

## Developing Nurses' Geriatric Expertise Through the Geriatric Resource Nurse Model

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### Background

Adults aged 65 and older comprise the majority of patients in most hospitals. Usual aging changes along with comorbidities place older adults at risk for complications, longer lengths of stay, and hospital readmission.<sup>1-5</sup> In a 2008 report, "Retooling for an Aging America: Building the Healthcare Workforce,"<sup>6</sup> the Institute of Medicine (IOM) warned that unless health care workers developed competence in the care of older adults, the growing older adult population would face a health care workforce too small and "woefully unprepared" to meet its needs. The current dearth of both gerontologically prepared nursing school faculty and discrete gerontological undergraduate courses reflects the IOM's stance, as nurses graduate and begin practice without sufficient knowledge and skills to manage the complex care of hospitalized frail older adults.<sup>7</sup>

As an initiative to address the geriatric competency gap, Nurses Improving Care to Health System Elders (NICHE)<sup>8</sup> was founded in 1992, supported by the John A. Hartford Foundation. Based at the New York University College of Nursing, the NICHE program provides tools and resources to help health care systems improve the quality of care provided to their older adult populations and increase nurse competence in caring for hospitalized older adults.<sup>9</sup> The Geriatric Resource Nurse (GRN) model is one of many NICHE initiatives and is often the first step in developing systemwide geriatric care improvements. The GRN model is an educational and clinical intervention model that prepares

staff nurses as the clinical resource person on geriatric issues to other nurses on their unit.<sup>10</sup> Direct-care nurses who volunteer to become GRNs participate in an educational program consisting of approximately 20 contact hours of gerontological nursing content, usually coordinated by an advanced practice nurse using the NICHE GRN curriculum available to NICHE member facilities.<sup>10</sup> GRNs who develop gerontological nursing expertise serve as mentors to peers in the care of older adults, thereby disseminating geriatric best practice and principles on their respective nursing units.

Outcomes of the GRN model have been measured quantitatively in only a limited number of published reports. One study found patients experienced significantly more issues with pain, incontinence, and immobility on a unit without GRNs ( $P = .001-.032$ ).<sup>11</sup> Readmission rates were lower for elderly patients discharged from a unit with GRNs, and use of vest-type restraints was lower on the GRN unit. Fewer elderly patients on the GRN intervention unit reported a decline in activities of daily living.<sup>11</sup> Five additional studies revealed positive patient outcomes through the GRN model, including decreases in rates of delirium,<sup>12,13</sup> use of indwelling catheters,<sup>12</sup> urinary infection rates,<sup>12,14</sup> use of restraints,<sup>12,14</sup> functional decline,<sup>15</sup> and falls.<sup>16</sup>

Two studies reported improvements in nurses' knowledge,<sup>12,14</sup> confidence,<sup>14</sup> attitudes,<sup>14,16</sup> or satisfaction with care<sup>14</sup> following implementation of the GRN model. A third study<sup>17</sup> compared nurses who received geriatric education primarily through Web-based modules and nurses who received no geriatric education, finding no differences in knowledge, attitudes, or satisfaction with care, as measured by a shortened version of the Geriatric Institutional Assessment Profile (GIAP).<sup>18</sup> Further study is needed to clarify the effect of the GRN model on nurses' knowledge, confidence, and satisfaction related to geriatric care in the current health care environment.

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In an effort to expand and update the existing knowledge base related to the GRN model, the purpose of this quality improvement project was to explore outcomes of the GRN model, specifically nurses' knowledge, confidence, and satisfaction related to care of the hospitalized older adult. The objectives of this project were: 1) to compare quantitatively the knowledge, confidence, and satisfaction related to care of older adults among nurses who did and did not participate in the GRN model; 2) to explore qualitatively the experiences of nurses who participated in the GRN model; and 3) identify evidence of organizational impact of the GRN model on care of hospitalized older adults.

## Methods

### Project Design

This quality improvement project featured the implementation of the GRN model as an intervention through a quasi-experimental design, with educational and mentoring activities constituting the core of the intervention. Outcomes were assessed in 2 groups of direct-care nurses before and after the implementation of the model. Participants in the GRN model were labeled "GRNs," and nonparticipants in the GRN model were labeled "non-GRNs" and composed the comparison group. One year elapsed between the pre- and postintervention data collection.

