

Quality Measure Concepts for Inpatient Rehabilitation That Are Best Understood From the Patient's Perspective

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Abstract

Purpose: The aim of this study was to identify inpatient rehabilitation quality-of-care concepts that are best understood from the patient perspective.

Design: We conducted 12 focus groups with 95 former patients, caregivers, and rehabilitation clinicians and asked them to describe high-quality inpatient rehabilitation care.

Methods: We independently reviewed the focus group transcripts and then used an iterative process to identify the quality measure concepts identified by participants.

Results: Based on participants' comments, we identified 18 quality measure concepts: respect and dignity, clinician communication with patient, clinician communication with family, organizational culture, clinician engagement with patient, clinician engagement with family, rehabilitation goals, staff expertise, responsiveness, patient safety, physical environment, care coordination, discharge planning, patient and family education, peer support, symptom management (pain, anxiety, fatigue, sadness), sleep, and functioning.

Clinical Relevance to the Practice of Rehabilitation Nursing: Rehabilitation nurses should be aware of the quality-of-care issues that are important to patients and their caregivers.

Conclusion: Important patient-reported domains of quality of care include interpersonal relationships, patient and family engagement, care planning and delivery, access to support, and quality of life.

Keywords: Focus groups; inpatient rehabilitation; quality of care.

The National Quality Forum (NQF) noted that patients remain an untapped resource in evaluating the quality of healthcare services and that “patients are a valuable and, arguably, the authoritative source of information on outcomes” (NQF, 2013, p. 3). Furthermore, Berwick (1997) noted “the ultimate measure by which to judge the quality of a medical effort is whether it helps patients (and their families) as they see it. Anything done in health care that does not help a patient or family is, by definition, waste”

(p. 1565). Consistent with these statements, there is growing interest in understanding the quality of care from patients' perspectives in inpatient rehabilitation facilities (IRFs; Gans, 2018). The quality of care in IRFs has historically been measured using clinical (e.g., clinician-reported function) and claims (e.g., readmissions) data.

Previous research has identified a range of issues that patients and caregivers observed or experienced during IRF stays. These issues include quality and timely communication, staff attitudes and behaviors, knowing the staff, empathy, respect, needs and hopes, education, resources, making the best use of time and facilities in the rehabilitation center, dependency and the lack of control, fostering autonomy, motivation needs nurturing, understanding the purpose of therapy, how therapy helps them achieve their goals, care coordination, skill of staff to manage patients with complex needs, management of fatigue and pain, person-centered care, group versus individual identity, feeling bored and alone, recreational and social activity, physical activity is valued, and functioning (Christie et al., 2021; Gill et al., 2014; Luker et al., 2015, 2017; McMurray et al., 2016a, 2016b; Wain et al., 2008). Although these studies provide insights into patient perceptions during the rehabilitation stay, there is a

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Cite this article as:

Deutsch, A., Neumann, H., Goldsmith, A., Heinemann, A. W., & Ehrlich-Jones, L. (2022). Quality measure concepts for inpatient rehabilitation that are best understood from the patient's perspective. *Rehabilitation Nursing*, 47(6), 210–219. doi: 10.1097/RN.0000000000000385

need to identify the concepts that could be indicators of IRF quality and could be used for the purpose of improving IRF care quality (Institute of Medicine, 2001). Furthermore, these efforts should harmonize with quality measurement efforts in other healthcare settings, such as the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) used in acute care hospitals (Briggs et al., 2018; Chakraborty & Church, 2020), because there are efforts to align quality measurement across care delivery settings. Although patients' goals of care vary within and across settings, several core quality concepts are important regardless of patient goals and care setting, such as person-centered care, good communication, education, and discharge planning. To support these efforts, the NQF's Measures Application Partnership has developed cross-cutting frameworks for quality measurement, including a person- and family-centered care framework (NQF, 2014). Aligning efforts for patient-reported quality concepts would mean that when questions are relevant across care settings, patients would be asked these quality-of-care questions in a consistent manner (e.g., similar format, questions, and response options) regardless of setting. This could reduce survey development burden and could reduce confusion for patients who receive multiple quality-of-care surveys because of care in multiple settings. Furthermore, aligned efforts mean that quality-of-care survey results could be compared across settings of care.

