# Exploring Clinicians' Perceptions About Sustaining an EvidenceBased Fall Prevention Program

Findings from this qualitative study may help improve sustainability.

ccidental falls among hospitalized, acutely ill patients are a serious clinical problem, one that has defied solution for decades despite extensive research and clinical attention. Although reported fall prevalence and fall rates among hospitalized patients vary, there is little doubt that patient falls are not rare events. One large study examined the evidence from 88 million patient-days of observation, gathered from 6,100 adult medical-surgical and surgical nursing units over a 27-month period, and found a fall rate of 3.56 falls per 1,000 patient-days. According to the literature, the reasons hospitalized patients fall reflect a complex web of interactions among patient-specific fall risk factors, nursing work factors, the physical layout of the clinical area, and the hospital's organizational structure, including communication from senior leaders.

It's well known that the successful implementation and sustainability of evidence-based practices (EBPs) are essential to providing safe, high-quality patient care. Fall prevention programs, which are now standard practice, offer one example.<sup>2-5</sup> Indeed, fall rates are reported as a nursing-sensitive and interprofessional quality indicator.<sup>6-11</sup> Yet although hospitals have made extensive efforts to reduce patient falls through evidence-based fall prevention programs, sustaining such programs has proven challenging. There is a knowledge gap regarding what happens

between the implementation and maintenance phases of these programs. The purpose of this study was to address this knowledge gap by exploring the perspectives of the interprofessional health care team.

## **BACKGROUND AND LITERATURE REVIEW**

Although individual studies have demonstrated a link between fall prevention interventions and reduced fall rates, meta-analyses across care settings have shown no sustained, cost-effective improvement.<sup>2, 12</sup> Successful fall prevention requires an interprofessional, multifactorial approach.<sup>2, 13-16</sup> Consistent recommendations for fall prevention programs include tailoring interventions to meet specific patient needs and contextual factors.<sup>4, 12, 14, 15, 17</sup>

Evidence that can guide the development of sustainable fall prevention programs is limited.<sup>18,19</sup> Given the dynamic and complex context in which day-to-day care is provided, the integration of practice changes may break down.<sup>20-22</sup> A tendency to drift back to earlier practice patterns is one recognized problem, especially on units with competing initiatives.<sup>20,21,23</sup>

Evidence-based fall prevention has been a longstanding quality and research priority for the University of Iowa Hospitals and Clinics, the organization engaged in the current study. During the 1980s, working in the organization's Department of Nursing Research, Gyldenvand first addressed fall risk,

### **ABSTRACT**

**Purpose:** This study aimed to address the knowledge gap between implementing and sustaining evidence-based fall prevention practices for hospitalized patients by exploring perspectives of the interprofessional health care team.

**Design:** A qualitative design was used to capture insights from clinicians across disciplines in a large midwestern academic medical center.

**Methods:** Four homogenous semistructured focus groups and three individual interviews involving a total of 20 clinicians were conducted between October 2013 and March 2014. Audio-recorded data were transcribed and analyzed using inductive qualitative analysis.

**Findings:** Two primary themes emerged from participants regarding the sustainability of an evidence-based fall prevention program: communication patterns within the interprofessional health care team and influences of hospital organizational practices and elements. Several subthemes also emerged. Participants gave nursing staff primary responsibility for fall risk assessment and prevention.

**Conclusions:** Individual professional perceptions and practices, as well as organizational characteristics, affect the sustainability of evidence-based fall prevention practices. While all team members recognized patient falls as a significant quality and safety issue, most believed that direct care nurses hold primary responsibility for leading fall prevention efforts. The data support the importance of effective interprofessional team communication and organizational practices in sustaining an evidence-based fall prevention program across inpatient units. Furthermore, the data call into question the wisdom in labeling quality indicators as "nursing sensitive"; the evidence indicates that a team approach is best.

**Keywords:** evidence-based practice, fall prevention, falls, health care team, perceptions, program evaluation, sustainability

constructing an early risk assessment scale.24 Further research was conducted by Pottinger and colleagues during the 1990s, and the scale was implemented within the organization's health care system at that time.25,26 Building on this work, in 2002 the relevant literature for this tool was reviewed, which confirmed the sufficiency of the supporting evidence and the tool's benefits.<sup>27</sup> The tool facilitated the use of fall precautions, including the implementation of basic fall prevention practices for all adult inpatients. This program was later expanded by tailoring the practices for all patients at high risk for falling and then for those experiencing multiple falls.<sup>28</sup> The program remained in place because fall rates were maintained below the National Database of Nursing Quality Indicators benchmark for many years. But when fall rates rose slightly, further clinical research on the sustainability of such programs was warranted.