### Setting

The setting for the project was a 344-bed suburban Midwestern teaching hospital without NICHE designation. The hospital was part of a statewide health system that employed 1 gerontological advanced practice nurse in the local area. Interprofessional rounding was not yet a housewide practice. RN-to-patient ratios on medical units ranged from 1:5 to 7, and technician-to-patient ratios ranged from 1:8 to 15, depending on the unit and shift.

Nurses from 3 medical inpatient units participated in the study. One was a 30-bed medical unit with an average census of more than 75% older adults. The second unit was a 20-bed medical unit specializing in diabetic care and averaging at least 50% census of older adults. The third unit was an oncology unit that also averaged at least 50% census of older adults.

### Participants

Of the 60 eligible nurses, 18 volunteered to participate in the GRN model. Initiation of the model was announced through a presentation by the gerontological clinical nurse specialist (CNS) and circulation of a written description of the GRN model. All nurses who volunteered were accepted as participants in the model. Sixteen nurses who did not volunteer for the GRN model volunteered to participate as the comparison group. There was no randomization of participants to groups.

### Project Intervention

After approval by the institutional review boards of the hospital and the associated university, the GRN model was initiated. A steering committee was convened and included senior administrators, nurse managers, nurse educators, and the gerontological CNS leader. The steering committee met monthly to ensure adequacy of resources and confirm system-wide support and enthusiasm for improved geriatric care.<sup>19</sup> A faculty member from a school of nursing associated with the hospital consulted with the CNS and provided expertise in educational strategies, measurement of project variables, and data analysis.

The gerontological CNS led the education and mentoring activities for nurses who participated in the GRN model. Participating nurses first attended an 8-hour class on aging and health conducted by the gerontological CNS leader. Subsequently, GRNs met for 2 hours every month for 10 months for didactic sessions presented by the CNS and to discuss clinical experiences. Nurse volunteers in the comparison group did not participate in educational and mentoring activities through the GRN model.

The curriculum for the GRN model was developed by the gerontological CNS and included topics also found in the NICHE GRN core curriculum, such as dementia, delirium, depression, functional status, family caregiving, health care decisions, nutrition, pain, sleep, medications, and urinary continence<sup>20-23</sup> (Table 1). The topics of elder mistreatment, constipation, how older adults differ from younger adults, societal constructs of aging, and end-of-life care were also developed as discrete presentations. Recent research studies that supported curriculum topics were cited. The SPICES acronym,<sup>24</sup> developed as a tool for flagging common conditions in

elderly patients for further assessment, was used to help GRNs organize their approach to care. As encouraged by the author, SPICES was adapted to the patient population and issues at the project hospital. Didactic sessions addressed topics linked to each letter of the SPICES mnemonic, specifically, **S**leep, **P**roblems with eating and feeding, **I**ncontinence, **C**onfusion and Constipation, **E**vidence of falls, and **S**kin or **S**ocial problems. Leadership principles were also discussed and role modeled to help nurses function both as peer mentors for their colleagues and as pivotal interprofessional team members.

To translate classroom learning into clinical practice, the CNS conducted unit rounds with GRNs 3 to 4 days per week for up to 2 hours per day, depending on the availability of GRNs. On rounds, the CNS answered questions, modeled competencies, asked about patient status using the SPICES tool, and assisted with the application of new knowledge. The CNS encouraged the GRNs to share their new expertise with colleagues, both informally at the bedside and formally via inservice education. The CNS offered support for the GRNs' new role and counseled them in professional development.

**Table 1.**  
**Geriatric Resource Nurse (GRN) Curriculum**

Topic	Brief Description of Content
Introduction	NICHE and the GRN Model, GRN role; unit needs and goals
"Taking Care of Geriatric Patients—What's the Difference?"	Usual aging changes, geriatric syndromes; atypical presentation of conditions; age bias; hazards of hospitalization
"Old Age: Changing"	Societal and older adults' perspectives on aging; aging stereotypes; distinction between geriatrics and gerontology
Preventing Functional Decline in Hospitalized Older Adults	Epidemiology; hazards of bedrest; nurses role in maintaining function
Dementia	Diagnostic criteria; clinical manifestations; stages; neuropsychiatric symptoms; nursing management
Delirium	Epidemiology; diagnostic criteria; etiology, prevention and management
Depression	Epidemiology; diagnostic criteria; manifestations and impact; nursing's role
Family Caregiving	Challenges and rewards of caregiving; assessment of caregiving needs
Medications and the Older Adult	Changes in pharmacodynamics and pharmacokinetics in older adults; potentially inappropriate medications; adverse drug events; over-the-counter drug and herbal use
Elder Mistreatment	Epidemiology, signs and symptoms, assessment and intervention
Health Care Decisions	Advance directives, research regarding patient, family, professional perspectives at end of life; outcomes of CPR; palliative and end-of-life care
Urinary Incontinence	Types, impact, management
Sleep and the Hospitalized Older Adult	Sleep and aging; hazards of sedatives/hypnotics; nonpharmacological nursing sleep interventions
Eating and Feeding	Nutritional impact of hospitalization; promoting nutrition; artificial feeding in advanced dementia
Pain Management in the Hospitalized Older Adult	Epidemiology; pharmacological and nonpharmacological treatment of pain; assessment of pain in patients who cannot self-report; pain medication side effects
Constipation	Impact, prevention, treatment

