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Ema Perez April 10, 2023

Investigating Older Adult Self-Advocacy Through Pressure Injury Care in Skilled Nursing Facilities

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An abstract of
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Bachelor of Sciences with Honors

Neuroscience and Behavioral Biology

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Background: Self-advocacy in healthcare settings is associated with better health outcomes like decreased fall risk, increased screening for chronic conditions, and greater satisfaction with care. However, past research has indicated that healthcare professionals are less receptive to instances of self-advocacy in older adults and that older adults tend to be more passive in healthcare settings than their younger counterparts. Pressure injury (PrI) is a preventable skin wound caused by consistent pressure or pressure and shear. 70% of all PrIs occur in adults over 65 and 15% of older adults transferred from acute care hospitals to skilled nursing facilities have at least one PrI.

Methods: This qualitative study investigated clinician and caregiver perspectives on barriers to self-advocacy during PrI prevention and management in skilled nursing facilities. Thematic content analysis with deductive and inductive coding phases was performed on transcripts from ten semi-structured interview recordings with clinicians. Preliminary analysis was performed for one caregiver interview. Participants were clinicians who cared for older adult residents with PrI in skilled nursing facilities and an informal caregiver, recruited through convenience sampling.

Results: Resident-level barriers such as cognitive impairment were identified as barriers to self-advocacy. Even in instances when older adults were motivated and cognitively able to self-advocate, systemic barriers complicated self-advocacy and appropriate PrI care. SNF residents and their caregivers were consistently ranked least responsible for PrI management by clinicians. Education to residents and families about PrI prevention and management was usually given verbally and by variable members of the care team.

Conclusion: Previous studies have identified intrinsic qualities that promote older adult self-advocacy including knowledge, communication ability, and willingness to challenge the healthcare team. However, the results of this study indicate that older adult residents in SNFs also face extrinsic barriers that impede their participation in PrI care. The implementation of structured resident education and alternative models of geriatric treatment are promising future directions for improving the quality of care in SNFs.

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Acknowledgements

I thank Dr. Shilpa Krishnan for her mentorship during my time working on this project and for her openness to my ideas and interests in its direction. I thank Dr. Grace Couture for her clinical expertise and perspective, and for her support with interview conduction. I would also like to thank Drs. Ted Johnson and Keith Easterling for their willing contributions as committee members.

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Introduction

Self-advocacy in the healthcare setting is the ability to "represent one's own interests within the healthcare decision-making process" (Brashers et al., 1999, as cited in Wright et al., 2007). Self-advocacy has long been associated with better health outcomes like decreased fall risk, increased screening for cancer, and increased satisfaction with care, especially when treatments include implementing behaviors independently (Ruggiano et al., 2014; Lachman, 2006). However, older adults are less likely to feel in control of age-related declines in physical and cognitive function and are generally more passive in healthcare settings than their younger counterparts (Lachman, 2006; Kahana et al., 2009). This is especially concerning considering that 80% of adults over the age of 65 have at least one chronic condition (The National Council on Aging, 2021). To effectively self-advocate, older adults must have (1) sufficient, relevant medical knowledge, (2) the ability to communicate assertively with their healthcare team, and (3) the willingness to challenge their healthcare team if necessary (Brashers et al., 1999, as cited in Wright et al., 2007). Barriers to one or more of these factors can negatively impact an older adult's self-perceived agency in the healthcare setting. Breakdowns in health literacy disproportionately affect people with limited socioeconomic resources and members of racial and ethnic minorities (Muvuka et al., 2020). Communication ability ranges greatly among older adults. Approximately 42% of older adults report hearing loss, and communication disorders following stroke such as aphasia are more prevalent in older populations (Yorkston et al., 2010; Ellis & Urban, 2016). Furthermore, physicians are less likely to include older adults in healthcare decision-making than younger adults (Adelman et al., 2000). One reason for this trend is the perception held by some physicians that older adults would rather defer decision-making to

the healthcare team. However, older adult participation in decision making is often complicated by the aforementioned barriers, thus this perception may be misguided (Bynum et al., 2014).

One important and preventable health condition that predominantly impacts older adults is pressure injury (University of Arizona Health Sciences [UAHS], 2015). A pressure injury (PrI) is a skin wound caused by consistent pressure (UAHS, 2015) (see Figure 1). In older adults with limited mobility, this pressure is most often from a bed or chair. PrI can be prevented by regular repositioning to relieve this pressure (UAHS, 2015). The Centers for Medicare and Medicaid Services (CMS) use PrI incidence as a measure of the quality of care provided in skilled nursing facilities (SNFs), where older adults often receive short-term care after hospital discharge (Centers for Medicare & Medicaid Services, 2016). Despite this incentive, the prevalence of PrI in SNFs and nursing homes remains around 13 % (Berlowitz, 2014). 70% of all PrIs occur in adults over 65 and 15% of older adults transferred from acute care hospitals to SNFs have at least one PrI (UAHS, 2015; Bell, et al., 2016).