The need for more research that will foster a better understanding of how to sustain EBPs is well recognized. 22,29-32 Although several sustainability frameworks have been proposed, 22,33,34 validation is essential, as is achieving the integration of key elements. But many specific practice and organizational characteristics, including the attributes of leadership that promote sustained EBP programs, remain poorly understood. Strong evidence-based fall prevention programs that are well implemented nonetheless often lack sustainability. As part of a larger mixed-methods study that

aimed to identify factors influencing the sustainability of an evidence-based fall prevention program for adult oncology patients, we sought insights from interprofessional team members about factors affecting the implementation and sustainability of evidence-based fall prevention practices. This article reports the qualitative findings.

# **METHODS**

**Design.** A qualitative study design involving both focus groups and individual interviews was selected. Focus groups were intentionally designed to be homogenous by role so that conversations would be less likely to be influenced by power imbalances or setting, as Kevern and Webb have described.<sup>35</sup> Three participants (a hospitalist physician, a pharmacist, and a physical therapist) had unexpected clinical commitments that kept them from participating in the scheduled focus groups. They were interviewed individually instead.

**Setting and sample.** The study took place in a large midwestern academic medical center with 739 staffed beds. A purposive convenience sample was first recruited from nursing staff who were attending the Department of Nursing Falls Committee meeting, with subsequent e-mail invitations sent to other hospital clinicians between September 2013 and February 2014. Inclusion criteria were employment at the study hospital and willingness to participate in the

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study. While the larger study focused on evidencebased fall prevention efforts on adult oncology units, the qualitative portion invited other clinical staff to participate in the focus groups in order to gain insights at the organizational level.

Forty-three e-mail invitations were sent to 11 oncology surgeons, two medical oncologists, one inpatient physician assistant (a second physician assistant was recruited by snowball sampling), four social workers, four physical therapists, two pharmacists, three nurse navigators and care coordinators, one recreational therapist, five nurse managers, and 10 nursing staff members of the Falls Committee. This committee included RNs and nursing assistants. To maintain anonymity of responses, committee members participating in the focus groups were not designated as RNs or nursing assistants. A total of 20 people participated. Of these, 18 were women and two were men. Fifteen were nurses and five were nonnurse clinicians. See Table 1 for details on their roles and practice areas.

**Data collection.** Following approval by the hospital's institutional review board, the focus groups and individual interviews were conducted at the hospital during daytime hours on weekdays between October 2013 and March 2014. To increase data reliability, an investigator with qualitative research experience (one of us, RBP) conducted the focus groups and interviews. Before the start of each focus group or interview, the investigator explained the study purpose and methods and obtained participants' informed consent.

**Instrument.** A semistructured interview guide was used to direct the conversations about the implementation and sustainability of the hospital-wide evidence-based fall prevention program (see *The Interview* 

*Guide*). The guide was used for each focus group and individual interview. Additional questions that arose naturally were also asked.

Methodological rigor and trustworthiness. Three strategies were used to ensure rigor and trustworthiness in the research process. First, to ensure coherence among the research questions, study method, data collection plans, interview guide, additional questions, and data analysis, all research team members discussed the methodological components until consensus was reached. This limited the potential for bias. Second, to ensure data integrity, all focus groups and interviews were audio recorded, and notes were taken. Field notes were also made after each session, describing the researcher's impressions and noting communication patterns, participant interactions, and any distractions that occurred (such as a pager repeatedly sounding). The audio recordings were then transcribed verbatim by one researcher (RBP) and verified by another (GM). We also maintained an audit trail and documented our processes. Third, to ensure the integrity of the data analysis, we used "thick" descriptions, including verbatim quotes from participants with verification by team members. To protect participants' anonymity, no names were used during note-taking. Individual interviewees and focus group members were identified either by alphabetical letter or by the color of their sweater or other article of clothing.