*NICHE, Nurses Improving Care to Health System Elders.*

## Measures

Quantitative data were collected at the beginning of the GRN model and 1 year later. Participants in the intervention and comparison group completed a written survey adapted from the Geriatric Institutional Assessment Profile (GIAP), version 4, which is reported here with permission.<sup>25</sup>

Nine items from the GIAP version 4 measured nurses' knowledge and were labeled Knowledge of Care of Older Adults Scale. In addition, a single item measured participants' self-report of knowledge of basic principles of geriatric nursing care.

Eight items on version 4 of the GIAP measured participants' satisfaction with the care older adults receive on their unit and were labeled the Satisfaction with Geriatric Care scale. Cronbach's alpha reliability in this project was .92.

Three additional single items from version 4 of the GIAP assessed participants' perceptions of the extent to which caring for older adults was difficult, rewarding, and burdensome. A 9-item scale, labeled Confidence in Caring for the Older Adult, was created for this study to measure confidence in care of older adult inpatients. Cronbach alpha reliability was .84.

Qualitative data were collected at the end of the 10-month GRN curriculum through individual GRN interviews using questions developed for the study (Table 2). The interviewer was a nurse educator and colleague of the GRNs, who was not directly involved in the GRN educational process. Interviews were conducted in a quiet, private area on patient care units where interruptions were rare. Most interviews were conducted when GRNs did not have patient care responsibilities. Length of time of interviews ranged from 10 to 20 minutes. Interviews were audio-recorded and transcribed by a transcriptionist who was not associated with the project.

Additional qualitative data were collected by means of field notes recorded by the CNS when spending time on the units with the GRNs. The content recorded included questions the GRNs raised, stories they shared, skills they practiced, concerns they expressed, and examples they reported of challenges and opportunities for leadership and peer mentoring. The CNS's notes and observations were used to tailor education throughout the 10 months. An additional source of qualitative data was the notes taken during organizational meetings related to the project.

Limited demographic data were requested to protect the anonymity of the participants in the small samples. Data on level of education, years of nursing experience, and unit worked were collected.

## Data Analysis

Quantitative data were analyzed using SPSS version 19.0 (SPSS Inc., Chicago, IL) software. Frequencies and percentages described the sample demographically. To address the first objective of the project, 2-way repeated-measures analyses of variance were computed to determine differences in outcome variables between the intervention (GRNs) and comparison (non-GRNs) groups from pretest to posttest. Outcome variables were total scale scores for Satisfaction with Geriatric Care, Knowledge of Care of Older Adults, Confidence in Caring for the Older Adult, and single items that measured overall knowledge, degree of difficulty in caring for older adults, extent to which caring for older adults was rewarding, and the extent to which caring for older adults was burdensome. Independent variables were group membership as GRNs or non-GRNs and time as pre- or postintervention. All assumptions underlying the statistical analyses were met.

Qualitative data were examined by thematic analysis. The researchers, who were blinded to the identities of individual GRNs who provided the interview data, first analyzed the interviews independently for general impressions, then highlighted key words and phrases. Codes and then themes emerged and were labeled with participants' own phrasing to ensure that the nuances of the actual expressions were captured.<sup>26</sup> The researchers then compared their codes and themes, finding them to be very similar. In the final step of the analysis, 30 codes and 10 themes emerged.

Data from field notes collected by the gerontological CNS during rounds and conversations with GRNs were content analyzed by both researchers independently and together. Frequencies and types of events were noted, such as the number of questions GRNs asked and the focus of their questions.