Cognitive impairment is associated with the major cause of PrI, lack of mobility (Buchman et al., 2011). 12-18% of people over the age of 60 have a mild cognitive impairment (MCI) (Alzheimer's Association, 2022). MCI encompasses a wide range of functionality (e.g., from occasional memory problems to difficulty completing stepwise tasks), which is often underestimated. Older adults with cognitive or communication disorders may require accommodations to effectively self-advocate and their personal perspectives may not always be acknowledged by the healthcare team. In SNFs, fewer residents with cognitive impairment display improvement of physical mobility between admission and discharge than their cognitively intact counterparts (Loomer et al., 2019). This trend is mediated by the severity of cognitive impairment: improvement in mobility was observed in the fewest residents whose

cognitive impairment was categorized as “severe” (Loomer et al., 2019). Past research has indicated that, even in the absence of physical or cognitive deficits that inhibit communication, healthcare professionals are generally less receptive to instances of self-advocacy in older adults (Ruggiano et al., 2014). According to the American Psychological Association (APA) Resolution on Ageism, older adults with cognitive impairment are at especially high risk for stigma and devaluation of life in healthcare settings (APA, 2020). This increased risk warrants investigation into the value that the care team places on instances of self-advocacy in this population and the most effective ways to increase this perceived value.

There is a large and growing body of research concerning self-advocacy in healthcare. However, much of this research is conducted in the context of long-term care for chronic conditions, AIDS/HIV, or cancer. Additionally, these studies are often conducted through large-scale telephone or email surveys. These methods inadvertently exclude older adults with mild to severe communication or cognitive impairments. Limited information is available on the perspectives of older adults on their feelings of agency within healthcare settings (Ruggiano et al., 2014). Healthcare best practices for preventing and managing PrI abound (Mayo, 2022). Nevertheless, without an investigation into barriers to effectively manage and prevent PrI for older adults, these practices are futile. This study characterized the clinician perception that comorbidities, especially cognitive impairment, impact the ability to receive optimal PrI care in the setting of a SNF. We described what clinicians and caregivers perceive to be the role of the resident in their own care and examined how perspectives on agency vary with cognitive ability as indicated by level of cognitive impairment and observed communication skills or deficits. Based on prior literature, we expected that the role of the resident and their perceived ability to self-advocate would be minimized in clinician interviews compared to resident and caregiver

interviews (Ruggiano et al., 2014). We identified intrinsic and extrinsic barriers to advocacy in older adults with PrI with the goal of informing strategy development to alleviate these barriers and increase the quality of care.

Methods

Eleven semi-structured interviews were conducted and qualitatively analyzed. Ten clinicians (N=10) were interviewed over Zoom and one caregiver (N=1) was interviewed in person. The interviews are part of an ongoing study led by Dr. Shilpa Krishnan PT; PhD titled "Patient-Centered Pressure Injury Outcome Preferences." The first, completed phase of this larger study investigates clinician perspectives, while the second, current phase investigates SNF resident and informal caregiver perspectives. The study has been approved by Emory University's Institutional Review Board.

Clinicians who self-identified as members of the care team for older adults with PrI in SNFs were recruited through convenience sampling and interviewed (see Table 1 for clinician characteristics). The interviews were recorded and transcribed manually. The transcripts were analyzed first deductively, then inductively using NVivo 12 qualitative coding software. In the deductive coding phase, transcripts were organized into themes based on predetermined research questions and the semi-structured interview guide. In the inductive coding phase, recurring themes in the interview transcripts guided the creation of themes and subthemes that more precisely described points brought up by participants. For example, the question: "What do you think are the primary reasons residents at your facility develop pressure ulcers?" was answered by one clinician: *"Sitting in urine or feces for a long time, the staff taking a long time to come and change them, I think that's kind of the main thing."* In the deductive phase, this reference was placed under a theme called "Primary reasons for PrI development." In the inductive phase, this reference was placed in themes "Barriers to PrI Management> Resident-Level Barriers> Comorbidities> Incontinence" and "Barriers to PrI Management> Facility-Level Barriers>Staffing." This nesting strategy allowed for the attainment of theme and subtheme

saturation within and across interviews. A multidisciplinary team of researchers (physical therapist, physician scientist, and undergraduate student) coded and refined themes and subthemes, employing consensus coding to resolve any divergences. Tables 3 and 4 provide code frequency data supplemented with representative quotations.

The second phase of this study investigates SNF resident and caregiver perspectives. Over the past year, our team has made connections with several older adult advocacy groups including the Culture Change Network of Georgia, Alliant Health Solutions, and the federally funded Long Term Ombudsman Program with the goal of participant recruitment. We have entered into a memorandum of understanding with PruittHealth, Inc. and recruited participants with the help of PruittHealth administrative staff. Participants were older adults who have sustained a PrI within the past year during their stay at a SNF and their informal caregivers (e.g., family members, close friends). As in the previous phase, perspectives on PrI management in SNFs were ascertained through semi-structured interviews. Thus far, one caregiver interview has been completed and transcribed manually. The interview was completed at the location of the participant's choosing and the participant was compensated with a $10 gift card. In this phase, the interview guides were subject to accommodations based on previous literature outlining guidelines for qualitative interviews with participants who have communication disorders such as aphasia (Dalemans et al., 2009; Chiti & Pantoni, 2014). This phase of interviews was in person and was preceded by an informative Saint Louis University Mental Status (SLUMS) examination. The SLUMS examination is a validated tool to detect mild to severe cognitive impairment, with SLUMS scores from 21-26 indicating MCI and scores below 20 indicating dementia. The test took ten minutes to administer and was scored after the interview. Analysis of self-advocacy during PrI care was focused on responses to the subset of interview questions in

Table 2. Broader analysis of barriers to PrI management in SNFs included all coded participant responses.