Here, we describe the first phase of a project focused on identifying patient-reported data that might be used to improve inpatient medical rehabilitation care delivery. The larger project, titled *Developing Quality Metrics From Patient-Reported Outcomes for Medical Rehabilitation*, sought to examine the feasibility and effort required to collect patient-reported outcomes measures and patient-reported experience measure data among patients with neurological conditions undergoing inpatient rehabilitation. The research questions were:

1. What quality measure concepts do former patients, caregivers, and clinicians identify as features of high-quality inpatient rehabilitation care that are best understood from the patient perspective?
2. Which of these quality-of-care concepts are already addressed in the acute care HCAHPS quality measures?
3. To what extent do these quality measure concepts map to the six priority topics and subtopics in the NQF framework for person- and family-centered care?

Methods

Study Design

We convened 12 focus groups for three different stakeholder groups: patients, caregivers, and clinicians (Table 1). We

Table 1 Summary of the 12 Focus Groups

Focus Group	Location	Number of Participants
Patient 1	Urban freestanding IRF	9 former patients with stroke, TBI
Patient 2	Urban freestanding IRF	8 former patients with SCI
Patient 3	Suburban IRF unit	8 former patients with stroke
Patient 4	Suburban IRF unit	3 former patients with SCI, TBI
Patient 5	Urban freestanding IRF	5 former patients with MS, PD
Caregiver 1	Urban freestanding IRF	6 caregivers
Caregiver 2	Urban freestanding IRF	6 caregivers
Clinician 1	Urban freestanding IRF	11 clinicians
Clinician 2	Urban freestanding IRF	10 clinicians
Clinician 3	Urban freestanding IRF	10 clinicians
Clinician 4	Suburban IRF unit	9 clinicians
Clinician 5	Suburban IRF unit	10 clinicians

Note. IRF = inpatient rehabilitation facility; TBI = traumatic brain injury; SCI = spinal cord injury; MS = multiple sclerosis; PD = Parkinson's disease.

then conducted qualitative content analysis of the focus group transcripts to identify concepts that are important to the quality of care for rehabilitation inpatients that are best understood from the patient's perspective. The larger overall project had an Advisory Committee that provided feedback on the project activities. We asked two members of this Advisory Committee who were former patients to review de-identified transcripts and the initial set of quality concepts and provide feedback to the team.

Recruitment of Participants and Focus Group Logistics

After obtaining institutional review board approval at Northwestern University and Alexian Brothers Hospital Network, we recruited former IRF patients, caregivers, and IRF clinicians. Patients and caregivers (family or friends of former patients) were a convenience sample who met the following inclusion criteria: age of 18 years and older; able to speak and understand English; patient (or caregivers of a patient) with a neurological condition; and for patients, discharged from an IRF for at least 30 days. We focused on patients with these conditions to learn if it was feasible to collect data from patients with communication, cognitive, and physical impairments. Clinicians were a convenience sample recruited from one urban freestanding and one suburban IRF unit. All had expertise in treating patients with neurological conditions.

We asked designated clinicians at each IRF to identify potential participants for the patient focus groups from patients they knew who fit the inclusion criteria. If the patient agreed to meet with a researcher, the clinician shared

contact information with the study team. We also posted study recruitment fliers at the IRFs and distributed them to area support groups.

A systematic approach was used to recruit and engage former patients. We began by calling potential participants 2–3 weeks before the focus groups to discuss the goals of the study and participation expectations. For the individuals who agreed to participate, confirmation letters were sent out 1 week before and called participants 1 day before the focus group.

To support consistency in how focus groups were conducted, we developed a moderator guide that included a summary of the study's aims; the welcome/opening statements; a request for introductions; and the planned set of questions (including open-ended questions about IRF quality and what information should be publicly reported about IRFs to help with the selection of an IRF for care), associated prompts to encourage participants to elaborate their viewpoints, and concluding/debriefing comments.

