and the benefit of the new no-lift program, the prevalence of stress, and both the desire for and the barriers to participatory health promotion programs in these centers. However, major differences between the two groups existed in their perceptions of work organization issues. In addition, managers failed to comment on many physical and psychosocial risks in the work environment that concerned the workers.

CNAs' perceptions of work organization concerns have been described previously. Several studies have reported that staff shortage, lack of teamwork, not being treated with respect, lack of appreciation, and poor relationship with supervisors were factors that contribute to poor working conditions for direct caregivers, along with difficulties in recruitment and retention (Bowers, Esmond, & Jacobson, 2003; Kemper et al., 2008; Nursing Home Community Coalition of New York State, 2003). Staff shortage is a chronic issue for this company and others in the long-term care sector. More than 90% of U.S. nursing homes do not have enough staff to meet federal standards for quality of care (Abt Associates, 2001). Our qualitative findings add to the evidence that employees' physical and psychological concerns in the work environment may be relevant to staff shortage. Policies and programs

that help meet caregivers' physical and psychological demands might in turn reduce staff turnover and improve quality of care and resident health outcomes.

The different perceptions between CNAs and managers on work organization issues suggested poor worker-management communication. Although the managers each stated an interest in building a more participatory culture, they might not be as knowledgeable as they thought about problems that distressed their employees. Managers' differing opinions about employee concerns could be a contributing factor for workplace injuries and illnesses, higher worker stress, burnout, and job dissatisfaction among CNAs. Previous studies reported that businesses that actively engage employees in decision making generally experience lower injury and illness rates, as well as improved productivity compared with those that do not (Bull, Riise, & Moen, 2002; Shannon et al., 1996).

From a broad view of workplace health and safety, managers did not acknowledge the physical risks associated with infectious disease, combative residents, and trip hazards. Primary psychosocial stressors such as work organization and physical hazards in the work environment, cited by CNAs, were also neglected by managers. Parker et al. (2007) reported that the work environment perceived by managers is a much safer and friendlier place than that perceived by employees. Other investigators have posited that the differing perceptions between employees and managers might indicate limited management participation or engagement of employees in the health and safety improvement process (Mullen, 2004; Shannon et al., 1996; Zohar, 2002).

Effective health promotion is important to stabilize the long-term care workforce. Occupational health and ergonomics programs have been shown to be effective in reducing musculoskeletal injuries (Collins, Wolf, Bell, & Evanoff, 2004; Hignett, 2003) and combative assaults (Fitzwater & Gates, 2002), in turn reducing staff turnover and improving quality of care (J.C. Morgan & Konrad, 2008) in long-term care centers. An integrated perspective on employee health suggests that such programs might be broadened in scope to address other work environment problems. Healthy workplaces should involve employees in decision making, promote learning, reward appropriately, and attend to interpersonal relationships. There is also evidence that participatory programs are more effective in engaging employees of lower socioeconomic status (Punnett, Cherniack, Henning, Morse, & Faghri, 2009). A comprehensive, ecological approach to health promotion should have the potential to decrease absenteeism, lower medical claims costs, improve recruitment and retention of employees, and contribute to the individual employee's overall well-being and quality of life.

Strengths and Limitations

The strengths of the study include the large numbers of focus groups and CNAs from multiple sites, units, and shifts; the coordinated scripts for paired focus groups and management interviews; and the internal consistency of findings within groups and across seven centers.

The generalizability of the results may be limited to the extent that these seven nursing homes were all owned and operated by a single corporation and were all located in the New England area. However, in light of the extant literature on related topics, it appears likely that the study findings are generally relevant to current U.S. nursing homes.

The different perceptions between CNAs and managers might be due to the different format of questions asked within the two groups, or the fact that the manager interviews lacked the benefit of the group processes that may have stimulated a broader range of issues raised in the focus groups. Also, the managers might be in a disadvantaged position by possibly avoiding discussion about the negative impacts of corporate policies. In this study, the concerns and opinions expressed have not yet been validated by observation of the actual hazards in the work environment.