Results

Clinician Participant Characteristics (see Table 1)

Clinician participants were of varying professions, including one certified nursing assistant (CNA), one podiatrist (DPM), one licensed practice nurse (LPN), one physician (MD), one nurse practitioner (NP), two occupational and two physical therapists (OT and PT), and one registered nurse (RN). 90% (N=9) of clinician participants were female; 70% (N=7) self-identified as Asian, 20% as White (N=2), and 10% as Black (N=1). Clinicians had practiced for a mean of 11.8 years at the time of the interview (range 2-34 years, SD: 9.0). 40% (N=4) of participants practiced in Georgia, 20% (N=2) practiced in California, and 40% (N=4) practiced in other states. 40% (N=4) of clinicians were currently employed at a SNF and of the 60% (N=6) no longer employed at a SNF, average time since last employment at a SNF was 2.9 years (range: 0.2-7 years, SD: 2.5). The average 5-Star CMS quality rating for SNFs represented in this sample in 2022 was 4 stars (range 2-5, n=9).

Caregiver Participant Characteristics

The caregiver participant interviewed was a 70-year-old, high-school educated, White female. The resident with PrI whom she cared for was admitted to a SNF in Georgia at the time of the interview. Both the interview and the cognitive assessment took place at the caregiver's residence. The caregiver's SLUMS score fell within the range of scores indicating dementia (score = 18, range for dementia =1-20). However, administration of the assessment was complicated by the caregiver's age-related macular degeneration. Differences in performance between older adults with visual impairment versus without visual impairment on cognitive assessments with vision-dependent test items have been shown to reflect differential visual, not

cognitive, impairments (Killen, 2012). Thus, this caregiver participant's SLUMS score may be an underrepresentation of actual cognitive function.

Clinician Interviews

Several barriers to PrI care with implications for residents' ability to self-advocate emerged during interview analysis (see Table 3). All (N=10) clinicians said that there were no official PrI care trainings available to residents or caregivers at their SNFs. Informal education was generally provided to residents verbally at the point of care (N=8). All (N=10) clinicians cited resident comorbidities such as incontinence (N=7) and cognitive impairment (N=7) as primary factors impeding PrI care. Clinicians also mentioned malnutrition (N=2) and diabetes (N=2). Limited mobility was referenced in the interviews (N=7) as a cause for PrI development and a barrier to management of existing PrIs. Resident noncompliance (N=3), pain (N=2), and limited family support (N=1) were other challenges to PrI care.

When asked which disciplines were "involved in PrI management" at their facilities, clinicians identified nursing (RN [N=9], CNA/Tech [N=7], NP [N=2], wound RN [N=2], LPN [N=1]), medicine (MD [N=1], podiatrist [N=1], wound care physician [N=1]), rehabilitation (PT [N=7], OT [N=6], PTA [N=1], COTA [N=1]), and nutrition (N=1). When asked to rank interviewer-provided care team members in order of importance (patient, caregiver [e.g. friends, family], support and technical staff [e.g. CNAs], specialized wound clinician [e.g. nurses, therapists and physicians], and others), clinicians most often ranked nursing as most responsible for PrI management (N=6). The family (N=5) and the resident (N=4) were most often ranked as least responsible. 50% (N=5) of clinicians cited resident cognitive impairment as a reason for this low ranking. When asked an open-ended version of this question ("Who is most responsible

for PrI management?") without interviewer-provided care team members, the most consistently identified responsible member was a wound care nurse. Interestingly, no clinician identified their own discipline as most responsible for PrI management (see Figure 2).

When clinicians were asked to describe their own roles in PrI care, 60% (N=6) described repositioning residents and 50% (N=5) reported performing skin assessments. 30% (N=3) performed wound care such as cleaning and debridement, and 40% (N=4) administered medical treatments like antibiotics or prescription topical ointments. Other mentioned roles in resident care were mobility assessment (N=3), provision of education to residents and families (N=2), and nutrition monitoring (N=1).

Beyond direct interaction with residents and caregivers, all (N=10) clinicians described elements of a negative workplace culture that inhibited optimal PrI care (see Table 4). Elements included a lack of facility directives (N=9) and lack of accountability (N=8) for follow-through on care. 60% (N=6) of clinicians said that there were no standard procedures for PrI prevention across their SNFs. There were also no reported facility-provided staff incentives for effective PrI care (N=7). 70% (N=7) of clinicians also reported that PrI care that did not actually occur was documented anyway due to unrealistic staff productivity expectations.

Caregiver Interview

Though qualitative coding was not performed on the caregiver interview, themes gathered from the completed clinician interviews were generally consistent. The caregiver reported that she had not received any official education about PrI since the resident's admission to the SNF. Instead, she asked questions on behalf of the resident to receive information about PrI. "*They told me they were pressure injuries and that this is what they were gonna do but they*

didn't give me any information on what caused them or anything like that… he would ask me the questions and I would ask them, I tend to absorb and I pay attention…I would of liked one of the wound care people to actually talk to me more than just a phone call telling me what they were doing."

