Safe Patient Handling and Mobility (SPHM) in Non-Acute Care Settings

Tricia Jaworski, OTR/L, CSPHP
Rosalina Galam, MHA, MS, LAT, ATC, CEAS II
Stephanie Wilson, OTR/L, CSPHP

November 11, 2026

Today's Speakers



Tricia Jaworski, OTR/L, CSPHP
Advocate Health



Rosalina Galam, MHA, MS, LAT, ATC, CEAS II
Northwestern Medicine



Stephanie Wilson, OTR/L, CSPHP
Endeavor Health

Disclosure

We declare this presentation will not contain commercial bias. (If applicable, state any funding sources for the content represented in the presentation.)

Disclosure:
In accordance with the policies on disclosure of the California Board of Registered Nursing and Article XXII - ASPHP Conflicts of Interest, all planner and presenters for this event have been asked and are expected to identify whether they do or do not have any real or apparent conflict(s) of interest or other relationships related to the content of their presentations(s).

Conflicts of Interest:
A conflict of interest exists when an individual(s) has an opportunity to affect educational content about health-care products or services of a company with which he/she has a financial, professionals, or personal relationship.

Learning Objectives

1. Review challenges in non-acute care setting identified through survey data
2. Describe how unique care settings affect interdisciplinary teams and SPHM programs across organizations
3. Explain how a Falls Champion can support successful patient outcomes
4. Identify resources for leaders responsible for SPHM programs in these settings

Our Organizational Landscape



Aurora Health Care

- 18 Hospitals
- 330+ Sites of Care
- 2.3K Employed Physicians
- 10K Nurses

Advocate Health Care

- 11 Hospitals
- 200+ Sites of Care
- 2K Employed Physicians
- 10.6K Nurses

ADVOCATE HEALTH

11 Hospitals
85 Ambulatory Clinics

1,296 Employed Physician FTEs
Growth from FY24

11,381 Employees
Increase in Employee Headcount

1,320 Residents & Fellows
Growth from FY24

Employee Engagement
Increased LTR NPS from FY24 to FY25

Vizient & CMS Star Rating
NMH achieved 5 star rankings on both quality ratings

Leapfrog Safety Grade
NMH received A safety grade in Spring 2025

Magnet Designation
NMH received its 5th Magnet designation from the ANCC

Northwestern Medicine

3rd Largest Health System in IL

- 9 Hospitals
- 28,300+ Team Members
- 8,250+ Registered Nurses
- 1,450,000+ Patients
- 6,800+ Physicians and Advanced Practice Providers
- 300+ Sites of Care
- 118,500+ Admissions
- $5.9B Net Revenue

Endeavor Health

The Story Behind It All




CHECK-IN

Case Scenario

The patient scheduled their visit six months ago, before a recent hospitalization. Now, they have limited mobility, fatigue quickly, and due to the distance from one appointment to the other >100 feet....

Think of how the patient will get from the front entrance to each department

- ✓ What equipment is available to support the patient if needed?
- ✓ Who is trained to assist with this task, and are Safe patient Handling and Mobility Champions available?
- ✓ How are the Environmental Safety Considerations?
- ✓ Has the patient been identified as a fall risk?
- ✓ Is there a process to identify if patient has a disability or accommodation documented?







High Reliability Organizations (HROs)

"Operate under very trying conditions all the time and yet manage to have fewer than their fair share of accidents."

— Weick & Sutcliffe, *Managing the Unexpected*

- **Risk** = Probability × Consequence
- Reduce either factor → reduce overall risk
- Ultra-safe systems: high-risk → high-consequence

High Reliability Maturity Model

Unmindful

Chronically Complacent

Care processes built around convenience of providers not patients & families

Reactive

Safety is Important

We do a lot every time we have an accident. Customer service is a focus. Patient & family centered care is not incorporated in a meaningful way

Systemic

Systems in Place to Manage Most Hazards

Care process visible to the patient, learning and feedback process is sporadic

Proactive

We Methodically Anticipate

Errors prevented before occurring. Structured process for patient and the family at the table, input is valued, results are visible