Focus groups, which were held at the IRFs, used the moderator's guide. We sought diversity in terms of race, ethnicity, and gender among participants. Focus groups consisted of three to 11 participants and lasted 1.5–2 hours. A court reporter created verbatim transcripts of the discussions for content analysis. The moderator wrote key concepts and discussion points on large notepads, and a research assistant took notes. Focus group participants received an honorarium.

Content Analysis

The five-member research team included registered nurses, a psychologist, a project manager, and a research assistant. The thematic analysis began with two investigators independently reviewing two transcripts per stakeholder. The review involved a line-by-line review of the transcript and the coding of concepts (i.e., main themes) that were described by participants. To enhance the trustworthiness of our reviews, we sought feedback from consumer representatives from our project Advisory Committee, who reviewed transcripts individually and provided feedback on important concepts they noticed to the team. Based on the initial reviews, the research team created a codebook of concepts and examples of each based on the transcripts. Because some concepts were related or overlapping (e.g., communication and education, education and discharge planning), the codebook provided coding guidance about how to determine which concept to code. Then, a minimum of two investigators independently reviewed each transcript and identified the concepts. The thematic analysis approach involved reading

and coding data based on the defined concepts and codebook guidance. We discussed the key themes and reconciled discrepancies with the entire research team.

Results

Characteristics of Participants and the Focus Groups

The 33 former patients were 40% female, 57% White, and 30% Black, and their average age was 51 years. More than half (55%) had a bachelor's degree or higher, 12% had an associate's degree, and 24% graduated high school or had earned a general education degree. Former patients described their neurological conditions as stroke (40%), spinal cord injury (30%), traumatic brain injury (15%), multiple sclerosis (12%), and Parkinson's disease (3%). Time since the onset of their condition ranged from 1 to 36 years.

For the caregiver focus groups, the 12 participants were 75% female and 75% White, and their average age was 59 years. Half of the caregivers had a bachelor's degree or higher, 17% had an associate's degree, and 25% graduated high school or had earned a general education degree. Half of the caregivers were retired, and 25% of them worked full-time or part-time. On average, they had been helping a person with a disability for 6 years.

The 50 clinician focus group participants included 20% registered nurses, 20% physical therapists, 14% case managers and social workers, 12% physicians, 10% occupational therapists, 10% speech-language pathologists, 8% other professionals, and 6% psychologists. Overall, 74% of clinicians were female, 82% were White, and their average experience was 15 years. Table 1 describes the focus groups' location and the participants.

What Is Quality Rehabilitation Care?

We started each focus group by asking participants to describe what "quality rehabilitation care" means to them, from the patient's perspective. The research team's independent review and then discussion of the transcripts identified 18 quality measure concepts: (1) respect and dignity; (2) clinician communication with patient; (3) clinician communication with family; (4) organizational culture; (5) patient engagement; (6) clinician engagement of family; (7) rehabilitation goals; (8) staff expertise; (9) responsiveness; (10) patient safety; (11) physical environment; (12) care coordination; (13) discharge planning; (14) patient and family education; (15) peer support; (16) symptom management: pain, anxiety fatigue, and sadness; (17) sleep; and (18) functioning.

We synthesized participants' comments for each of these concepts below. Note that 14 of the 18 concepts were discussed by all stakeholder groups. Caregivers did

not identify patient engagement, symptom management, or sleep as a concept, and former patients did not identify family engagement. We selected quotes to illustrate each concept.

Respect and Dignity

All three stakeholder groups mentioned respect and/or dignity as a quality concept. Former patients and caregivers described how dignity and respect was or was not conveyed during interactions, with two describing how they wanted clinicians to speak to them directly despite their difficulties with communication or their memory. For example, a former patient stated: “I’m the patient, but they are talking to my wife...I’m still here, give me dignity.” Several former patients and one caregiver noted that they appreciated the clinicians who approached and interacted with them in a way that made them feel “normal.” Clinicians suggested that patients should be asked directly if they were treated with respect.

