Perceptions of Nursing Practice: Capacity for High-Quality Nursing Home Care

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Emerging evidence indicates that harmful nursing home resident outcomes occur because of ineffective collaboration between registered nurses (RNs) and licensed practical nurses (LPNs) during assessment, care planning, delegation, and supervision. This observational, factorial vignette survey related video vignettes of RN–LPN collaboration in nursing home care to RN perceptions of: 1) current practice in their home; and 2) preferred practice in their home ($N = 444$ rated vignettes of nursing practice). Current practice ranged from collaboration with few or poor-quality connections and a lack of differentiation between RN and LPN roles (low-capacity practice) to strong RN–LPN connections and clearly differentiated roles (high-capacity practice); RNs identified high-capacity practice as preferred. Interventions that bring together RNs and LPNs to learn new ways of giving care by differentiating roles while also strengthening connections show promise as levers for changing quality of care in nursing homes.

Emerging evidence indicates that harmful nursing home resident outcomes, such as medication errors, pain, and poor quality measures as well as avoidable hospitalizations result from ineffective collaboration between registered nurses (RNs) and licensed practical nurses (LPNs) (Corazzini, Anderson, Mueller, Hunt-McKinney, et al., 2013; Corazzini et al., 2015; Corazzini, Anderson, Mueller, Thorpe, & McConnell, 2013; Vogelsmeier, Scott-Cawiezell, & Pepper, 2011). This ineffective collaboration involves few or no formal or informal connections between RNs and LPNs and a blurring of their scopes of practice. As a result, RNs and LPNs interchangeably perform assessment, care planning, delegation, and supervision (Corazzini, Anderson, Mueller, Hunt-McKinney, et al., 2013).

Interventions that bring together RNs and LPNs to learn new ways of giving care by differentiating roles and strengthening connections show promise as levers for changing RN–LPN collaboration (Corazzini et al., 2015). In nursing homes, unit-level teams of the nursing staff at all licensure levels are the foundational clinical teams for quality of care; studies focused on these teams suggest that efforts to improve quality and care outcomes should focus on their learning capacity (Anderson et al., 2012; Estabrooks et al., 2011; Mohr, Batalden, & Barach, 2004). Distinguishing the contributions of RNs and LPNs and strengthening the quality of RN–LPN connections foster the ability to exchange information and solve problems, integrating RN-level clinical expertise in a meaningful way. This ability to seek and share new knowledge and ideas with other members of the care team is known as reciprocal learning (Leykum et al., 2011), which has been related to the successful implementation of quality-improvement initiatives (Leykum et al., 2011; Noël, Lanham, Palmer, Leykum, & Parchman, 2013).

However, acceptance of interventions targeting RN–LPN collaborations for unit-level team learning and higher quality of care requires an awareness of the differences between RN practice and LPN practice and the importance of the quality of their connections for achieving better resident outcomes. In foundational work to this study, RNs and LPNs in nursing homes described how they contribute to assessment, care planning, delegation, and supervision. Case study analysis comparing nursing homes yielded three general patterns of practice:

- Practice with a poor capacity for RN–LPN collaboration (poor connections and blurring of RN–LPN roles)
- Practice with a high capacity for RN–LPN collaboration (multiple formal and informal connections and clear distinctions between the scopes of practice and roles of RNs and LPNs)
- Practice with a mixed capacity for RN–LPN collaboration (elements of the first two patterns) (Corazzini, Anderson, Mueller, Hunt-McKinney, et al., 2013).

Compared with high-capacity practice, poor- and mixed-capacity practices were associated with poorer or more inconsistent quality of care outcomes (Corazzini, Mueller, et al., 2013).

A gap in understanding remains about how to measure these practice dimensions because the descriptive case study approach is not feasible in large-scale studies, which must rely on staff perceptions of practice. Thus, research is needed to examine whether RNs can recognize their own practice patterns and whether they can determine if their practice patterns are desirable for a high quality of care.