The caregiver reported that the resident had several comorbidities that complicated his PrI care including incontinence, diabetes, pain, limited mobility, and aphasia. Though she facilitated the resident's communication with the healthcare team and provided moral support, the caregiver stated that she did not see herself as a member of the team caring for the resident at the SNF. Retrospectively, she agreed that her role as a communicator was crucial to the resident's PrI healing process. *"I realized that he wasn't communicating, and they weren't understanding, I really did have to translate. And he was telling me stories from his past, but he'd start in the middle, and he'd meander all over the place with them. And the only reason I knew what he was talking about was because he'd told me the story so many times… He's done more communicating at [SNF redacted] than he did in the hospital…they're paying more attention to him. We finally got through to them that it's a part of the stroke, the communication problems."*

The caregiver also stated that information about the roles of different members of the care team (e.g., OT vs. CNA) also allowed her to better advocate for the resident's care. The caregiver noted that when the resident was first admitted to the SNF, he had preexisting PrIs that were properly cared for and healed. However, she added that the resident had recently developed new PrIs and concluded that his PrI care had declined over the course of his stay at the SNF.

Discussion

A systematic review of literature on PrI care revealed a need for studies of the *implementation* of PrI prevention and treatment in SNFs (Saha et al., 2013). In this study, we examined how intrinsic resident factors like cognitive impairment and extrinsic facility factors like poor team communication impact care for this largely preventable condition. The results of this study indicate that a lack of consistent and effective education, multiple resident comorbidities, unclear clinician and resident role definition, and a negative workplace culture are barriers to optimal PrI prevention and management in SNFs. These findings are consistent with prior literature investigating perceived barriers to PrI care in other, longer-term care settings such as nursing homes (Lavallée et al., 2018).

Furthermore, no other studies have investigated older adult self-advocacy specifically in the SNF setting. Our approach integrated perspectives of clinicians at many different levels of care and perspectives of the caregiver to provide a holistic and multifaceted view of healthcare in a SNF. As previously mentioned, the three keys to self-advocacy in healthcare settings are (1) sufficient, relevant medical knowledge, (2) the ability to communicate assertively with the healthcare team, and (3) the willingness to challenge the healthcare team if necessary (Brashers et al., 1999, as cited in Wright et al., 2007). Each barrier to PrI management identified in this study has implications for the role residents can have in their own care throughout their SNF stay.

Clinicians consistently reported a negative workplace culture concerning PrI care that existed at their facilities. Though these facility-level barriers are beyond the role of the resident, they directly influence the care residents receive. For example, in a facility that lacks proper protocols and guidelines, staff may not be specifically assigned to the task of wound care. The

task may be "tacked on" to preexisting responsibilities that take priority such as medication administration and feeding. This asymmetry of care is a known weakness of person-centered rather than task-oriented work methods for PrI care (Parreira et al., 2021). Though the person-centered approach has been shown to improve PrI outcomes (Gethin et al., 2020), SNFs must also consider its faults: staff are forced to deprioritize important but less immediately necessary care activities such as PrI prevention and management. Another contributor to the negative workplace culture was a lack of accountability for follow-through on care. Clinicians reported pressure to falsify documentation due to unrealistic and outdated guidelines for PrI prevention and management and tedious documentation practices. Indeed, previous literature has revealed a difference in the documentation of services provided and actual services rendered in daily PrI related care activities (Schnelle et al., 2004). Clinicians in the current study cited the "Q2" protocol for PrI prevention, which requires turning and changing residents every two hours. However, a 2013 study revealed no difference in PrI incidence for 2-, 3-, or 4-hour turning schedules (Bergstrom et al., 2013). Dated and impractical standards that remain in documentation procedures incentivize dishonesty rather than incentivizing the goal of preventing and managing PrIs.

Effective interdisciplinary teams require that each member understands their own contribution and the contributions of other members on the team (Nancarrow et al., 2013). Participants in this study were largely unaware about the roles of PrI care team members other than themselves. Therefore, residents and caregivers in these SNFs are unlikely to have a clear understanding of who to advocate to for specific care practices either. The caregiver confirmed that this knowledge was a key facilitator during her instances of advocacy for the resident: *"[The OTs] would give me information on why they were doing it sometimes and then they would say*

that the nurses need to get him up every day, they didn't go by every day to get him up. And sometimes they got him up every day and sometimes they didn't…so I know who to fuss at." High staff turnover rates are another serious challenge for interdisciplinary PrI care teams. Transient staffing can inhibit the establishment of a consistent team communication system. Gandhi et al. (2021) found median turnovers of 100% for CNAs and 103% for RNs from 2017-2018, which indicates that replacement RNs also left the facility within one year. There was a negative correlation between staff turnover and CMS 5-star quality rating, with the lowest rated SNFs having the highest rates of staff turnover. This phenomenon exacerbates the already ambiguous role definition of PrI care team members, complicating residents' and caregivers' ability to advocate for PrI care in SNFs. A recent survey associated higher reported rates of staff empowerment (e.g. participant in quality improvement teams, incentives for education) with higher CNA retention (Berridge et al., 2018). This work emphasizes the importance of a supportive workplace culture for consistent care and better care outcomes.