To address the third objective of the project, data from the project's organizational meetings were analyzed by both researchers independently and then jointly. Frequencies and types of

**Table 2.****Geriatric Resource Nurse (GRN) End-of-Curriculum Interview Questions**

1. What has been the best part of becoming a GRN?
2. What has been your biggest challenge in becoming a GRN?
3. Has your practice changed since becoming a GRN? Give an example with regard to caring for geriatric patients.
4. Has becoming a GRN changed your relationships with other disciplines? Give example(s).
5. Has becoming a GRN changed your leadership skills? Give example(s).
6. How has becoming a GRN affected your ability to teach or mentor colleagues? Give example(s).
7. Would you recommend becoming a GRN to your nurse friends?

*GRN, geriatric resource nurse.*

system-level changes were noted, such as number of new geriatric initiatives prompted by the GRN project.

## Results

### Demographics of Participants

Of the 33 participants, there were complete data sets at baseline and at the end of the GRN model for 17 GRNs and 11 non-GRNs, which comprised the sample for analysis. Five participants in the GRN model did not respond to the postintervention survey, 3 of whom were no longer employed on participating units.

Over half of the sample (58%) held baccalaureate degrees, which was reflective of the RN demographics at the target institution. The GRN group reported more years of experience than non-GRNs, although the difference was not significant. One participant held a professional certification in oncology nursing. None of the demographic differences between groups was statistically significant (Table 3). Data on gender were not collected; however, 1 of the 17 GRNs (6%) was male. All participants were direct-care nurses, some of whom also performed charge nurse duties and precepted new nurses.

### Effect of GRN Model on Nurse Outcomes: Quantitative Analysis

Mean scores on the project measures were computed for GRNs and non-GRNs pre- and posttest (Table 4). Analysis of variance revealed a significant interaction effect between scores of the GRNs ( $n = 17$ ) and non-GRNs ( $n = 11$ ) over time. GRNs reported a greater increase in knowledge pre- to post-test than non-GRNs on the

single-item measure of overall basic knowledge of care of older adults [ $F(1,24) = 17.09, P < .001$ ] and the 9-item Knowledge of Care of Older Adults Scale [ $F(1,26) = 4.70, P < .04$ ]. GRNs reported that the extent to which care was burdensome decreased significantly [ $F(1,26) = 7.91, P < .009$ ], as did the degree of difficulty with care [ $F(1,26) = 5.95, P < .02$ ]. The extent to which care of older adults was rewarding did not change significantly over time when the GRNs and non-GRNs were compared. Results further revealed a significant increase in satisfaction with care [ $F(1,26) = 5.15, P < .03$ ] and confidence related to the care of older adults [ $F(1,26) = 11.4, P < .002$ ] among GRNs from pretest to posttest, compared with non-GRNs who did not experience the GRN model.

### Effect of GRN Model on Nurse Outcomes: Qualitative Analysis

The primary theme of the interview data was “changed the way I practice.” Subthemes were

**Table 3.****Demographic Data for Sample ( $n = 33$ )**

	GRNs ( $n = 17$ )	Non-GRNs ( $n = 16$ )
Level of Nursing Education		
Associate degree	7	5
Baccalaureate degree	9	10
Other	1	1
Years of nursing experience	10.3	6.3
Professional certification	1	0

*GRN, geriatric resource nurse.*



**Table 4.****Pre and Post Means for Geriatric Resource Nurse (GRN) and non-GRN Groups**

Single-Item Variables	GRN Scores		Non-GRN Scores	
	Mean/SD Pretest	Mean/SD Post-test	Mean/SD Pretest	Mean/SD Post-test
Knowledge of basic care of older adults	2.87 (.52)	4.13 (.52)	3.55 (.82)	3.27 (.47)
Difficulty caring for older adults (high score = less difficulty)	3.06 (.90)	3.82 (.64)	3.73 (.91)	3.73 (.79)
Rewarding to care for older adults	4.18 (.88)	4.82 (.39)	4.36 (.51)	4.55 (.69)
Burdensome to care for older adults (high score = less burdensome)	3.65 (.61)	4.29 (.77)	4.18 (.75)	4.27 (.65)
Scales				
Satisfaction with geriatric care	2.59 (.51)	3.42 (.38)	2.88 (.71)	3.05 (.62)
Confidence in caring for older adults	3.37 (.48)	4.23 (.41)	3.66 (.57)	3.74 (.62)
Knowledge of care of older adults	3.36 (.34)	3.75 (.32)	3.28 (.49)	3.37 (.39)

improvements in medication safety, mobilizing patients, communication, managing delirium, feeding, assessments, and attention to family members. Two additional themes were increased confidence and enhanced leadership skills (Table 5). All participants reported that they would recommend participation in the GRN model to their peers.