**Data analysis.** Since the research question focused on learning the perceptions of interprofessional clinicians, an inductive approach to data analysis was used. Specifically, a pragmatic form of qualitative thematic methodology and framework analysis guided the explication of the data. <sup>36,37</sup> Five stages of analysis

**Table 1.** Composition of Interview and Focus Group Participants (N = 20)

Participants	No. of Participants (women/men)	Participant Work Setting
Individual Interviews (n = 3)		
Pharmacist	1 (1/0)	General Medicine, Oncology
Physician (hospitalist)	1 (0/1)	Oncology
Physical therapist	1 (1/0)	General Medicine, Oncology
Focus Groups (n = 17)		
Members of the Department of Nursing Falls Committee (RNs, NAs)	8 (8/0)	General Medicine, Medicine – Psychiatry, Oncology, Surgery
Physician assistants	2 (1/1)	Oncology
Nurse leaders	7 (7/0)	Behavioral Health Services, Children's and Women's Services, General Medicine, Inten- sive Care and Specialty Services, Oncology

NA = nursing assistant.

were followed: familiarization with the data through multiple readings of each transcript; identification of salient themes and subsequent development of a theoretical framework; indexing the data into a chart; summarizing the data within the framework; and synthesizing and interpreting the data.<sup>36-38</sup>

# **RESULTS**

Participants spoke openly and with varying degrees of understanding and insight about previously implemented practices within the hospital's evidence-based fall prevention program. Data analysis uncovered inherent complexities that indicated systemic challenges to the sustainability of these practices. The analysis also indicated priorities for addressing those challenges, reflecting the dynamic and cyclic process of sustaining an evidence-based fall prevention program within an organization. The challenges were revealed by two primary themes—communication patterns within the health care team and the influences of hospital organizational practices and elements—and each had associated subthemes (see Table 2). These themes suggest that communication and organizational practices are inextricably linked and affect the sustainability of EBPs.

Communication patterns within the health care team. As noted earlier, fall prevention is an interprofessional responsibility. An evidence-based fall prevention program involves gathering information about a patient's fall risk; communicating that information to the health care team, as well as to the patient and family; selecting appropriate fall prevention strategies; and ensuring that these strategies are actively used by everyone. In this study, the theme of communication included two subthemes: how team members gather information about a patient's fall risk (including how they evaluate the relevance of that risk), and how fall risk and fall prevention strategies are communicated.

How team members gather information about a patient's fall risk. All of the participants discussed aspects of fall prevention that reflected their individual roles in relation to fall risk assessment strategies. These strategies included the use of a fall risk assessment scale (FRAS); consideration of the patient's vital signs (particularly blood pressure and heart rate), age, mobility, disease process, chronic comorbidities, medications, mental status, and fall history; and the patient's immediate environment. All of the nursing staff, nurse managers, and nursing practice leaders identified the FRAS as their primary method of objectively assessing a patient's fall risk. The nonnurse participants were almost universally unaware of the FRAS and instead focused on their own (role-specific) assessment method. For instance, one nonnurse participant described using the American Geriatrics Society Beers Criteria for Potentially Inappropriate Medication Use in Older Adults<sup>39</sup> to

# **The Interview Guide**

- 1. Responsibility for fall prevention
  - a. Who is responsible for fall prevention leadership and guidance?
  - b. Who are the key stakeholders in sustaining fall prevention?
  - c. How is the planning and coordination for fall prevention coordinated?
  - d. How is guidance provided to the nursing staff for fall prevention?
  - e. How is the fall assessment tool used for fall prevention?
- 2. How does your unit use the fall data to assess current fall prevention strategies and alter assessment and intervention strategies?
- 3. How are hospital-based fall prevention efforts implemented on your unit?

identify medications that can contribute to an increased fall risk in older adults.

Several participants commented on fall risks associated with age, physical status, and medication issues. One nonnurse participant said, "I talk about mobility and confusion . . . so that they [nursing staff] know that elders are at risk for falling—the older you are, the more at risk you are for falling." A staff nurse spoke about the importance of assessing a patient's mental status and told a story reflecting the team's communication about one patient:

They [the physicians] had figured out that [the patient] was on . . . the wrong type of pain med . . . and it was making her confused. . . . Everyone agreed that it was related to being . . . so fresh postoperatively and [she] was kinda confused waking up.

How fall risk and fall prevention strategies are communicated. The data revealed a tapestry of passive and active communication patterns that were, to some extent, role dependent, and determined how and to whom fall risk and fall prevention strategies were communicated. Passive communication patterns were defined as those that did not involve direct verbal communication about fall risk or fall prevention. Active communication patterns were defined as those that involved direct verbal communication with other team members.