Overall, clinicians ranked families and residents as the least responsible members of the care team for PrI. Families may only see the resident sporadically and are not educated on PrI prevention and management, thus they may not be prepared to identify an existing PrI themselves. However, cooperative communication between the care team and the families of older adults with cognitive impairment has been shown to increase quality of care in other healthcare settings (Robison et al., 2007). Clinicians perceived that the residents at their facilities were unable to advocate for their own care due to cognitive deficits. For example, one clinician explained their low ranking of the patient: *"I think I would put patients kind of at the end as well only again because my patients usually have dementia, and they don't know what's going on."* Another stated, *"We have a lot of people who have dementia and have wounds and then it's*

harder to educate them obviously and there is no carry over." Indeed, qualitative studies of self-advocacy in older adults often excluded adults with moderate to severe cognitive impairment (Ruggiano et al., 2014). Using the CMS-provided Minimum Data Set (MDS) from 2013-2014, Downer et al. (2017) found that, upon admission to a SNF, 60% of residents were classified as cognitively intact and 22% of residents were mildly impaired. Thus, there is a large population of older adults in SNFs without or with mild cognitive impairment that may benefit from a more active role in their own PrI prevention. The caregiver in the current study also explained that the resident's communication deficits prohibited him from interacting with the care team because they did not have time to accommodate his post-stroke aphasic speech. She stated: *"He doesn't communicate well because of the stroke, and he's got a real low voice, it's hard to hear him too. And the nurses are very impatient, and they want to get on with their day and they don't really have time to listen to him."* Thus, resident self-advocacy may be impacted not only by the presence of cognitive or communication deficits, but also the lack of staff time to accommodate these deficits.

One evidence-based way to encourage self-advocacy in older adults with PrI is through consistent, structured education. A recent review of the effectiveness of education on PrI care concluded that education to older adults about PrI enhanced knowledge of the PrI development process and increased their participation in their own care (Thomas et al., 2022). Education methods in the studies that were considered by the review included pamphlets and telephone-based education. For example, one education leaflet titled "Preventing Pressure Ulcers, a guide for patients and their carers" showed an illustration of the body with the most common sites of PrI development highlighted (Hartigan, 2011). The leaflet also provided practical, bulleted action steps such as "If you are in a chair…Lift your bottom off the seat by pushing up on the arms of

the chair" and "Look for skin that doesn't return to its normal color after you have taken the weight off it" (Hartigan, 2011). Clinicians in the current study described any resident education given in their SNFs as informal, inconsistent, and verbal. The caregiver also expressed that more information about what PrI was and what the PrI prevention strategies were upon admission to the SNF would have helped her better support the resident. She emphasized that she would have benefited from explanations of why the care team was implementing certain PrI management tasks, not just assurance that the PrIs were being managed.

Beyond education, Inouye et al. (2007) proposed an interactive concentric model of intervention for geriatric syndromes like PrI. Researchers identified risk factors for PrIs and other geriatric syndromes based on a systematic literature review. Consistent with the findings of the current study, they concluded that the pathophysiology of PrI is multifactorial and that interventions should focus on risk factors that synergize. For example, incontinence and impaired mobility both contribute to the clinical phenotype of a PrI. Rather than employ a separate treatment for each risk factor, an interactive concentric intervention would seek to treat both factors with one practice. This model is unique as it facilitates the implementation of existing evidence-based practices rather than introducing new best practices, narrowing the research to practice gap that has inhibited optimal PrI prevention and management for so long.

According to data from Medicare beneficiaries, long-term PrI care cost the U.S. national healthcare system around 22 billion dollars in 2014 (Nussbaum et al., 2018). Approximately 66,000 deaths from PrI complications occur annually, surpassing the 63,400 drug overdose deaths that occurred in 2018 (Bauer et al., 2016; Hedegaard, et al., 2020). Furthermore, 55% more patients with PrI than patients without PrI are discharged to a SNF or other intermediate care facility instead of going home (Bauer et al., 2016). Thus, SNFs bear much of the grave and

expensive burden of PrI care and management. This study used perspectives from clinicians at multiple levels of the PrI care team to identify barriers to resident self-advocacy and to the implementation of PrI best practices in the understudied setting of the SNF. Frequent studies of PrI care that include only nursing staff perspectives limit the generalizability of their findings to the entire team. The current study interviewed a professionally and geographically diverse sample of clinicians with varying roles in PrI care. Though broadly consistent themes were identified, the current study did not interview enough clinicians within each specialty to account for within versus between group differences in perspectives by clinical specialty. Additionally, considering the overlap of clinician roles and responsibilities in multiple types of healthcare facilities, it may have been difficult for clinicians to separate barriers or facilitators in SNFs from their experiences in other facilities during recall. There is also limited data on the perspectives and characteristics of facility administrators (National Academies of Sciences, Engineering, and Medicine, 2022). In the current study, this limitation was likely due to a self-selection bias against this extra-medical role (i.e., administrators may not identify themselves as part of the care team for individuals with PrI). Future research should investigate the perspectives of all PrI care team members, including administrators. Only interviewing participants who are currently working in the SNF setting would also clarify the dynamics of the PrI care team and the impact of these dynamics on facility-specific outcomes.