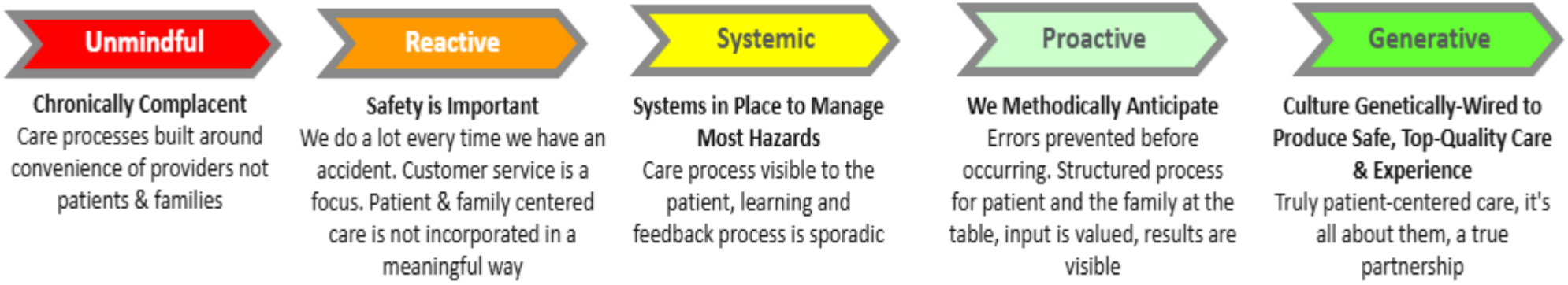
Generative

Culture Genetically-Wired to Produce Safe, Top-Quality Care & Experience

Truly patient-centered care, it's all about them, a true partnership

Poll Question

Where is your organization in the maturity model?



High Reliability Organization (HRO) Principles

Anticipation

Preoccupation with Failure (Learning what MAY happen)

Operating with a chronic wariness of the possibility of unexpected events that may jeopardize safety by engaging in proactive and preemptive analysis and discussion

Sensitivity to Operations (Learning what is HAPPENING)

Paying attention to what's happening on the front-line, ongoing interaction and information sharing about the human and organizational factors that determine the safety of a system as a whole

Reluctance to Simplify *interpretations (Learning what is TRUE)*

Taking deliberate steps to question assumptions and received wisdom to create a more complete and nuanced picture of ongoing operations regardless of rank

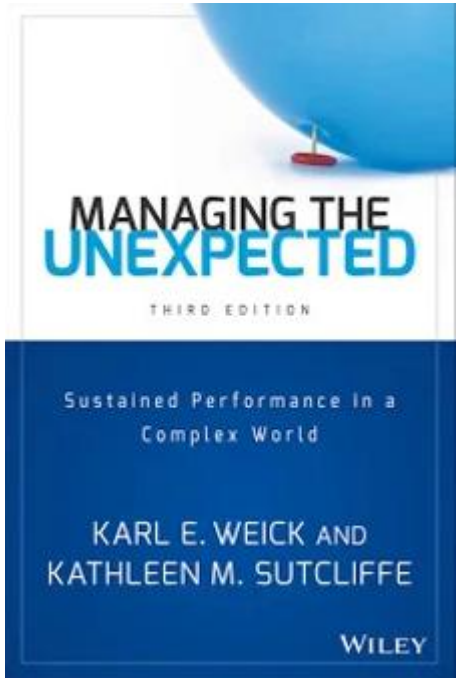
Containment

Commitment to Resilience (Learning from situations)

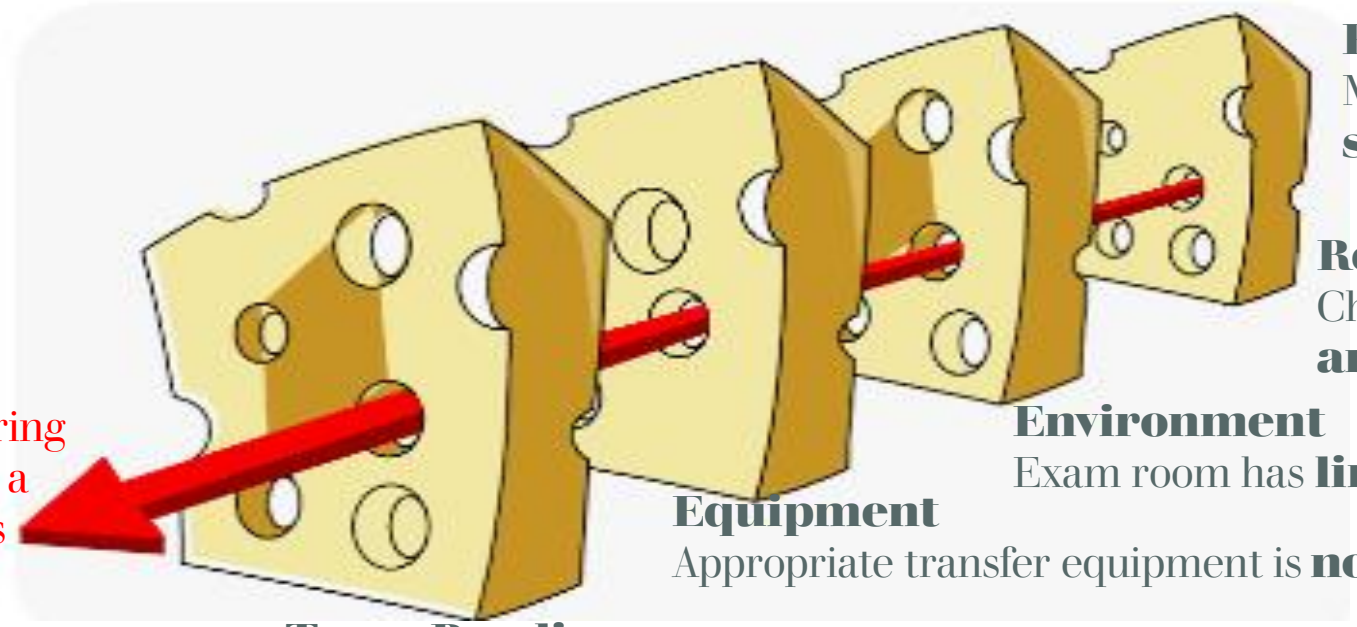
Developing capabilities to detect, contain, and bounce back from errors that have already occurred, before they worsen and cause more serious harm