Among staff nurse participants, there was an unspoken expectation that all team members would look for a patient's fall risk, recognize fall prevention strategies, and enact those strategies. These participants reported using passive communication patterns such as documenting a patient's FRAS score in the electronic health record (EHR); writing the FRAS score on the whiteboard in the patient's room, along with specific fall prevention strategies; putting the

Table 2. Main Themes and Subthemes

Main Themes	Associated Subthemes
Communication patterns within the health care team	<ul> <li>How team members gather information about a patient's fall risk</li> <li>How fall risk and fall prevention strategies are communicated</li> </ul>
2. Influences of hospital organizational practices and elements	<ul> <li>Nurse-to-patient staffing levels</li> <li>Practices regarding patient room doors</li> <li>Data regarding patient falls</li> <li>Variations in unit-specific fall prevention strategies</li> <li>Unit layouts</li> <li>Responsibility for fall prevention</li> </ul>

image of an autumn leaf (a symbol indicating increased fall risk) on the patient's door; and leaving a lift device in the patient's room (as well as explaining its purpose to the patient and family). But the nonnurse participants did not understand these communications. Some reported that they weren't aware of the FRAS, and some didn't know what the autumn leaf meant. One nonnurse participant said, "I don't know if anyone uses [a fall risk assessment tool]. I don't, and I don't know if the nurses do. I would not be surprised if they did." Another stated.

If something like that [strategies for communicating fall risk] is in place . . . I'm not sure that it is or is not a hospital policy . . . but I think the nurses have been doing a great job just communicating in person.

All of the participants described using active communication strategies, especially regarding the fall risk of specific patients. A pharmacist participant reported communicating about fall risk in relation to a patient's medications to physicians, but not to nurses unless they asked directly. Other active communications involved reporting the FRAS score and other fall-related information during change-of-shift reports and in daily interprofessional huddles. These communications also included patients and families. One staff nurse participant reported involving the patient, family, and another nursing staff member in helping to prevent falls, and told the following story:

A patient was nauseous. The son was helping her to the bathroom. I was kinda walking behind her. When she got in here . . . I just told her, you know, "If you feel dizzy or if you're not sure you can stand up, please pull the cord." And then gave her her privacy. And then I also notified the nursing assistant that if you hear the bathroom light, so-and-so's in the bathroom. She's a fall risk. Attend to it as soon as you can.

While some nonnurse participants said they routinely check the EHR for evidence of hypotension (which increases fall risk), all spoke about relying on face-to-face, active communication regarding a patient's fall risk. And all of the study participants indicated feeling that since nursing staff spend the most time with patients, they're in the best position to identify fall risk. But the nonnurse participants didn't seem to expect nurses to follow up with fall prevention strategies. They reported that they'd do an independent assessment and order such strategies. For example, one nonnurse participant stated,

We started doing orthostatics and that is part of our morning vitals . . . and we'll frequently respond to those with fluid boluses . . . or we'll be looking harder at why are [the patients falling]. Are they getting infected? Are they getting febrile? . . . I view my job as responding to some of those vitals that the nursing assistants or nurses put in the EHR.

A nurse manager participant reported providing a daily reminder to staff to set bed alarms. The nurse manager explained that the unit clerk had linked the bed alarms to both the call light system and the inhouse smartphone, so that "everyone" would be alerted to a patient's movement. But it was unclear whether "everyone" included nonnurses on the interprofessional health care team. There may have been an assumption that only nursing staff actively respond to bed alarms.

Influences of hospital organizational practices and elements. Participants spoke about organizational practices and elements within the hospital that affected the sustainability of the evidence-based fall prevention program. This theme had six subthemes: nurse-to-patient staffing levels, practices regarding patient room doors, data regarding patient falls, variations in unit-specific fall prevention strategies, unit layouts, and responsibility for fall prevention.

*Nurse-to-patient staffing levels.* Nurse-to-patient staffing levels and the use of bed alarms were identified

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as directly affecting the ability of nursing staff to prevent some patient falls. A nonnurse participant noted that patient care assignments and available staff at any given time "assumes that the patient is 'with it'... and understands the risks... [and] is compliant with our request of them to call for help." The Falls Committee focus group discussed the difficulties of attending to more than one patient who needed help at the same time. One participant described staffing levels on night shifts, saying, "For 15 patients we have one NA on nights, at most." This comment led to the following exchange:

Participant 1: Like last weekend we had probably 17 patients on the east side, 19 on the other. We only have one NA. And can you imagine? You have five patients—and most of them are high acuity. So, I have to [toilet] this person and someone wants to go to the bathroom . . . and the other NA is doing something else—

Participant 2: [interrupting] And it doesn't matter if there is an alarm going off—or what alarm overload is—

Participant 1: [interrupting] Yeah, it's crazy . . . and we all have bed alarms, what do you do? If you're in the bathroom with one person—

Participant 2: There can be six alarms going off. You can't leave the person you're with to go answer the other six alarms.