Another limitation of this study is the lack of data on caregiver and resident perspectives. Recruitment during the COVID-19 pandemic was extremely limited due to decreased researcher access to healthcare facilities. Future work should employ a similar semi-structured interview methodology with more caregivers and with residents to allow further comparison with the clinician perceptions described in the current study, especially comparisons between perceptions

of how cognitive impairment impacts self-advocacy. Future research should also consider the impacts of the COVID-19 pandemic on PrI care. In the wake of the pandemic, the National Pressure Injury Advisory Panel (NPIAP) issued a statement expanding the definition of "unavoidable" PrI to include PrIs that formed because strategies to limit the spread of COVID-19 were prioritized over PrI prevention strategies (Black et al., 2020). The elimination of the caregiver presence during the pandemic may have also had deleterious effects on PrI management.

In this study, results from clinician and caregiver interviews were used to describe what clinicians and caregivers perceive to be the role of the resident in PrI care in SNFs. Previous studies have identified keys that promote older adult self-advocacy including relevant knowledge, communication ability, and willingness to challenge the healthcare team. This study adds that older adult residents in SNFs face extrinsic barriers to these keys that impede their ability to self-advocate. Accommodating resident and caregiver education structures coupled with interactive concentric models of care that focus on the implementation of existing best practices are realistic and promising future directions for improving the quality of PrI care in SNFs by empowering residents to participate in their own care.

Tables and Figures

Table 1. Clinician Characteristics.

Profession	Sex	Race	Years of Practice	State	Most Recent Year Working at Facility
CNA	F	Black	15	GA	2016
DPM	F	Asian	8	NY	present
LPN	F	Asian	15	FL	2018
MD	M	White	34	OH	2018
NP	F	Asian	7	GA	present
OT	F	Asian	9	PA	2018
OT	F	White	2	GA	2018
PT	F	Asian	5	CA	present
PT	F	Asian	8	CA	present
RN	F	Asian	15	GA	2014

CNA=Certified Nursing Assistant

DPM=Doctor of Podiatric Medicine

LPN=Licensed Practical Nurse

MD=Medical Doctor

NP=Nurse Practitioner

OT=Occupational Therapist

PT=Physical Therapist

RN=Registered Nurse

Table 2. Subset of semi-structured interview questions.

Asked to Clinicians	What do you think are the primary reasons residents at your facility develop PrI?
	What are common barriers and challenges to effectively managing PrI in your facility?
	Who is most responsible for PrI management? Rank the following members of the care team in order of importance: patients, care partners (friends, family), support and technical staff, specialized wound clinician (RN, therapist and MDs), others (please specify).
	What information/education is given to help people (patient and caregivers, clinicians etc.) manage PrI? How is the information provided? Does the information/education differ between patients and caregivers, and clinicians?
Asked to Caregivers	In your understanding, what is a bedsore or pressure injury (PrI)?
	Did you know or think the resident was at risk of developing a PrI before it happened?
	Did/Do you see yourself as part of the care team working to prevent and treat PrI?
	Do you have a role in helping heal their PrI? If so, what was/is your role in helping heal their PrI?
	Was information or training about PrI cause, prevention, or treatment provided to you in the acute care/hospital facility? In the SNF?

Table 3. Resident-Level Barriers to PrI Management.

Themes and subthemes organized by code frequency =N (%)	Representative quotations
Comorbidities=10 (100%) Incontinence=7 (70%) Cognitive Impairment=7 (70%) Diabetes=2 (20%) Malnutrition=2 (20%) Antibiotic Resistance=1 (10%) Arthritis=1 (10%) Multiple sclerosis=1 (10%)	"...she'd be in the bed, and I'd come in to see her. I'd come in to get her for therapy and she would be so soiled, like hadn't been changed like it would be like 11, 12 in the afternoon and she hadn't been changed from the night before." (P1 OT) "...especially for a patient who has Alzheimer's... you turn them on their side, they will do everything that they can to remove that wedge or that pillow, and they go right back on their back." (P10 CNA)
Limited Mobility=7 (70%)	"And she was sharp as a tack. Like she was so, she was on it, but she had a stroke and she's hemiparetic on one side like super dense, could not walk at all, so wheelchair bound...so, like, not so cognition definitely but also kind of stroke, can't move around too." (P1 OT)
Compliance and Motivation=3 (30%)	"Most of the times I have noticed non-compliance, especially when somebody has a high prior level of function, and they develop a wound they don't always tend to follow the guidelines, which tends to increase the length and delay the wound healing as well." (P2 PT)
Pain=2 (20%)	"Usually pain I would say is one of the challenges that we usually, like, have because sometimes, like, we want to roll the patients, or we want to do more of mobility or range of motion, but having the pressure ulcers they don't like being moved too much. They're always in pain, like, we want to make them set up, but they cannot." (P6 PT)
Limited Family Care and Advocacy=1 (10%)	"Even some of the more difficult ones that I had, like, and by difficult, I mean like the ones requiring more care, the ones that had family members coming in definitely got a different quality of care than the ones that didn't, which is sad." (P1 OT)

Table 4. Negative Workplace Culture.

