≥85 years with CKD identified by MDRD and BIS-1 did not differ from that identified by CKD-EPI.

When comparing eGFR with the eTSMM obtained through a recently validated equation,[9] eGFR correlated with eTSMM in the whole sample and in men. This could have reflected the steeper age-related decline in muscle mass occurring in men. The multinomial regression model showed that the probability of a less severe eGFR category is higher in younger subjects, and a higher eTSMM decreases the odds of a better classification. A higher eTSMM is often associated with obesity and diabetes, and elevated BMI and waist-hip ratio is associated with increased eGFR decline.[10]

Conclusions

Different equations may provide different eGFR values and CKD classification in older adults. Further, eGFR values are affected by muscle mass in men but not in women. CKD-EPI is the most prudent choice at any age, though it underestimates eGFR in respect to BIS-1. MDRD appears to be unreliable in patients aged >85 years.

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Director of Nursing Perceptions of Physicians' Roles in US Nursing Homes

Nursing homes (NHs) are increasingly recognized as critical components of the long-term care continuum. Acute care systems have come to recognize the need for high-quality and easily accessible post-acute and long-term care avenues, a niche NHs have embraced over the past several years. Indeed, post-acute patients receiving NH rehabilitation account for more than 2.2 million Medicare-covered stays across 15,000 facilities.[1] The quality of care in NHs remains inconsistent and, in many respects, suboptimal. Although NH quality is dependent on a number of workforce factors, directors of nursing (DONs) and their relationships with staff, including attending physicians, are likely an important part of the equation.[2–4]

Although the evidence linking staffing, competence, and clinical quality is well accepted,[5–7] there is little research on the quality or impact of relationships between NH leaders (eg, administrator and/or DON) and physicians. This study intended to examine DON perceptions of their relationships with physicians.

Methods

The DON-physician perceptions survey was adapted from a 31-item validated survey of NH physicians, the NH Medical Staff Organization and Culture (NHMSO).[8] The 28-item adapted DON survey addressed domains of commitment (eg, physician attends care plan meeting), physician NH practice (eg, physician practice style), organizational structure (eg, decisions are made by consensus), and interpersonal relationships between the physician and other staff (eg, staff nurses), as well as demographic information.

E-mail invitations were sent to 3400 National Association of Directors of Nursing Administration in Long Term Care (NADONA) members. Participants received completion reminder e-mails every 3 to 5 days for several weeks after the survey was deployed; in total, 4 rounds of follow-up were conducted. Participants received $10 Amazon gift cards for completing the survey.

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This research was approved by the University of California Committee for Human Research (CHR). The survey questionnaire provided information about the survey, and participants' consent was implied by their participation as approved by the CHR.

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Table 1
Director of Nursing Perspectives on Physician Practice in Their Nursing Home (N = 180)

Commitment	No. (%) of Respondents Answering "Agree" or "Strongly Agree"
In my facility, the physician is considered the primary nursing home representative in interactions with families.	22 (13.2)
Physicians are expected to attend care plan meetings.	31 (18.6)
Physicians are expected to assume the leadership role in team meetings.	37 (22.2)
Competency (How involved is your physician in the following activities?)	**No. (%) of Respondents Answering "Moderately Involved" or "Very Involved"**
Quality improvement	128 (78.5)
Response to survey deficiencies	109 (66.5)
In-service education	55 (33.5)
Antibiotic stewardship	109 (66.9)
Admissions processes	68 (41.7)
Organizational Structure (Culture)	**No. (%) of Respondents Answering "Agree" or "Strongly Agree"**
The nursing staff in this facility get no respect from physicians.	17 (10.2)
There are close collegial relationships among the physicians.	92 (55.4)
A major characteristic of my leadership style as nursing director involves allowing each attending physician greater freedom to act independently.	86 (51.8)
A major characteristic of my leadership style as nursing director involves reviewing the medical care delivered by each attending physician.	134 (80.2)
Our administrative decision-making process is best described as consensus building.	105 (63.6)
There is a great deal of organizational loyalty.	113 (68.1)
There is an identifiable practice style to which we all try to adhere.	125 (75.8)
There is an emphasis on physician individuality; each physician has the right to practice according to his/her own style.	106 (63.9)
Organizational Structure (Quality of Relationships)	**No. (%) of Respondents Answering "Very Good" or "Excellent"**
How would you rate the relationship between physicians and licensed nurses in your facility?	117 (72.2)
How would you rate the relationship between NPs and PAs and the attending physicians?	104 (71.7)
How would you rate the relationship between yourself and the physicians on staff?	131 (80.9)
How would you rate the quality of the relationship between yourself and the medical director?	130 (81.8)

Results

A total of 339 DON survey responses were received, yielding a 10% response rate, which is within the normal range for online surveys of clinicians.[9] Only 180 responses contained sufficient data for analysis. Analyzed survey responses came from 35 states, with half of the respondents employed in Florida, Michigan, North Carolina, North Dakota, and New Jersey. Sixty-percent of DONs had a bachelor's degree or higher. Tenures as DON at their current facility ranged from under 1 year to 35 years, with a median tenure of 3 years. Nearly one-quarter (23.5%) had served for less than 2 years as DON at their current facility. Finally, 54.3% had at least 1 specialty certification (eg, geriatrics/gerontology, infection prevention).