Separately, one nonnurse participant reported that when patients need to go to the bathroom they often cannot wait until a staff member answers a call light.

Practices regarding patient room doors. Staff nurse participants spoke of their impeded ability to watch patients whose room doors must be kept shut because they're on protective isolation for neutropenia. One said, "All of our patients are behind closed doors . . . they're all in private rooms because of protective isolation." As participants observed, such isolation means

**Table 3.** Main Themes and Practice Implications

Main Themes	Practice Implications
Communication patterns within the health care team	<ul> <li>Standardize fall risk assessment and prevention strategies across units.</li> <li>Focus on patient-specific risk factors, interventions, and communication.</li> <li>Engage patients and families in identifying fall risks when developing a prevention plan.</li> <li>Clearly communicate the fall risk assessment tool to be used and prevention strategies with all interprofessional team members.</li> <li>Develop standardized communication patterns for conveying patient-specific fall risk to patients, families, visitors, and all team members.</li> <li>Incorporate patient-specific fall prevention strategies in all interprofessional bedside rounds, patient handoffs, unit-based morning huddles, and when needed, postfall huddles.</li> <li>Ensure a hospital culture of team-based responsibility for fall prevention through regular, periodic education.</li> </ul>
Influences of hospital organizational practices and elements	<ul> <li>Create (1) a team of trained personnel who can respond immediately to nursing units in need of high-level care for patients at high fall risk and (2) an interprofessional team for postfall huddles.</li> <li>Consider the use of remote video patient monitoring for patients at high risk for falls (such as those with confusion or dementia).</li> <li>Weigh the need for a patient's room door to be closed versus the need for visual monitoring and the patient's ability to call for and receive assistance easily and quickly.</li> <li>Conduct regular unit-based reviews of fall data with the entire interprofessional team. This should include examining the fall data for common causes that might be unit- or situation-specific.</li> <li>Standardize strategic visual and electronic fall prevention communication throughout the hospital.</li> <li>Consider the geographic layout of the nursing unit and how it might affect clinicians' ability to monitor the patient.</li> <li>Consider the distribution of computer stations on the unit and how this affects clinicians' proximity and ability to respond quickly to patients at high risk for falls.</li> <li>Create a culture of individual and team member accountability by clearly delineating the roles of each person in addressing patient-specific fall risks and fall prevention strategies.</li> </ul>

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that fall prevention is reliant on the patient calling for help when needed and on the availability of staff to respond.

Data regarding patient falls. Access to unit-level fall data and participation in its analysis were identified as useful for fall prevention by participants in both the Falls Committee and nurse manager focus groups. Participants in the nurse manager group reflected that having access to and examining the data provides staff with opportunities to discuss the details of patient falls. They noted that this often leads to ongoing nursing education, opportunities for quality improvement initiatives, and the identification of various ways to communicate fall prevention strategies effectively. One nurse manager said,

We took a look at the data and drilled down as to why patients were falling . . . so, between that and looking at their environment and knowing what the patient population was, and some of the evidence out there, we opted to do orthostatic blood pressures now on all [our] patients in the morning. And, if they're orthostatic, [we] treat their orthostasis.

Nonnurse participants were either unaware of hospital fall data or had varying degrees of involvement with the data. One nonnurse participant said, "I don't personally use [the data]...[instead] we review all of the [incident reports]."

Variations in unit-specific fall prevention strategies. All participants described fall prevention strategies that can vary from unit to unit. These strategies included regularly scheduled interprofessional huddles; hourly patient rounds, in which patients and families were encouraged to volunteer information about the patient's baseline activity level and prior history of falling; awareness of the charge nurses' report at shift changes; and moving patients to a hallway near the nursing station to improve surveillance. Nonnurse participants were not uniformly aware of these practices. And in the Falls Committee focus group, some participants were surprised to learn of strategies used on other units—for example, keeping a list of patients at high fall risk next to the unit clerk, so that nurses can be notified immediately if a bed alarm sounds or a call light is activated.