Clinician Communication With Patient

Former patients, caregivers, and clinicians each addressed or provided examples of clinician–patient communication reflecting quality of care or instances where quality could be improved. Several former patients mentioned they would have liked clinicians to ask them open-ended questions, such as “How are you doing?” and “What is important to you?” One former patient said she did not know the right things to ask and she did not know how to express herself, saying: “It is vital that therapists ask those questions that we should be asking of ourselves.” Another former patient described feeling terrified of the unknown and that communication helped to address stress related to the unknown. Another former patient wanted clinicians to ask about her needs so that this information was accurately communicated to her insurance company. She wondered: “How are they making my needs known to the insurance company when they have never even spoken to me about my needs?”

Clinician Communication With Family

Former patients highlighted the importance of communication with family, especially when a patient had difficulty understanding others or expressing themselves. Caregivers noted that clinicians should use plain language when communicating, not medical jargon. One caregiver recalled how much they appreciated that team members met to discuss what was happening and what to expect. Another appreciated having family conference calls so that they could update their larger family. Caregivers emphasized that keeping family up-to-date was critical because the family is under a great deal of stress. Another

caregiver wanted clinicians to acknowledge that families feel overwhelmed and suggested they ask questions, such as “What are your greatest challenges?” “What are you having a hard time dealing with right now?” “What are you most afraid of when you go home?” “What are the things that worry you?” Another caregiver appreciated clinicians listening to their concerns, even if the concerns were vague.

One clinician noted that staff often hear a family member talk about patients’ concerns, whereas another noted the importance of making the family aware of the treatment plan and the patient’s progress.

Organizational Culture

All stakeholder groups described ideal staff as compassionate, empathic, friendly, caring, accommodating, people-oriented, patient, and engaged. Several acknowledged that these ideal characteristics might be hard to measure, but they should be measured. The former patients recognized that working in a rehabilitation hospital was hard because some patients may be angry about their circumstances and that burnout or personal matters can be challenging for staff. They thought that hospital leaders could support staff to address these issues. One caregiver noted that nurses and nursing assistants who were caring, compassionate, and competent supported patients’ well-being. Clinicians suggested asking patients if they perceived staff were happy, helpful and polite, compassionate, and kind and whether staff liked working there.

Clinician Engagement With the Patient

Several former patients described how staff engaged and motivated them, which helped them improve their functional status. One former patient remembered thinking: “I was like wow, they really care.” Another recalled thinking: “They do care about what I think.” Several former patients noted a clinician’s customization of treatments to the person was a way of engagement. Another recalled his confidence improved when a therapist challenged him to try something new or pushed him to try harder. Former patients noted lack of engagement was perceived when clinicians looked bored, did not provide feedback, or did not address a patient’s progress. One person recalled that inattention contributed to feeling terrified of the unknown and increased stress levels.

Clinicians linked patient engagement with helping patients reach their goals. In one group, they described their role as an active listener who honors patient wishes and a champion of the patient by keeping them motivated and focused on goals. In another group, clinicians similarly described patient engagement as listening to patient

concerns and preferences and acting on that information by tailoring their approach to therapy.

Clinician Engagement With the Family

Clinician engagement with the family included informing members about patients' goals and progress and an environment that involved loved ones and friends in patients' rehabilitation journey. Caregivers expressed strong support for family engagement with one impressed that the staff asked her how she was doing and what could be done for her. She appreciated simple gestures, such as offering a cup of coffee. Another caregiver appreciated feeling part of the care team noting "that's the way it ought to be."

Clinicians described family engagement as communicating with a patient's family and support network about treatment changes. Clinicians echoed the caregiver's sentiments by emphasizing that family members should feel like part of the rehabilitation team and considered it a facilitator for the patients reaching their goals. Clinicians noted barriers to effective family engagement included complicated schedules and time limitations.

Rehabilitation Goals

Former patients described how their clinical team helped them set, monitor, and reach their goals. They described ways in which clinicians listened to their goals and worked with them as their condition evolved. One former patient noted: "a great hospital, doctor or surgeon, is when they listen to you, and they take your goals on as theirs." Another former patient described how staff helped him focus on his recovery by considering short- and long-term goals. One former patient described how he appreciated establishing weekly goals and checking progress: "Okay, did we meet this one; did we meet this one; do we need to work on it further?" A family caregiver also noted that the patient's and family's positive experience included the therapists' "owning" the patient goals and the family being included in the team.

