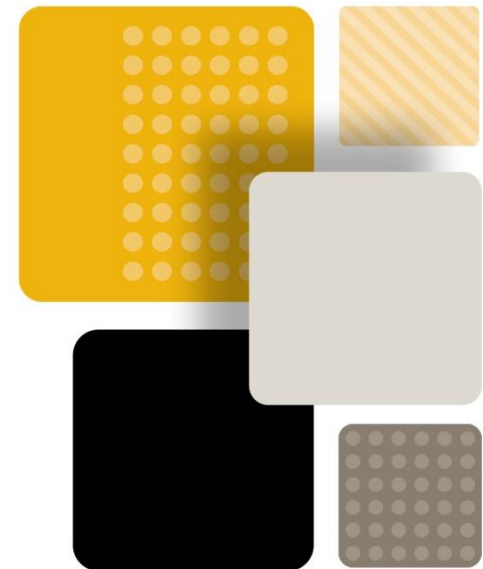# Engaging Patients in Patient Fall Prevention

Laura Cullen, DNP, RN, FAAN
Nursing Research, EBP and Quality
Department of Nursing Services and Patient Care
University of Iowa Hospitals and Clinics
Iowa City, IA USA

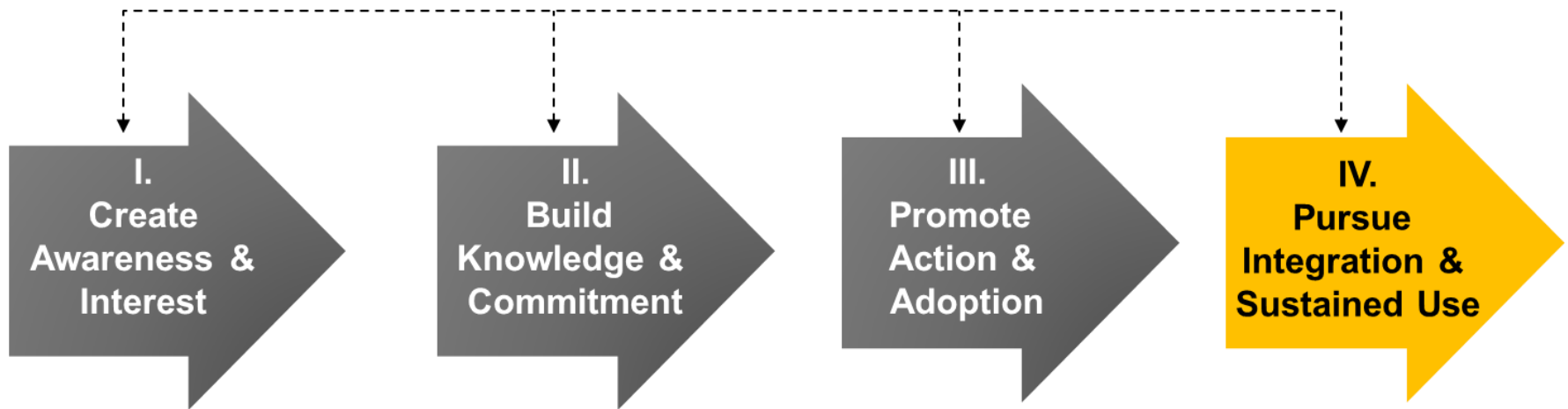THE DAISY FOUNDATION

IN MEMORY OF J. PATRICK BARNES

Team Members

- (PI) Sharon Tucker, PhD, RN, PMHCNS-BC
- (Co-PI) Laura Cullen, DNP, RN, FAAN
- Michele Farrington, BSN, RN, CPHON
- Rihana Al-Ghalayini, BSN, RN
- Deborah Sheikholeslami, BSN, RN-BC, OCN
- Grace Matthews, MSN, RN-BC
- Debra Picone, PhD, RN, CPHQ
- Rebecca Porter, PhD, RN

- Janis Johnson, RN
- Renee Gould, MS, RN-BC
- Rhonda Evans, MSN, RN, OCN, BMT-CN
- Deborah Bohlken, MSN, RN, OCN
- Lynn Comried, MA, RN, CCRN
- Kelly Petrulevich, BSN, RN, OCN
- Jennifer Carpe, BSN, RN, CNML
- Erin Kugler, BSN, RN, OCN

Fall Prevention at UIHC

| I. Create Awareness & Interest | II. Build Knowledge & Commitment | III. Promote Action & Adoption | IV. Pursue Integration & Sustained Use |

Cullen, L., & Adams, S. (2012). Planning for implementation of evidence-based practice. *Journal of Nursing Administration, 42*(4), 222-230.