Only 19% of respondents agreed that the physician attends the care plan meeting, and only 13% agreed or strongly agreed that the physician is considered the primary NH representative in interactions with families. A majority of DONs noted that physicians were moderately to very involved in antibiotic stewardship and quality improvement, and less involved in admissions and NH in-service training (Table 1). Among those DONs who indicated their medical director was certified by the American Board of Post-Acute and Long-Term Care Medicine (n = 45), 60% reported a high to moderate value in that certification. Conversely, among those whose medical director was not certified (n = 28), 75% said medical director certification was not or somewhat valuable. This finding suggests that exposure to certification affects perception of its value.

DONs were offered an opportunity to provide additional narrative feedback about their relationship with physicians in their NH. Availability of the physician included "everyday" to "being a phone call away" or "on-site weekly." DONs were most appreciative of physicians who "establish a very close relationship with families and staff." Comments also noted that improvements were necessary in the physician's level of involvement in care planning and staff education, and many DONs were continually challenged by the recruitment and retention of physicians in an environment with limited workforce resources. DONs also noted needed improvements regarding physicians' further understanding of antibiotic stewardship, end-of-life comfort, and NH regulations, especially the upcoming phase 3 implementation of the Mega Rule for physicians to practice in NHs.

Conclusions and Relevance

This survey provides a snapshot of the perceptions of DONs regarding physician roles in NH care. Overall, DONs reported very good to excellent close collegial relationships with their physician colleagues, especially around their commitment and competency with quality improvement. However, DONs also reported that physicians were not optimally involved, especially in the areas of staff in-service training and admissions. Further, DONs noted that their physicians needed a better understanding of federal regulations and policies governing long-term care. Areas noted by the DONs that may indicate further learning

opportunities for physicians include antimicrobial stewardship. Given the increased emphasis on improving antibiotic-prescribing practices and reducing inappropriate use, including stewardship-related duties in the physician's position description is warranted.[10]

The limitations of this study were that the sample included only NHs whose DONs are members of a professional organization, and that the response rate was low. Despite these limitations, it is clear that further discussion regarding expectations of physician involvement in their NH is needed. Future research is needed to enhance our understanding of the relationship between NH physician practice, DON-physician relationships, and NH quality indicators. Further research is also needed on the role and value of professional organizations such as AMDA and NADONA in continuing education and certification activities around the provision of NH care and quality improvement and, ultimately, the impact these additional credentials have on care outcomes.[11]

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Severe Apathy as a Risk Factor for Falls in Older Adults With Frailty Symptoms

Identification of unknown risk factors for falls is important in order for adults to reduce fall risk. Recently, apathy has been recognized as a complex behavioral syndrome represented by declined motivation in cognition, behavior, and emotion.[1] The more severe symptoms of apathy affect executive functions,[2] which is associated with fall risk.[3] However, it is unclear whether the severity of apathy has an impact on fall risk and is modified by physical frailty, which is one of the notorious risk factors for falls.[4] The purpose of this study was to investigate the effect of severity of apathy on falls and whether this relationship changes according to physical frailty.

Methods

The data were cross-sectionally collected from August 2015 to December 2017 as part of the Frail Elderly in the Sasayama-Tamba Area (FESTA) study. The study included 843 community-dwelling older adults. Of those, 49 were excluded, and the remaining 794 participants (average age: 72.7 ± 5.9 years, women: 69%) were included in the analysis. This study was approved by the ethics review board at Hyogo College of Medicine (No. Rinhi 0342).

To assess symptoms of apathy, we used the Geriatric Depression Scale (GDS-3A).[1] The questions were as follows: (1) Have you dropped many of your activities and interest? (2) Do you prefer to stay at home, rather than going out and doing new things? and (3) Do you feel full of energy? We considered no positive answers as non-apathy, 1 or 2 positive answers as mild apathy, and 3 positive answers as severe apathy.

Incidents of falls were assessed using the questionnaire.[5] Physical frailty was assessed based on the Cardiovascular Health

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