Clinicians' comments focused on the process of goal setting, the importance of setting realistic goals in collaboration with the patient and their family, and implementing a plan of care to meet those goals. For example, one clinician suggested asking patients if clinicians asked about their goals and whether their input was incorporated into goal setting.

Staff Expertise

All stakeholder groups identified technical expertise as an aspect of quality rehabilitation care. Former patients used words like *knowledgeable* and *skilled* in describing staff expertise. Several former patients mentioned the

importance of the availability of different types of expertise, including mental health, and specialized services, such as art therapy, as well as access to specialized equipment, such as a pool.

One caregiver noted they did not assume expertise: "I don't care if you have a white jacket, you have to earn my respect." Also, another caregiver, referring to a staff member who she did not perceive as an expert, said: "normally she had a question mark over her head." Another caregiver described how his wife had experienced both a spinal cord injury and then a stroke and remarked: "there [are] different kinds of rehab. And just because it's a rehab hospital doesn't mean that they are experiencing the specific kinds of rehab you need." This condition-specific expertise was also mentioned by several clinicians. One clinician remarked that staff competence was related to patient safety.

Former patients and one caregiver mentioned research, and clinicians mentioned academic or teaching facility as a marker of a quality rehabilitation program.

Responsiveness

Former patients identified staff responsiveness as an important quality topic, such as call light response times, which they were aware was tracked by staff. One caregiver cautioned that average response time would not be adequate. Clinicians discussed this topic more than other stakeholders and noted that patients use the call light when they are in pain or need the bathroom, noting "you make a call and it takes a minute, and it may feel like 10."

Patient Safety

All groups mentioned patient safety, but the specific issues raised varied by group. Two former patients referred to medication "near misses," whereas two caregivers referred to health care-acquired infections as safety concerns. Clinicians mentioned "preventing any negative outcome to the patient, such as infections, injurious falls," cleanliness of the environment, safe use of equipment by staff, adequate staffing, and negative interactions with other patients.

Physical Environment

Former patients identified several quality issues related to the environment, including access to technology, private rooms, and a clean and comfortable environment. Caregivers mentioned the importance of having a room that seemed like home, as well as access to computers and good food. Clinicians focused on a clean environment and safe equipment to use.

Care Coordination

All three stakeholder groups brought up care coordination as an important quality of care issue. Several former patients referenced care coordination in reference to the care team needing to convey their status to the insurance company to extend their stay because of continued improvements. One patient indicated that care coordination meant there were not big surprises during the stay or after discharge. Former patients also mentioned the need for coordination during the transition from inpatient to outpatient care. Former patients also noted appreciation of the predictability of their daily meal delivery and scheduling meals around therapy, giving them time to eat. Some noted that coordination was important for people who take a long time to eat and that when breakfast trays arrive late, they would be late for therapy. Caregivers discussed care coordination in terms of staff-to-staff communication, including aides communicating between shifts and teamwork. To measure this aspect of care, clinicians suggested asking patients if they believed staff were communicating with each other and whether care was consistent among the staff, including consistency with the therapy and nursing staff.

Discharge Planning

Former patients noted discharge planning as a critical component of rehabilitation care with clinicians asking about their home environment, for example, the need to navigate stairs, and showing family members what to do to support a smooth and safe transition home. One patient noted that her discharge plan began with the assessment of problems, monitoring progress, and then thinking about “what adjustments are you going to have to make when you go home?” Another patient recalled she practiced dressing and transfer skills on a mat in the IRF, but once home, she had difficulty completing these activities on her bed, which was less firm than the mat. Another patient recalled the therapist saying they would always need someone to help with an activity, but the patient was thinking “Well, what if that someone isn’t there and I’m by myself?” Another former patient referred to returning home as a “big shock” and that the emotional aspect can mean a step backward in their rehabilitation process. One patient recalled having a therapist help him practice getting on a bus, getting a cab, and going to the grocery store, which was really helpful.