Purpose/Specific Aim

- To identify factors that strengthen and sustain evidence-based fall prevention strategies for hospitalized adult oncology patients by examining the following fall risk and prevention factors:
  - Patient Factors
    - Fall characteristics from incident reports 2009-2012
    - Patient Interviews regarding perspectives of fall risk and prevention strategies
  - Nursing Factors
    - Fall prevention knowledge and self-efficacy
    - Documentation in medical record
 - Organizational Factors

Background

- Fall prevention is a patient safety priority in every institution, yet 3% – 20% of hospitalized patients fall (The Joint Commission, 2010).

- Hospital fall prevention programs must address patient risk factors (e.g., 45% of falls are related to toileting) **and context** (Krauss, et. al., 2007; Milisen, et. al., 2012; Tzeng & Yin, 2012; Volz & Swaim, 2013).

- Limited evidence exists to specifically guide **sustained** use of fall prevention strategies for oncology patients (Cameron, et. al., 2010; Choi & Hector, 2012; Clyburn & Heydemann, 2011; Davies, Tremblay, & Edwards, 2010; Kline, et. al., 2008; Spyridonidis & Calnan, 2011; Stenberg & Wann-Hansson, 2011; Stern & Jayasekara, 2009; Tucker, et. al., 2012).

- Capturing patients' perceptions is important but largely missing to help guide practice recommendations and fall prevention program planning (Evron, Schultz-Larsen & Fristrup, 2009; Nyman & Victor, 2012; Potter, et. al., 2012; Wiens, et. al., 2006).

Conceptual Framework
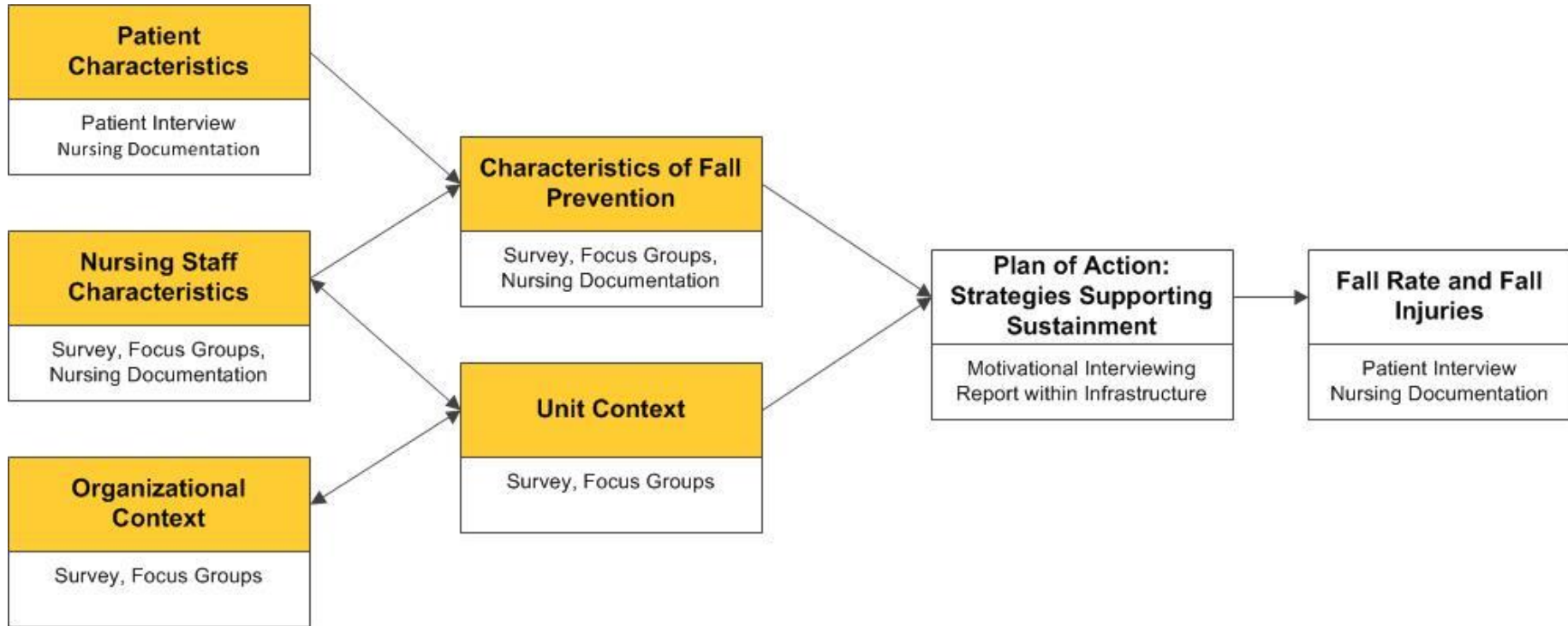
Created from: Damschroder, L., & Hagedorn, H. (2011). A guiding framework and approach for implementation research in substance use disorders treatment. *Psychology of Addictive Behaviors, 25*(2), 194-205.