Analysis of field note data revealed that GRNs provided care for complex, acutely ill older adults with multiple comorbidities, polypharmacy, and sometimes an uncertain symptom etiology. GRNs most often asked the CNS to validate assessments, evaluate mental status, and discuss medication regimens. In rank order, the most commonly mentioned content areas included mental status, mobility/functional decline, medications, assessments/SPICES,<sup>24</sup> and communication with the health care team.

Field note data reflected the challenges of peer mentoring and teaching. GRNs reported that they were reluctant to “act like I know it all” among colleagues on their units. Several GRNs reported that they did present educational sessions during staff meetings.

Field note data additionally revealed that during participation in the GRN model, 2 of the GRNs decided to enter academic programs to become advanced practice nurses specializing in gerontology. Two GRNs joined research studies as coinvestigators. Two GRNs took opportunities to give presentations at regional and national conferences. Fifteen of the 17 GRNs (88%) remained employed as direct-care staff nurses on

their original medical units 2 years after beginning the GRN model. Two GRNs relocated out of the geographic region.

Data analysis of organizational meeting notes revealed 8 developments related to the care of older adults that occurred following implementation of the GRN model (Table 6). Data from organizational meetings also revealed strong support from the chief nursing officer (CNO) and senior administrators. For example, the CNO gave reports on the GRN model in meetings at all levels of the organization and ensured publicity about the project. Support from nurse managers was reflected in meeting note data, for example, ensuring that GRNs could attend educational sessions, promoting unit level visibility and publicity for the project, and elevating GRNs and the CNS as experts in geriatric nursing care.

## Discussion

This study adds to the body of knowledge on the effectiveness of the GRN model to improve direct-care nurses’ knowledge, confidence, and satisfaction related to the care of hospitalized older adults. Nurses who participated in the model and became GRNs improved significantly in knowledge, confidence, and satisfaction from pre- to post-test, compared with nurses who did not participate in the model. Reports from participants in the model that the care of older adults was less burdensome and less difficult may reflect attitudinal changes as well. These findings

**Table 5.**  
**Themes, Subthemes, and Sample Data from Geriatric Resource Nurse (GRN) Interviews**

Theme/Subthemes	Sample Data
Changed Practice	"The GRN model has changed the way I nurse."
Medication Safety	"I make recommendations to physicians about sedatives based on my nursing assessment." "We are more aware of meds now.... We try other interventions before medicating." "I have learned more about pain medicine. I feel more comfortable to 'start low, go slow.'"
Mobility	"We are much more attentive to getting patients up." "Move, move, move ... we are very into mobilizing now." "I have learned that small actions, such as ambulating and maintaining function, can make the difference between going home and going to a nursing home."
Managing Dementia	"I'm not nearly as likely to restrain confused patients now." "I try nonpharmacological ways to calm my patients." "It takes extra time to manage the confused patient without drugs, but it's important, and we now understand the value."
Feeding	"I make sure the tech feeds the patients and then I ask how much they ate." "I found he usually doesn't eat breakfast until late, so we adjusted his feeding schedule, and his intake is much better."
Assessment	"I use SPICES as a guide to assessing my older patients."
Better family care	"We focus on the caregiver's needs now."
Improved communication	"Now I call the nursing home ... and find out [about the patient]. I never used to do that." "Now I track with what case managers are documenting." "I explain to the techs and my peers why I do what I do and they understand better."
Increased Confidence	"Gives me a backbone to stand up.... [I] feel more confident." "I'm more persistent and don't back down because I have the knowledge."
Enhanced Leadership	"It's nice when coworkers come up to you and [say], 'I have a patient that is difficult, what do you think?'" "I feel more like a leader."

support 2 prior studies that reported increased knowledge, confidence, positive attitudes, and satisfaction with care regarding care of older adults after completing a GRN program.<sup>12,14</sup>

Sampling bias may have occurred due to the non-random selection of participants in this project. For example, nurses who did and did not participate in the GRN model reported that care

**Table 6.**  
**Organizational Impact of Geriatric Resource Nurse (GRN) Model Implementation**

1. Modification of nursing policies, e.g., pain management, sepsis, and fall prevention, to address specific needs of older adult patients
2. Integration of geriatric nursing knowledge into TCAB<sup>36</sup> (Transformation of Care at the Bedside) initiatives
3. Increased consultations for the gerontological clinical nurse specialist
4. Development of an interprofessional quality improvement initiative to explore medication safety for older adult inpatients
5. Initiation of a nonpharmacological sleep enhancement pilot project in older adult inpatients
6. Inclusion of geriatric content, presented by a GRN, in orientation for all newly hired RNs
7. Expansion of housewide education on pain to include geriatric content
8. A link to the electronic medical record of a list of medications that increased fall risk

of older adult inpatients was highly rewarding. Nurses who volunteered to participate in the model or serve as the comparison group that did not participate in the model may have had above average interest in older adult patients.