One caregiver described his attendance at therapy sessions as “training” before his family member was discharged and that reminders like “You’re going to need to do this at home” were important. One caregiver recalled getting detailed training and information, but questioned the timing of it: “I think to some degree that

was done too late, because at that point I needed to order—get equipment...I was told at that point that I needed a ramp for his wheelchair. I needed to get grab bars in the shower. I needed to change the shower heads. I needed to get a shower bench, and I only had 2 days to do all of that.”

Clinicians recognized the transition to home can be overwhelming to patients and their families, and many cited discharge planning as a key component of rehabilitation care. They mentioned medications, equipment, and outpatient therapy can be challenges. Problems may arise if the patient and their family are overwhelmed or have unrealistic expectations. Other barriers to successful discharge planning are external to the facility, including access to transportation and social-emotional issues. Clinicians suggested that some barriers could be mitigated with additional planning, including ensuring that follow-up appointments are made before discharge, and considerations for other roadblocks, such as transportation.

Patient and Family Education

Patient and family education were discussed by all stakeholders, and these discussions often intersected with patient and family engagement and discharge planning. Former patients discussed the value of patient education. For example, one former patient recalled the creative ways in which his clinicians provided education about his injury. Former patients also discussed the importance of family education at a time when the patient may be unable to understand the information because of cognitive limitations. Many former patients emphasized that family education is critical when the patient is emotionally overwhelmed. Another noted that family education allowed the patient to focus on recovery while their social support network focused on discharge planning, insurance, and other considerations.

Caregivers also discussed the importance of patient and family education, most often in relation to discharge planning. Several caregivers noted that they wished they had been involved in patient education efforts earlier in the stay.

Clinicians recognized patient education as a vital part of their role, including teaching the patient about their condition, medications, and how to direct their care. Clinicians identified many of the same barriers to patient education that the former patients did, including patients being emotionally overwhelmed or anxious.

Peer Support

Peer support was identified as a theme by all stakeholders. Several former patients noted that visits from peers living with a disability in the community provided important support. Two referred to those interactions as “comforting” because the peers were doing “a bunch of

stuff” and offered reassuring words such as: “you will get there.” Several former patients recalled that they wanted to ask these peers all kinds of questions so they could learn how they do things. Former patients thought one-to-one meetings and panel discussions were both effective formats, and one participant mentioned he had benefited from asking questions about bladder management among peers hospitalized at the same time as himself. One former patient noted that he had a goal to walk and did not want to meet with a peer mentor who used a wheelchair.

Caregivers mentioned one-to-one peer mentoring as well as community support groups provided important information they needed in their role, noting “so that you’re not only listening to a medical staff who may not have experienced what it is that you are feeling or experiencing.” Clinicians also valued peer mentoring to support patients’ recovery, both formally, through peer programs in facilities, and informally.

Symptom Management: Pain, Anxiety, Fatigue, and Sadness

Former patients and clinicians, but not caregivers, identified symptom management as an important aspect of quality rehabilitation care. One patient noted: “I think it’s just a good idea to keep somebody relaxed, and out of pain, and comforted.” Another appreciated being asked about pain levels: “They wanted feedback about the exercises so they could tell if they were being effective or causing a problem.” Clinicians suggested asking patients if “pain was well managed.” One clinician suggested asking if alternative therapies to medications, such as icing and heating or stretches or meditation, were offered.

Former patients described how they needed to address anxiety and fears. One patient recalled being challenged by anxiety and fatigue and “The hardest part was when we had to do the mental things. I would get agitated and tired.” Several clinicians also identified the need to monitor and address fatigue.

Clinicians recognized the importance of addressing patient’s emotions, with one noting: “that’s why we have psychologists...So the question may be: Did you have interactions, an opportunity to discuss your mood with psychologists?” Another clinician noted: “...it’s going to be addressed by not just the psychologist...did the other therapist tune into your mood.... I do a lot of meditation and relaxation techniques with patients, they might want to interact with me that way, but not conventional psychotherapy. They might want to work with the chaplain.”