Methods

- Human subjects' protection approval obtained from IRB

- Describe patients' perspectives of their fall risk and prevention strategies while hospitalized

  - 40 patients participated in brief, structured interviews

  - 4 oncology units

  - Convenience sample of adult oncology patients who:

    - Had been hospitalized for less than 3 days

    - Were receiving inpatient cancer treatment

    - Communicated in English

Methods (cont.)

- Describe patient characteristics related to falls
  - Documentation in incident reports 2009-2012
  - Sample
    - Oncology patients who fell while inpatients
- Describe nurses' knowledge (Bonner, et. al., 2007) and self-efficacy (Dykes, et. al., 2011) related to fall prevention
  - Staff survey
  - Sample
    - Registered nurses and nursing assistants working on an oncology unit

Methods (cont.)

- Describe interdisciplinary team members perspectives of organizational context related to fall prevention
  - Staff survey (Ganz, et. al., 2013)
    - Sample
      - Registered nurses and nursing assistants working on an oncology unit
  - Clinician focus groups & interviews
    - Sample
      - Staff nurses, nurse managers, advanced practice nurses, medical directors, physical therapists, social workers and pharmacists working on an oncology unit
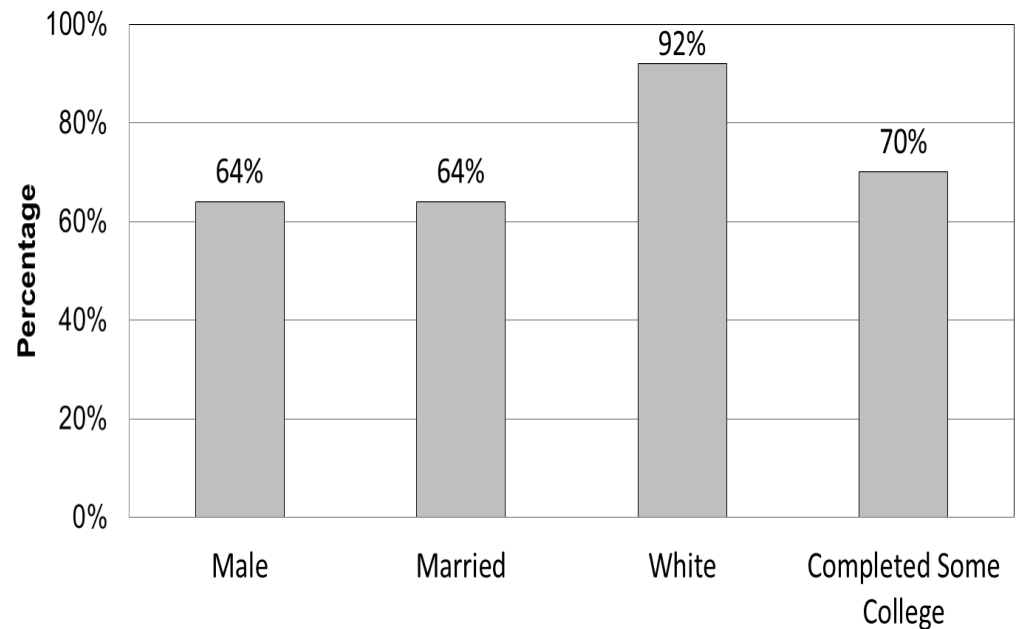
Results from Patients