Despite the fact that nurses who participated in the model had more years of experience than nurses who did not participate, nurses who participated and became GRNs reported lower knowledge scores than non-GRNs preintervention on the single knowledge item. Nurses who did not perceive that they had basic geriatric knowledge might have been more inclined to volunteer to participate in the GRN model.

Findings from interview data suggested that nurses who participated in the model perceived the greatest impact to be in their personal nursing practices. Nurses who participated in the model did not share copious or rich examples of peer mentoring. Field note data further corroborated that nurses who became GRNs struggled with peer mentoring and teaching other staff, despite high mean scores on confidence and knowledge scales. GRNs did not systematically disseminate information with peers and, in fact, were reluctant to do so. The cultures of specific units may influence the extent to which nurses embrace peer expertise and feedback.

An initial test of the Confidence in Caring for Older Adults scale in this project revealed early support for its reliability. Confidence was selected as a variable in the project because theory and research suggest that individuals are more likely to perform behaviors that they believe they are capable of performing.<sup>27</sup> Confidence has been documented as a mediating variable in the adoption of new behaviors in multiple research studies in a broad variety of samples.<sup>27-32</sup> Bandura's social cognitive theory proposed that self-confidence was 1 aspect of self-efficacy and that self-efficacy was behavior-specific, that is, self-efficacy focused on beliefs about personal abilities in a specific setting or with regard to a particular behavior.<sup>28</sup> Thus, a scale that specifically measured activities relevant to the GRN model was required to measure confidence of participants. More testing of the newly developed confidence scale for reliability and validity in larger, diverse samples is needed.

Multiple house-wide initiatives emerged following implementation of the GRN model, probably due to widespread publicity of the project that heightened awareness of the special needs of

older adults during hospitalization. The CNO and nursing administrators were key spokespersons for the project. The steering committee that met monthly ensured that resources were available for the project. The commitment of a gerontological CNS, who was the only geriatrically trained professional in the hospital, was crucial not only to providing the expert content and mentoring of GRNs but also to providing leadership and management of the model, along with new organizational initiatives.

Evidence documenting improvement in patient outcomes is needed to continue to obtain resources for the development of geriatric competencies among direct-care nurses. Improvements in nurse-sensitive outcomes, such as falls, hospital-acquired pressure ulcers, hospital-acquired infections, length of stay, and patient satisfaction, can be evaluated in units where the GRN model has been implemented. Associations among nurses' knowledge, confidence, and satisfaction with care can be examined in relation to key clinical outcomes.

Several limitations to generalizability of the findings are noted in this single-site quality improvement project. In addition to the limitation of a small convenience sample, there was no intent to keep participants and nonparticipants in the GRN model isolated from each other. Nonparticipants could have received geriatric information from nurses who did participate in the model. In fact, nurses participating in the model were encouraged to share what they learned with peers and nonparticipants. Another limitation was that version 4 of the GIAP did not have the strong psychometric properties cited for the current version of the GIAP.<sup>33-35</sup> In addition, the newly developed confidence scale had limited psychometric rigor. Future projects that measure outcomes of nurses related to the GRN model would be strengthened by using the current version of the GIAP, which is available online to NICHE members.<sup>10,34,35</sup> In addition, the GRN curriculum was developed by the CNS and therefore cannot be compared with studies that used the NICHE GRN curriculum. Despite the limitations of the project, statistically significant outcomes of the GRN model were noted, suggesting that direct-care nurses' knowledge, confidence, and satisfaction related to the care of hospitalized older adults can be improved through the educational and mentoring activities promoted in the GRN model.



## Summary

Outcomes of this quality improvement project indicate that the GRN model is an effective way to improve nursing practice and increase direct-care nurses' knowledge, confidence, and satisfaction related to care of hospitalized older adults. Furthermore, through the implementation of the GRN model in this project, multiple new organizational initiatives emerged to improve care of older adult inpatients. When implemented with an expert geriatric nurse leader and administrative support, the GRN model can yield significant results, even when other geriatric resources are limited.

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