Sleep

Patients and clinicians noted the importance of sleep and how clinicians could support restful sleep. Some patients

recalled being grateful to receive nonnarcotic medications to help them sleep. Clinicians mentioned noise control as an issue they could address to support restful sleep for patients. One clinician noted that some younger patients have different sleeping patterns, which can be an issue for the traditional inpatient rehabilitation schedule.

Functioning

All three stakeholder groups mentioned functioning. Many former patients mentioned independence with daily activities. One former patient spoke about cognitive function. One patient described his goal for functioning: “I am a guitar player, and the first thing I said to the doctor was not if I was going to live or die, it was whether I would play the guitar again.” One caregiver said: “Improving function is easiest to measure.”

Clinicians mentioned patients may have expectations about their level of independence at discharge and that “If they are saying I’m still having a hard time with this particular process, I’m not satisfied about my performance; that is very telling.”

Alignment of the Identified Quality Measure Concepts With HCAHPS and NQF’s Person- and Family-Centered Care Framework

As shown in Table 2, seven of the 18 concepts we identified mapped to HCAHPS quality measures used in acute care hospitals, and all concepts could be mapped to the five main topics of the NQF person- and family-centered care framework. Only one of the NQF framework’s sub-topics, advance care planning, was not addressed by any stakeholder group.

Discussion

Focus group participants identified 18 quality measure concepts for inpatient rehabilitation care that are best understood from the patient perspective. Fourteen of these concepts were identified by all stakeholder groups—former patients, caregivers, and clinicians. Of the remaining concepts, three (patient engagement, symptom management, and sleep) were identified by former patients and clinicians, but not caregivers. One quality-of-care concept (family engagement) was identified by caregivers and clinicians, but not former patients. The relative emphasis on specific concepts by some stakeholder groups reveals their perspective and responsibilities. Specifically, clinicians monitor symptoms and sleep via patient report and seek to engage family members routinely.

Our study findings are consistent with the major themes identified by Gill et al. (2014), McMurray et al. (2016b), and Luker et al. (2015, 2017). We note their studies reflect observations, needs, experiences, and

Table 2 Quality Measure Concepts Identified by Former Patients, Caregivers, and Clinicians

Quality of Care Concepts Identified by Focus Group Participants	Patients	Caregiver	Clinicians	Alignment With Hospital HCAHPS	National Quality Forum's Priority Topics and Subtopics Person- and Family-Centered Care (NQF, 2014)
Respect and dignity	✓	✓	✓	Communication with nurses and communication with doctors	Interpersonal relationships:
Clinician communication with patient	✓	✓	✓		• Respect, dignity, compassion, trust, perception of equity
Clinician communication with family	✓	✓	✓		• Communication and collaboration
Organizational culture	✓	✓	✓		• Cultural and linguistic responsiveness
Clinician engagement with the patient	✓		✓	Responsiveness of hospital staff	Patient and family engagement:
Clinician engagement with the family		✓	✓		• Shared decision-making and informed choice
Rehabilitation goals	✓	✓	✓		• Advance care planning
Staff expertise	✓	✓	✓		Care planning and delivery:
Responsiveness	✓	✓	✓	Cleanliness and quietness of hospital environment	• Establishment and attainment of patient/family/caregiver goals
Patient safety	✓	✓	✓		• Care concordant with person values and preferences,
Physical environment	✓	✓	✓		• Care integration (coordination, transitions)
Care coordination	✓	✓	✓		
Discharge planning	✓	✓	✓	Discharge information	Access to support and self-management:
Patient and family education	✓	✓	✓		
Peer support	✓	✓	✓	Communication about medicines	• Patient and caregiver needs and support
Symptom management: pain, anxiety, fatigue, and sadness	✓		✓	Cleanliness and quietness of hospital environment	• Timely and easy access to care and knowledge
Sleep	✓		✓		Quality of life:
Functioning	✓	✓	✓		• Physical and cognitive functioning
					• Behavioral, physical, social, emotional, and spiritual well-being
					• Symptom and symptom burden
					• Treatment burden

preferences of medical rehabilitation patients, whereas our study focused on aspects of care that are potential opportunities to improve the quality of care.