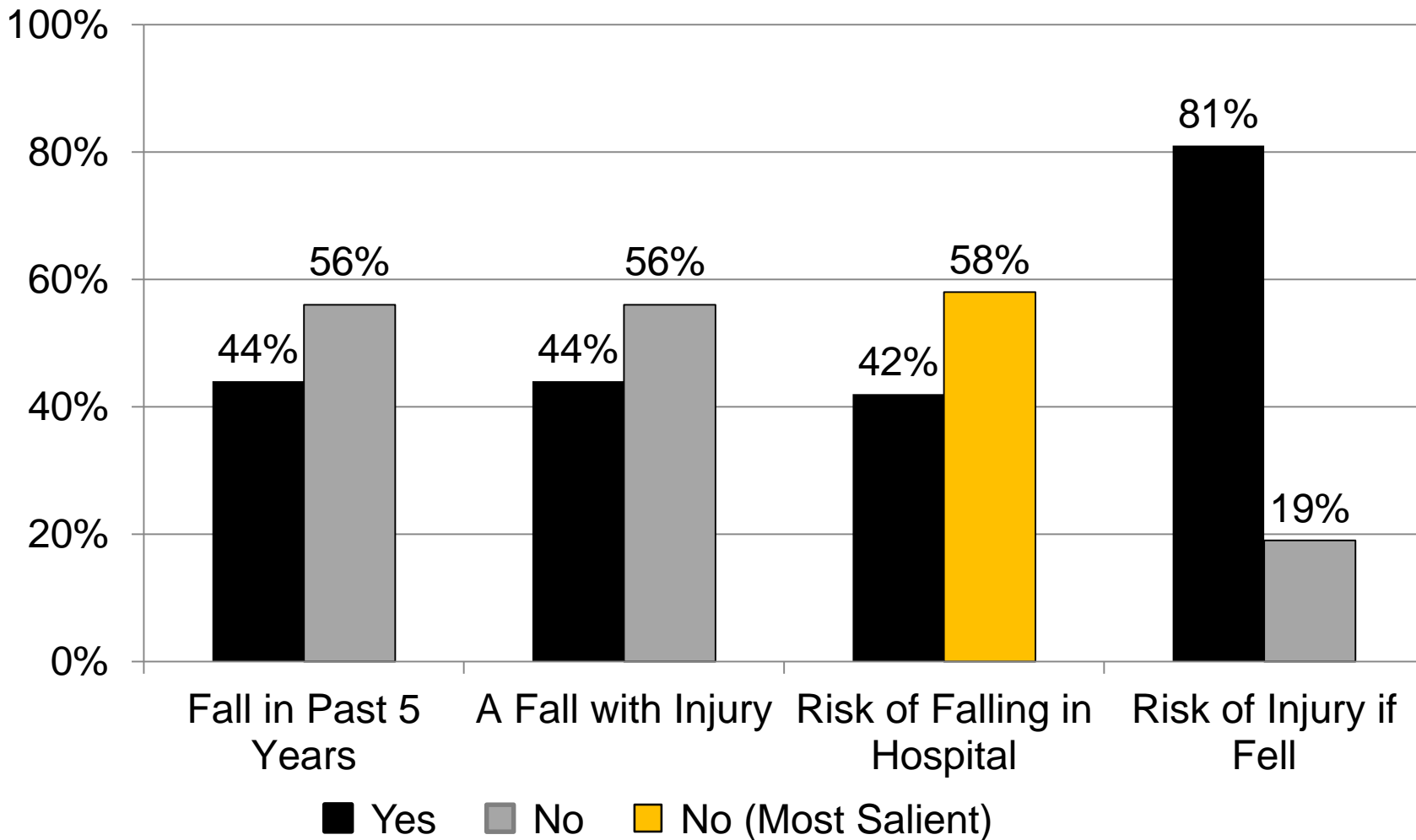*Interviews*

Results – Patient Demographics

- Participants
  - n=39
  - Mean age=58.85 years (SD=13.09); range = 22-84 years

Results – Patient Interviews

Chart showing patient interview results by category (Yes, No, No (Most Salient)):

- Fall in Past 5 Years: Yes 44%, No 56%
- A Fall with Injury: Yes 44%, No 56%
- Risk of Falling in Hospital: Yes 42%, No (Most Salient) 58%
- Risk of Injury if Fell: Yes 81%, No 19%