Awareness of practice also is relevant in designing interventions targeting RN–LPN collaboration to improve care quality. Specifically, the diffusion of innovation framework (Rogers, 1995) elucidates characteristics of an innovation that affects adoption, including the perceived compatibility and relative advantage of an innovation with what currently occurs in an organization (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). This framework has been widely adopted in health and social care to explain adoption of new care practices (Greenhalgh et al., 2004), including the adoption of new ways for staff to provide nursing care in nursing homes (Boström et al., 2012; McConnell et al., 2011). To predict whether nurses would be likely to adopt a new practice pattern, it is important to know whether they view an intervention that targets RN–LPN collaboration as compatible with current practice, and to assess whether nurses perceive relative advantages to a more collaborative approach, such as believing that higher-capacity collaborative practice is linked to better quality of care.

Therefore, the purpose of this study was twofold: to explore whether nursing home RNs can recognize their practice pattern (i.e., low, mixed, or high capacity) and to explore whether RNs in nursing homes see nursing practice characterized by high-capacity practice as linked to better resident outcomes in two areas: pain in short-stay patients and falls in long-stay residents. This study directly addresses an important gap in our empirical knowledge about the extent to which an intervention to clarify the roles and scopes of RN and LPN practice and strengthen the quality of connections between RNs and LPNs in nursing homes would be considered compatible and advantageous, supporting adoption within the diffusion of innovation framework (Rogers, 1995).

Method

The research team conducted a cross-sectional, observational, factorial vignette study (Rossi & Nock, 1982) to examine RN perceptions of Corazzini, Mueller, Anderson, Day, Hunt-McKinney, and Porter's (2013) framework of patterns of nursing practice in nursing homes. Step one was developing the Web-based, multimedia factorial vignette survey instrument. Step two was administering the instrument to RNs working in nursing homes. Step three was conducting analyses of RN perceptions. Institutional review board approval was obtained from the investigators' universities.

Sample and Recruitment

The sampling frame was all RNs employed in nonhospital -based, Medicare- or Medicaid-certified nursing homes. Probability and nonprobability samples (Singleton, Straits, & Straits, 1993) were drawn from the sampling frame and combined for analysis. For the probability sample, 1,500 nursing homes were selected based on a stratified random sample, with nine strata defined by differences in state nurse practice acts (Corazzini, Anderson, Mueller, Thorpe, et al., 2013). RN directors of nursing (DONs) for each nursing home received a written letter inviting them and their nursing staff to participate in the study. Interested DONs returned a postcard indicating the number of nurses employed in the home. Then, study participation packets for the reported number of nurses were provided electronically or via regular mail to interested DONs.

For the nonprobability samples, an e-mail invitation with a link to the Web-based survey was disseminated to all members of a professional organization representing DONs in long-term care and all nurses employed by a Southeast regional chain of nursing homes (N = 52 homes). Additionally, the research team approached seven DONs in a Southeast metropolitan area who were participating in a separate study and shared information about the current study. Interested DONs (N = 4) allowed the research team to recruit a convenience sample in their nursing homes by staffing a conference room with laptop computers that nurses could use to access the Web-based survey.

Measures and Procedures

Factorial vignettes are a commonly used methodology in health care research to measure judgment and perceptions (Evans et al., 2015). In factorial vignettes, the researcher randomly varies key dimensions of interest (e.g., age of the patient, diagnosis), creating a factorial matrix of possible combinations of dimensions. Respondents then evaluate multiple vignettes with various dimensions randomly sampled from this matrix. The approach addresses multiple methodological limitations of traditional vignette studies, such as the limited range of dimensions feasible when all respondents evaluate the same set of vignettes (Rossi & Nock, 1982).

For this study, factorial video vignettes were developed to capture low-capacity, mixed-capacity, and high-capacity nursing practice patterns in two clinical care scenarios. The first was the care of a short-stay rehabilitation patient who was just admitted to the nursing home and is experiencing moderate to severe pain. The second was the care of a long-stay resident who falls. For each scenario, a four-scene sequence was filmed to capture nursing assessment, care planning, delegation, and supervision on the unit involving the patient or resident, an RN, an LPN, and a nursing assistant. Three versions of each scene were filmed to capture low-capacity, mixed-capacity, and high-capacity patterns. The factorial of combinations, therefore, was 3*3*3*3 or 81 possible combinations for each clinical scenario (total, 162 combinations). As examples, Figures 1 and 2 contrast low- and high-capacity vignettes. Further details of the construction of the video vignettes, including the development of the scripts, are described elsewhere (Day et al., 2014).

Two measures were administered for each vignette:

- Did the vignette reflect actual practice in the respondent's nursing home?
- Did the vignette reflect preferred practice?