Themes and subthemes organized by code frequency=N (%)	Representative quotations
Lack of Facility Directives=9 (90%)	
Lack of Incentives=7 (70%)	“They had units with no falls that would get...they will appreciate it, they will put it on a poster or something, but I don't know if there was something like that then for pressure injuries. It would be good to have those things...that kind of gives the importance it deserves.” (P4 OT)
Lack of Protocols and Guidelines = 6 (60%)	“I feel sometimes in our building I would say again it’s the delay in implementation of a few things so like um not having the CNA's assigned specifically for turning schedules and stuff.” (P2 PT)
Productivity Expectations = 4 (40%)	“I'm kind of the primary care person for the whole building, it's only me. So, I have all my other responsibilities that I have to do on a day-to-day basis, I kind of tack on the wound care. Truthfully, I would love it if I wasn't that involved in wound care, I would love if I could do the rounds but not always be the person, I suppose. Because I have like 120 other people who have various problems every day and I have to do... a bunch of other stuff too.” (P5 NP)
PrI Care Is Low-Priority=3 (30%)	“I think that at the time when I worked there, it wasn’t really a huge focus. Kind of seemed like an afterthought, but it's obviously something that’s really important.” (P1 OT)
Continuity of Care=2 (20%)	“Continuity of care, also. Having similar patients and knowing the patients and the CNA, having the time to...group care is always better.” (P9 RN)
Lack of Accountability= 8 (80%)	

Pressure to Falsify Documentation=7 (70%)	"People are documenting that they're doing things and they're not. That's kind of a huge thing in SNFs is like, and that goes back to that productivity thing for that, you know? People are probably not going to be able to do all the things that they're expected to do in this short-staffed setting. But they're still going to document that they do it sometimes because they want to go home, and they want to keep their jobs." (P1 OT)
Repositioning=5 (50%)	"There is absolutely no way that anyone can have 12 patients and they're repositioning the patients every two hours when there's so much more that you have to do for these patients. So they just want to see... the documentation that it was done, I think that's more important. I think anyways, that's more important to say that it was done than if it was actually done." (P10 CNA)
Tedious Equipment and Ineffective Documentation=3 (30%)	"With the documentation portion, just, you know, just trying to get through the documenting because you have to document on your other patients...you know, just monotonous pointing and clicking through. With the VA everything's electronic, so a lot of it was pointing in clicking 'Did you do this? Did you do this' Yes, yes, yes, yes... in order for you to move on to the next part of the note you have to fill in every asterisk there." (P8 LPN)
Lack of Teamwork= 7 (70%)	"The nurse assigned to the same patient that I'm feeding is also assigned to the patient who has to be toileted at 12:00 PM. So I asked the nurse, can you toilet these two patients, because I'm feeding and she said no. [She said] 'You can do it when you're done feeding the patients.' And I said, 'Well, I have three patients to feed.' She said, 'If you're done at 1:00 or 2:00, then you can do it. You can toilet the patients.' That was one of my issues. It wasn't a team thing, you know, it wasn't... it was a CNA thing." (P10 CNA)

Poor Team Communication=5 (50%)	"Sometimes as a podiatrist I recommend things such as admission to hospital because now they have osteomyelitis and then it's up to the internal medicine doctor to make that decision. Then the internal medicine doctor does not follow through with that and the patient ends up just staying in the facility still and doesn't go to the hospital and then it gets worse." (P7 DPM)
Clinician Factors= 5 (50%)	
Apathetic=5 (50%)	"Some of them just didn't care, but a majority of the time, about 80% of the time, once they have a really, really bad wound that kind of wakes them up." (P8 LPN)

Figure 1. Staged Images of PrI (PPPIA, 2020).