Legend: ■ Yes ■ No ■ No (Most Salient)

Results – Patient Interviews (cont.)

	Adequate Hearing & Vision	Assistance to the Bathroom	Daily Nursing Assessment	Reporting a Change in Health
Very Important	74%	44%	63%	97%
Not Important	26%		37%	3%
Not At All Important (Most Salient)		36%		

■ Very Important   ■ Not Important   ■ Not At All Important (Most Salient)
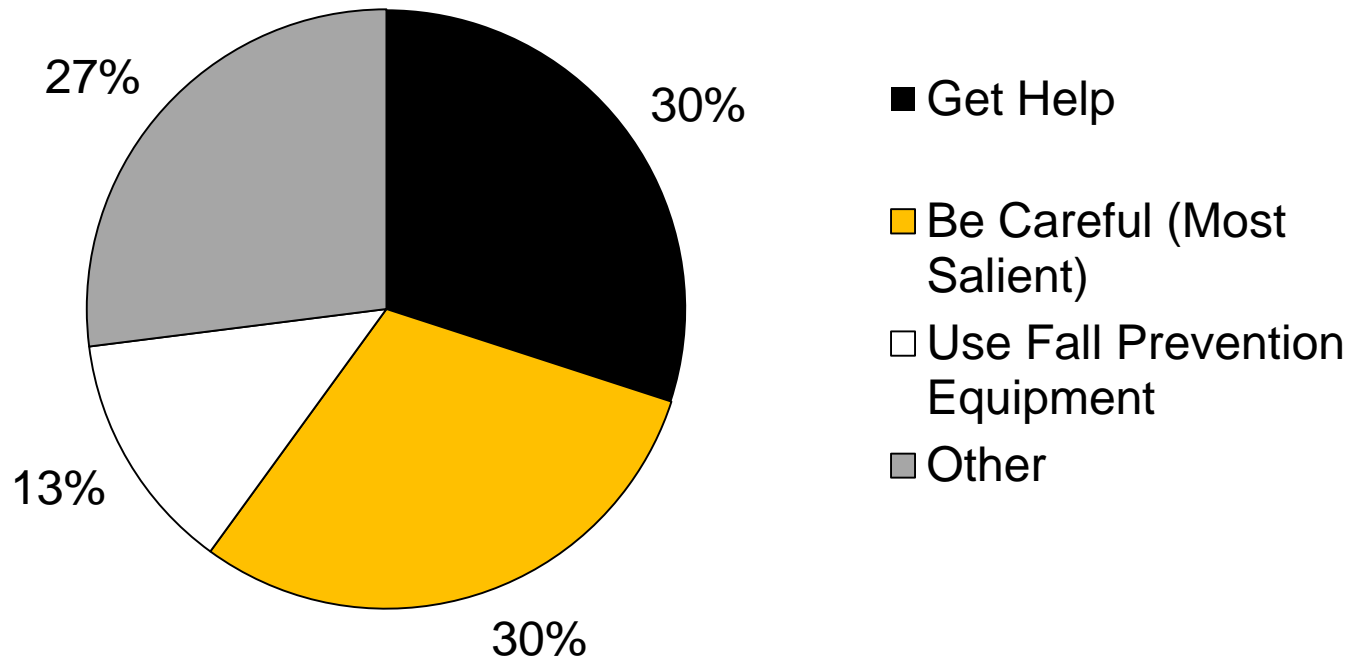
Results – Patient Interviews (cont.)