Unit layouts. Although architectural unit modifications aimed at facilitating better patient visibility and access (such as open computer workstations) had been made, one staff nurse participant reported that the unit design can impede fall prevention strategies. Another staff nurse participant added that nurses don't use the workstations as intended because patient care assignments and patient locations can change during a shift. To ensure a safer patient environment, atypical accommodations are made. One participant stated,

Nurses might have patients in more than one pod.... We used to preach "hallway therapy" for people who were at risk for falls. But now, it's like there's a fine line between preventing a fall and making them more delirious because they're in the hallway... and that [delirium] causes more falls.

Responsibility for fall prevention. With the exception of one nonnurse participant, the study participants identified nurses as the ones primarily responsible for assessing a patient's fall risk and leading the coordination of fall prevention strategies. Moreover, the staff nurse participants held themselves accountable for assessing such risk and communicating that information to the interprofessional team. The Falls Committee focus group identified teamwork as an element in preventing falls on a unit. One staff nurse participant said,

We have a lot of teamwork on our unit by the fact that we relocate patients close to the nursing station. . . . If there is someone in the hallway, it's everybody's responsibility because we know that the primary nurse has to be out caring for their other patients; even the unit clerk and the housekeeper [keep watch].

Some nonnurse participants also commented on the importance of teamwork. In response to a question regarding responsibility for fall prevention planning and coordination, a nonnurse participant said,

I think it's both doctors and nurses ... whoever sees the patient first. Of course, those are the nurses or nursing assistants and they have to ... assess if such a risk is there, and then inform the doctor immediately if they feel there's an increased risk. ... I just go in and assess the patient myself.

Many participants indicated that while nurses "own" the responsibility for leading fall prevention, it takes coordinated interprofessional teamwork for evidence-based fall prevention strategies to succeed.

# **DISCUSSION**

Numerous studies have shown the positive impact of fall prevention programs,<sup>2-5</sup> as well as the importance of an interprofessional approach.<sup>2,13-15</sup> This article reports on qualitative data from the aforementioned larger mixed-methods study regarding perceptions held by members of the interprofessional team about preventing falls among hospitalized patients. Although the larger study specifically involved adult oncology patients, such perceptions have broader implications for all hospitalized adults.

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The upward trend in fall rates on several inpatient units within our organization reflects a recognized problem both in translating research findings to practice and in sustaining an evidence-based fall prevention program effectively.<sup>20, 21, 23</sup> Although such a program had been successfully implemented, it was clear that a better understanding of sustainability was needed. The study findings indicate that while all team members consider fall prevention a priority for patient safety, some essential components need strengthening. These include ensuring a shared understanding among the interprofessional team members regarding their various roles; developing a cohesive, individualized plan for each patient that includes the reliable communication of essential information; and consistently using fall data to guide the use of fall prevention strategies.

**Practice implications.** Participants identified a number of clinical interventions that can help prevent patient falls. These included performing risk assessments, using safe patient handling equipment, monitoring orthostatic blood pressure, modifying toileting practices, maintaining surveillance, using bed alarms, and paying attention to unit and organizational data trends. But sustaining an evidence-based fall prevention program requires going beyond such interventions.

program. For a detailed list of practice implications, see Table 3.

In the literature, evaluations of the sustainability of evidence-based programs for other clinical issues indicate that some traditional implementation strategies may be helpful. Essential strategies include adapting specific practice recommendations, examining data trends, incorporating additional professional training, engaging "change champions" and leaders at all organizational levels, aligning project work with organizational priorities, allocating sufficient resources, and communicating and partnering with stakeholders. <sup>22,40-43</sup>

But while these strategies are necessary and commonly used, they aren't sufficient in themselves; more is needed to ensure a program's sustainability. Our findings illuminate several factors that may influence the sustainability of an evidence-based fall prevention program, and can be used to inform future program planning and research.

All of the participants in our study acknowledged the complexities involved in identifying actionable fall risks and corresponding interventions, particularly with regard to role responsibilities. Although the participants felt that the entire team was responsible for fall prevention, most identified the bedside nurse as having the primary responsibility for identifying fall risks and planning preventive strategies.

# Challenges were revealed in two primary themes—communication patterns within the health care team and the influences of hospital organizational practices and elements.