Seven of the 18 concepts identified are addressed to some extent with acute care HCAHPS quality measures, including respect and dignity, clinician communication with patients, responsiveness, patient safety, physical environment, discharge planning, and sleep. We consider these topics are cross-cutting, relevant to patients in multiple types of healthcare settings. Concepts not covered by the HCAHPS quality measures that are salient in inpatient rehabilitation care are clinician communication with the family, organizational culture, clinician engagement of the patient, clinician engagement of the family, rehabilitation goals, staff expertise, care coordination, peer support, symptom management, and functioning.

To organize the 18 concepts and to better understand how they link to person-centered care, we mapped the concepts to the NQF's person- and family-centered care framework. All 18 concepts mapped to the framework's five priority topics: (1) interpersonal relationships, (2) patient and family engagement, (3) care planning and delivery, (4) access to support, and (5) quality of life (NQF, 2014). Only one of the framework's subtopics, advance care planning, was not addressed by any stakeholder group.

In 2011, the Centers for Medicare & Medicaid Services (CMS) initiated the IRF Quality Reporting Program (Department of Health and Human Services, 2011), which was mandated as part of the Patient Protection and Affordable Care Act (2010). At its 10-year mark, the IRF Quality Reporting Program had adopted 18 performance measures focused on health care-acquired conditions, readmissions, discharge to community, Medicare

spending, functional status, drug regimen reviews, transfer of healthcare information, and staff vaccinations (Department of Health and Human Services, 2022). These implemented performance measures are calculated using clinician-reported and claims data. In 2015, CMS indicated that future quality measures for this program may focus on patients' experience of care, which would reflect the patients' perspective (Department of Health and Human Services, 2015). CMS did fund the development of an IRF Experience of Care Survey (Loft et al., 2018), but as of 2022, no survey or experience of care quality measures have been proposed for national implementation.

Staff at IRFs can access patient feedback in their own facilities, whether the information is collected using a formal and scheduled process (e.g., postdischarge surveys), or it is collected using informal or unscheduled processes (e.g., staff-patient/family interactions and social media). IRF staff, including rehabilitation nurses, have the opportunity to support the provision of high-quality, person-centered care by reviewing and acting on such data. In reviewing the existing available patient feedback data, staff can consider if additional aspects of care might be appropriate to collect in their facility, such as any of the 18 concepts that we identified in this study, which we mapped to the NQF's person- and family-centered care framework. Experience of care surveys implemented in other care settings are often administered by third-party vendors and thus do not increase data collection burden for direct care clinicians. We recognize that completing the survey does impose a burden on patients or their family members, and there are administrative tasks associated with implementation.

Readers should note several limitations of our study, including participants were mostly linked to only two IRFs located in one metropolitan area. Thus, our findings may not reflect the diversity of patients nationwide. Furthermore, our study was conducted prior to the start of the COVID-19 pandemic, and the pandemic has resulted in significant changes to healthcare delivery and perceptions of care (Camicia et al., 2021; Sutter-Leve et al., 2021).

Conclusion

Quality themes identified by the focus group participants are consistent with the growing literature about patient experiences broadly and about rehabilitation in particular. Themes regarding communication with the family, organizational culture, patient and family engagement, rehabilitation goals, staff expertise, care coordination, peer support, symptom management, and functioning are particularly relevant in inpatient rehabilitation. The findings provide insight into possible topics for potential

Key Practice Points

- Rehabilitation nurses, regardless of their role, have the opportunity to support the provision of high-quality, person-centered care.
- Patient-reported domains of quality that are important to patients and their caregivers are interpersonal relationships, patient and family engagement, care planning and delivery, access to support, and quality of life.
- Rehabilitation nurses can monitor and seek opportunities to improve these aspects of care delivery.

quality measures of inpatient rehabilitation that would reflect the patient's perspective.

Conflicts of Interest

The authors declare no conflicts of interest.

Funding

This study was supported by the Patient-Centered Outcomes Research Institute (PCORI/CD-12-11-4201).

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