- Participants reported the most important thing they could do to prevent falling:

27% — 30%

13% — 30%

- Get Help
- Be Careful (Most Salient)
- Use Fall Prevention Equipment
- Other

Results from Nursing Staff

Registered Nurses & Nursing Assistants Survey

Results – Nursing Staff Demographics

	Registered Nurses (RN)	Nursing Assistants (NA)
Number of RNs or NAs	n=52	n=18

Age in Years:
    M (SD)
    Range
	33.58 (12.01)
	22-59
		31.72 (12.16)
		19-58

f (%) Female	50 (96.2%)	14 (77.8%)
f (%) White	49 (94.2%)	16 (88.9%)
M (SD) Years as RN or NA	8.52 (9.75)	7.04 (8.97)
M (SD) Years as RN or NA on Current Unit	5.88 (6.96)	2.26 (3.01)

Highest Level of Education:
    f (%) Some College/Associate Degree
    f (%) Bachelor of Science or Higher
	13 (25%)
	38 (73.1%)
		16 (88.9%)
		2 (11.1%)

f (%) Specialty Certification	15 (28.8%)	10 (55.6%)

Results – Nursing Staff Knowledge and Self-Efficacy

Results	Registered Nurses	Nursing Assistants
Knowledge:	n=52	n=18
Total Possible Score M (SD) Range	23 20.13 (1.56) 15-23	22 18.17 (3.40) 6-21
Self-Efficacy:	n=51	n=17
Total Possible Score M (SD) Range	84 31.73 (8.40) 14-54	72 19.76 (7.35) 12-40

Results – Select Organizational Assessment (Nursing Staff)

Organizational Assessment Items	Registered Nurses			Nursing Assistants		
	M	(SD)	Range	M	(SD)	Range
Familiar with role in preventing falls.	3.43	n=49 (.61)	1-4	3.65	n=17 (.79)	1-4
Unit expert who maintains fall prevention awareness and knowledge.	3.08	n=49 (.73)	1-4	2.65	n=17 (1.12)	1-4
Prompts in place to ensure care is carried out appropriately for fall prevention.	3.33	n=49 (.59)	1-4	3.12	n=17 (1.05)	1-4
Electronic patient record facilitates completion of fall prevention activities.	3.04	n=49 (.79)	1-4	2.82	n=17 (1.02)	1-4
Use of fall interventions regularly reported to staff.	3.00	n=49 (.68)	1-4	3.18	n=17 (.88)	1-4
Committee monitors care processes to prevent falls.	3.25	n=48 (.67)	1-4	3.00	n=16 (.82)	1-4
Hospital leadership engaged in process of sustaining fall prevention program.	3.17	n=48 (.60)	1-4	3.18	n=17 (.95)	1-4