Nurses can take the initiative in leading the planning of patient-specific interventions with the health care team. Regular communication about fall prevention among the team members should be established as a daily practice norm. To this end, it may be necessary to standardize or develop new communication tools and patterns. It's also important to engage patients and families as full partners on the care team. Doing so facilitates patient decision making and fosters family participation in fall prevention. Moreover, it's essential to maintain the care team's focus on fall prevention whenever clinicians transition in, as happens frequently in academic health care settings. And while such point-of-care measures are vital, it's also important that senior leaders be committed to fall prevention and show consistent support for evidencebased fall prevention practices. Nurses can promote this by reporting on falls and fall prevention to such leaders and to the organization's board of directors, in addition to documenting within the fall prevention

Yet several nonnurse participants were unaware of broader nursing activities in these areas. Instead, either they assumed that nursing staff would verbally notify them of a patient's fall risk factors and prevention needs or they performed their own assessments. Furthermore, patient data from fall risk assessments, as well as unit data on falls with and without injuries and their contributing factors, weren't consistently used by participants; nor was such use seen as an aspect of collaborative patient care. Instead, case review of incident reports was the primary source of data, limiting nonnurse participants' awareness and knowledge as well as fall prevention planning efforts.

Nursing-sensitive indicators—which include patient falls—were developed in part to highlight the critical role nurses play in providing safe, high-quality patient care. But labeling patient falls as nursing sensitive might be misleading. Some interprofessional team members may assume that falls are exclusively a nursing responsibility, or they may take a deferential role,

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limiting their own responsibility. Nurses need to take every opportunity to initiate and lead discussions about fall risk assessment and fall prevention during team rounds, huddles, and handoffs. Focused communication is essential to comprehensive daily planning that addresses the quality and safety of patient care and to maintaining clear priorities and role responsibilities.

Moreover, team members change as clinicians rotate in and out. The literature indicates that sustaining EBPs requires ongoing communication, coordination, and reiteration of such practices. <sup>20, 40, 41, 44, 45</sup> Sufficient resources and an organizational commitment at every level to sustaining EBPs are vital to ensure successful programs and positive outcomes (such as low fall rates). <sup>40, 42, 44, 44, 46</sup>

In short, the study findings indicate that there is a need for collaborative interprofessional training and clarification of role responsibilities; for the development of consistent communication practices regarding both patient-specific and standardized fall prevention strategies; and for further research exploring the sustainability of an evidence-based fall prevention program among hospitalized adults. Related research should also address how to communicate and coordinate fall prevention efforts most effectively in busy clinical settings with high patient turnover and team member rotation.

**Limitations.** Although we adhered to accepted criteria for qualitative research that strengthen the credibility, dependability, confirmability, and transferability of findings, 47, 48 there were some limitations. The primary limitations concern participant recruitment and study design. Despite our efforts to acquire a diverse sample, the total number and role diversity of participants was smaller than anticipated. Reasons for nonparticipation were not solicited, but it's likely that there were various factors, including daily clinical demands, high patient acuity, and high patient volume. It's possible that participant self-selection was also affected by the perceived relevance of the study to one's professional role. The study was conducted at a single site, and this also limits the generalizability of the findings. Lastly, because the intent of the study was to explore perceptions, member checking (double-checking findings with participants) was not used. (Although viewed as one method for establishing research validity,47 the use of member checking has been disputed in the literature, particularly in exploratory qualitative research.49)

# **CONCLUSIONS**

In general, the sustainability of EBP initiatives is a complex matter. This area is generally poorly understood by clinicians, and relevant research findings have not been well translated into practice. In the area of fall prevention, although there is some evidence of links between the implementation of fall prevention

practices and lower fall rates, few studies have addressed the challenges of sustaining an evidence-based fall prevention program. This study identified several factors, and the findings suggest some essential interventions. It's imperative that all interprofessional team members consider fall prevention a top priority. A cohesive team approach is vital to communication and timely action on essential information in the hospital setting. Although patient falls are a designated nursingsensitive indicator of care quality, organizations must consider the implications. While RNs may take the lead in fall prevention efforts, this is a team responsibility. Patient and family engagement is also essential. Hospital-wide, standardized protocols to support interprofessional team collaboration and coordinated planning around the sustained use of an evidencebased fall prevention program are suggested.

For 15 additional continuing nursing education activities on the topic of fall prevention, go to www. nursingcenter.com/ce.

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