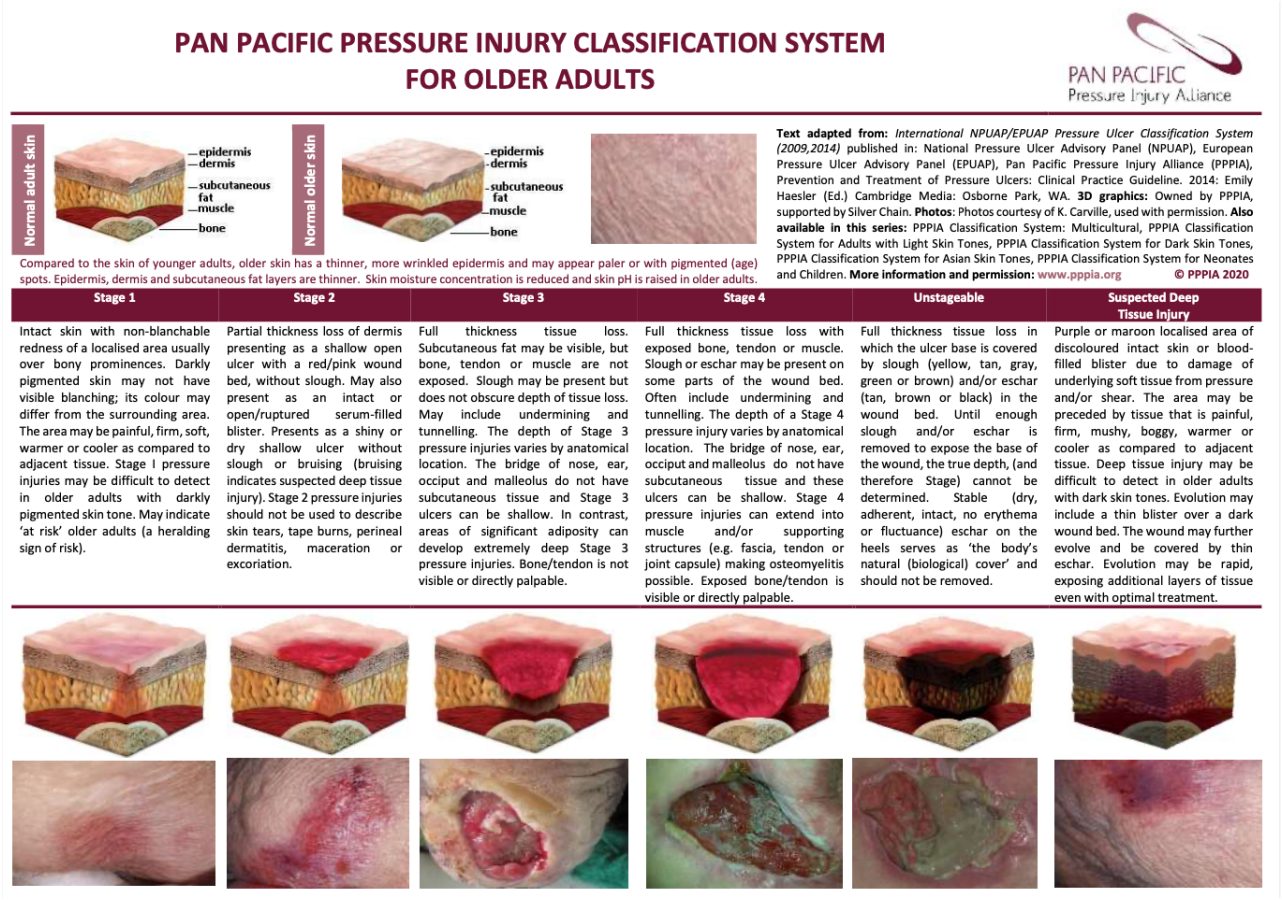
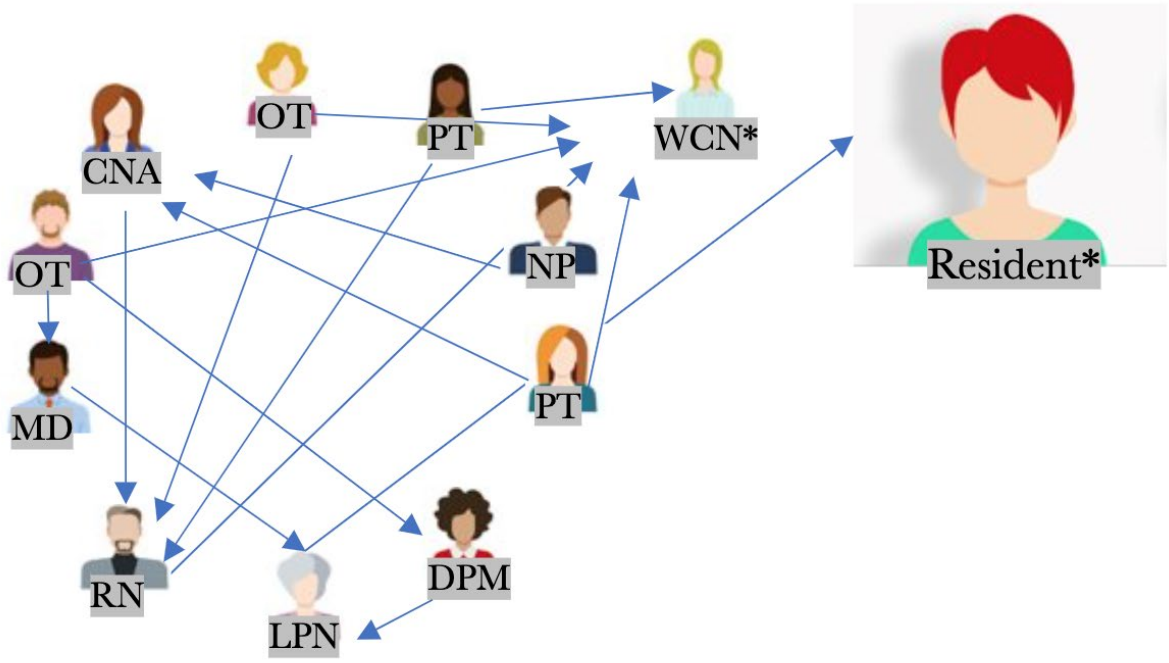


Figure 2. Graphic of clinician responses to the question "Who is most responsible for PrI care?".



*Neither a WCN nor a resident was interviewed.

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