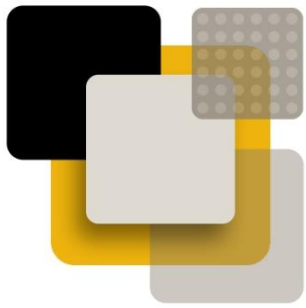# Results from Interdisciplinary Team

Focus Groups & Interviews
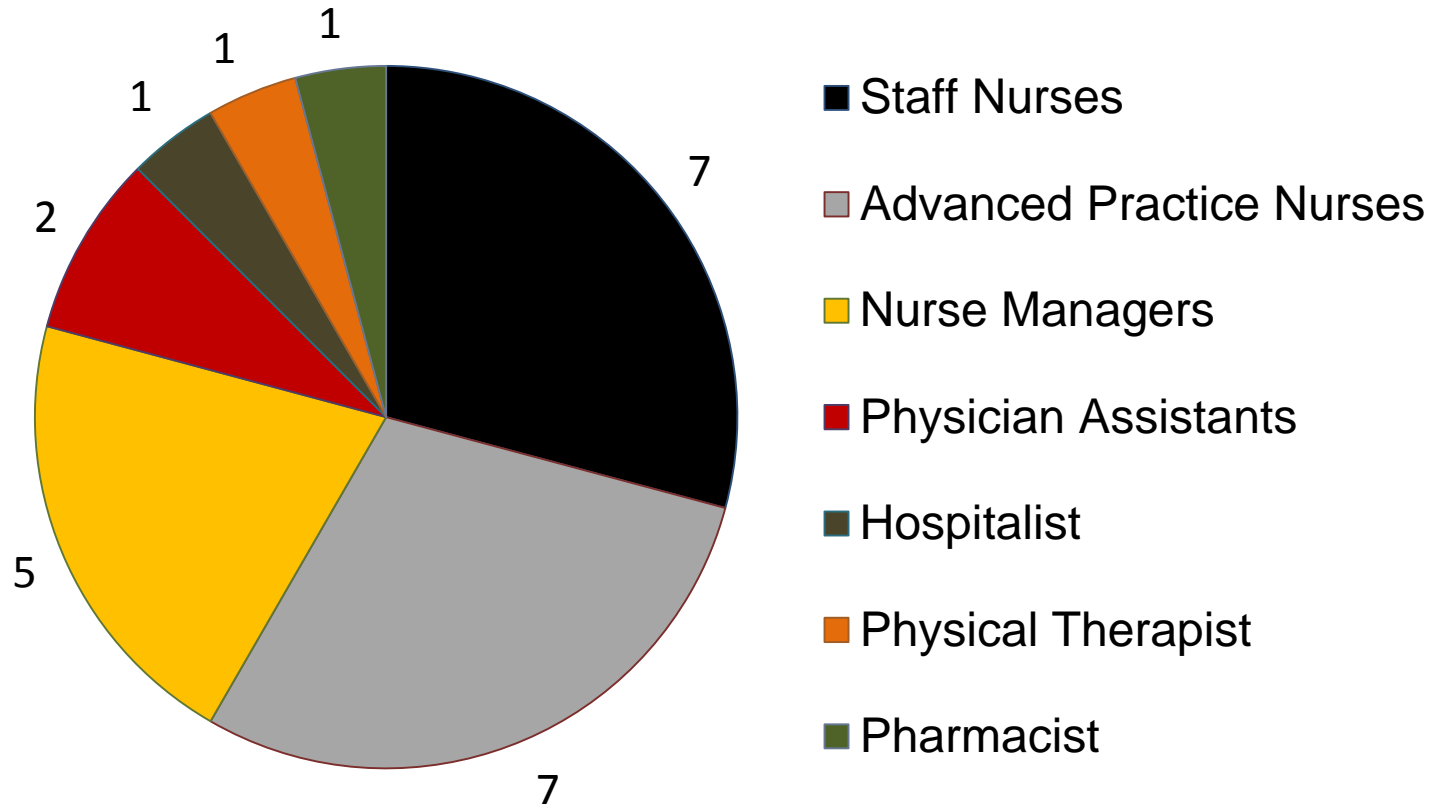
Qualitative Methods

- Focus groups & interviews
- Purposeful sampling (maximum variation)
- Inclusion Criteria:
  - Interdisciplinary team member from an inpatient oncology units
  - Willing to participate & be audiotaped
- Interview process
  - Semi-structured; one hour
  - Transcribed and verified for accuracy
- Rigor & trustworthiness
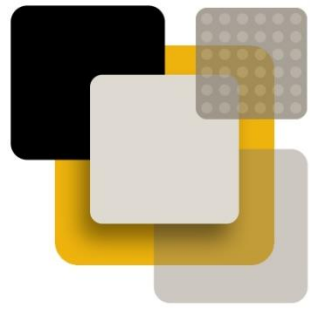- Thematic analysis – preliminary results