Conclusion and Implications

We used an exploratory qualitative study to explore the common and differing perceptions between caregivers and managers regarding their views on workplace health and safety, work organization, and psychosocial concerns in long-term care centers. This study provides a description of the current work environment issues in U.S. nursing homes. Many of these issues are amenable to primary prevention strategies. Besides the traditional health promotion programs identified by CNAs and managers, such as healthy eating, stress reduction, weight control, smoking cessation, and onsite exercise, future intervention programs might benefit by focusing on empowerment of CNAs. Future intervention programs might benefit by focusing on promoting empowerment of CNAs and better communication between upper management and frontline caregivers. Such intervention programs would help achieve more comprehensive reduction of occupational risks and build a more inclusive, participatory organization, which will benefit both managers and caregivers.

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Keypoints

1. Certified nursing assistants (CNAs) identified numerous workplace health and safety risks, work organization issues, and psychosocial problems in the long-term care work environment.
2. Center administrators and directors of nursing shared some perceptions about workplace injuries and stress regarding CNAs but failed to recognize some sources of physical and psychological stress in the work environment that were significant for CNAs.
3. Managers held a more positive view than CNAs about listening to employees' suggestions and employees' opportunities to be involved in decisions about resident care.
4. Improved systems of communication, which allow frontline caregivers to express their concerns and make more decisions about their work, are important to support the long-term care workforce.

Table 1
CNA Focus Group and Management Interview Topic Outline

CNA Focus Group topic	Management Interview topic
Health and safety concerns and the no-lift program	
<p>1 We would like to start by hearing your general thoughts about workplace health and safety in the nursing center as a whole.</p> <p>2 We are interested in hearing your views about resident handling at the center and how it relates to your health.</p> <p>3 Please describe any changes at work during the past year that might have affected your health or safety.</p>	<p>1 Are there any health concerns—either occupational or general—at the center that you'd like to see addressed?</p> <p>2 How do you think the no-lift program is working?</p> <p>3 Have you noticed any change in employee injuries or attitudes since the implementation of the no-lift program?</p>
Worker participation	
<p>4. We would like to ask you about ways in which you are able to have a say or give your opinions at your center.</p> <p>a. Could you tell us what kind of say you have in how work is scheduled or organized?</p> <p>b. If you have opinions or suggestions about how to improve the workplace, how are your opinions or suggestions treated by your supervisor or by management in general?</p> <p>c. Tell us about ongoing ways management asks for your opinions.</p> <p>d. Please talk about ways in which you would like CNAs to have more input or involvement in wellness or health and safety issues.</p>	<p>4. If employees come up with ideas for better organization or to reduce stress or improve service, how would that be handled?</p> <p>5. Could you tell us about other ways that workers participate in decision making or contributing ideas at the center?</p> <p>6. Do you think workers could be more involved in participating in and planning health promotion activities?</p>
Health promotion programs	
<p>5. What kinds of health and safety or wellness activities do you think your workplace could offer to help improve your health inside or outside of work?</p> <p>6. Are there programs or activities that could be provided at your workplace to help you and your coworkers support each other?</p>	<p>7. In terms of wellness activities, what have you tried in the past year?</p> <p>8. From your perspective, what kind of interest is there in health-related programs among the staff?</p> <p>9. In your opinion, are there opportunities or could there be opportunities for future health promotion activities?</p>

Note. CNA = certified nursing assistant.

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Table 2
Comparison of Worker Participation Concerns Between CNA Focus Groups and Management Interviews

CNA Focus Group Quotes	Management Interview Quotes
Staff suggestions and follow up	
Disagreement, Center A: "Because if we ever say anything to anybody it goes in one ear and out the other."	"We typically ask their opinion for most things that we can."
Agreement, Center B: "We have an open policy here, open door. You can go in to see the administrator. You can go to the director. You can go to whoever you feel comfortable with to speak about anything, and it's always taken care of since I've been here."	"Having them come to us, and then the best thing we can do is support the idea and help them follow through with it."
Staff participation and involvement in decision making	
Disagreement, Center C: "I think the aides should be more involved in the care plans but we're not." "When they make these changes they don't...involve us."	"It's giving people, the line staff, and the control over the decision.... I don't make any of the decisions in this facility.... The CNAs make the decisions on the floor."
Agreement, Center D: "They are pretty good at listening to us and we usually have the mandatory monthly meeting throughout this building for all wings for any concerns or anything new coming.... If anybody has concerns, they'll try to handle it."	"We're trying to develop as a center in getting our direct care staff [to] really be empowered to make decisions that affect what they do from day to day."

Note. CNA = certified nursing assistant.