Results – Interdisciplinary Team Participants

Participants (n = 24)

- Staff Nurses
- Advanced Practice Nurses
- Nurse Managers
- Physician Assistants
- Hospitalist
- Physical Therapist
- Pharmacist

Results – Interdisciplinary Team

- Core Theme: "Working Hand-in-Hand"
  - Successes
  - Opportunities

Core Theme – "Working Hand-in-Hand"

■ "we use housekeepers…they have a tendency to know who is on fall risk and will come and get them if they see them start to get out of bed …"

<div align="right">Nurse H</div>

■ "the unit clerks have started putting the … uh… call light system on the bed, too… they text page on the Voalte and so that if a bed alarm is going off …they're (unit clerks) are being more verbal …"

<div align="right">Nurse Manager A</div>

Core Theme – "Working Hand-in-Hand"

- "before I leave the room, if I recognize that they're at an increased fall risk for any reason, I'd actually contact – either speak in person with the nurse or the nursing assistant"

  Physical Therapist

- "one of my staff physicians – we showed him a fall leaves sign like – we're like, 'what does this mean to you?' and he was like, 'autumn…is it a decoration?'

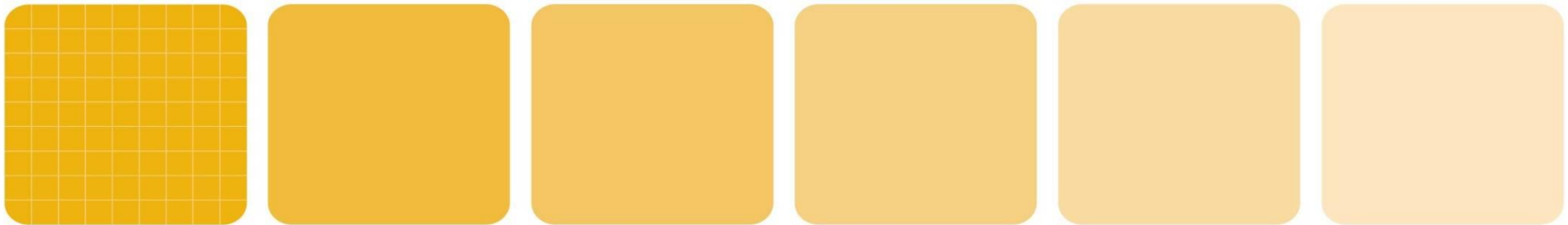 Nurse G

Core Theme – "Working Hand-in-Hand"

- When asked 'who is responsible'

  - "I would say us. Possibly – the hospitalist or myself or (other) PA if they're working the weekend. It doesn't typically go to our staff."

    Physician Assistant A

Patient Falls

Incident Reports

Results – Patients with a Fall

- Incident reports from 2009-2012 (n = 232 falls)
- Reported
  - Demographics: DRG and length of stay
  - Risk factors and score
  - Interventions in place
  - Patient activity at time of fall
- Analysis is underway

Conclusions

- Patients did not see themselves as at-risk for falling.
  - Patients often rated bathroom assistance as not at all important despite it being a top contributor to inpatient falls.
- Nurses have competing demand and workload issues that make fall prevention difficult to manage.
- Interdisciplinary team planning could improve

Implications for Practice

- Patients' perceptions are important for implementing and sustaining an inpatient fall prevention program.

- Translation of evidence-based fall prevention requires active strategies addressing fall risk assessment, interventions for prevention and use of falls data.

- Sustaining EBP fall prevention requires all clinicians to build the work into their normal communication, planning and workflow.

Recommendations

- Patients and caregivers should be engaged in a conversation at time of admission and repeated (based on patient condition) about fall risk and strategies to prevent falls.
  - Development of motivational interviewing skills among staff may facilitate patient engagement.
- A systems perspective is essential to promote a context for EBP fall prevention.

Questions

sharon-tucker@uiowa.edu

laura-cullen@uiowa.edu

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