Deference to Expertise (Learning from our people)

During high-tempo operations, decision-making authority migrates to the person or people with the most expertise with the problem at hand, regardless of rank



Patient Fall During Transfer



EVENT
Patient falls during transfer and/or a staff member is injured

Pre-Visit Planning
Mobility needs **not identified during scheduling**

Reassessment
Change in mobility **not recognized upon arrival**

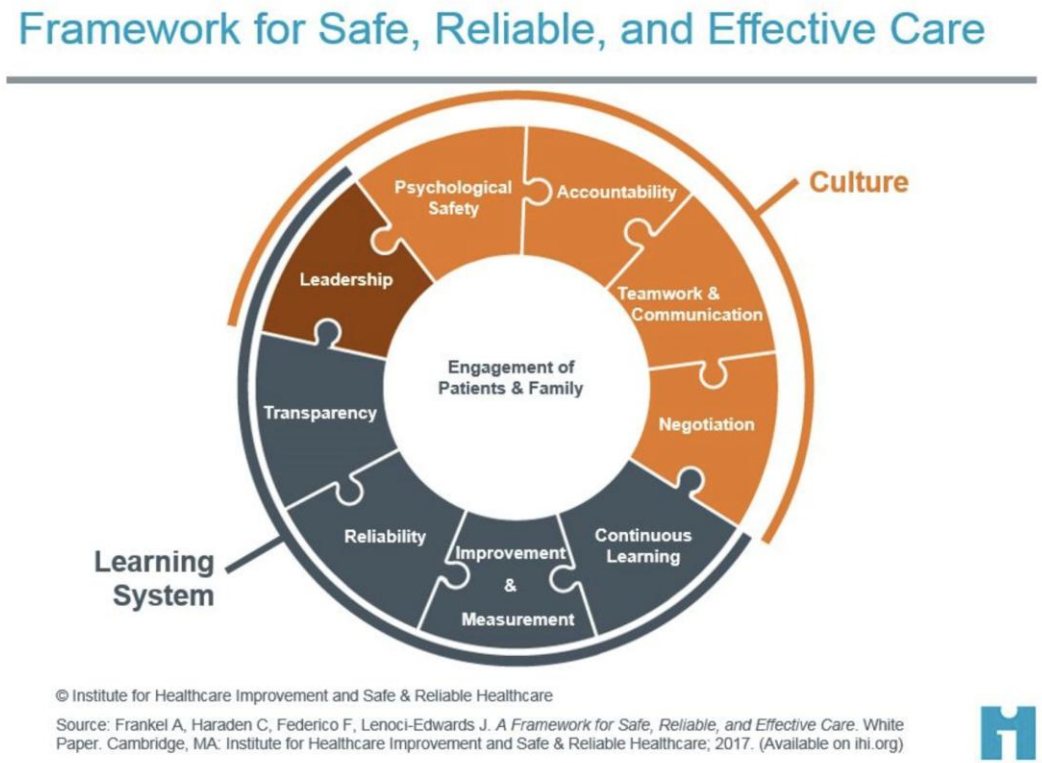
Environment
Exam room has **limited space for a safe transfer**

Equipment
Appropriate transfer equipment is **not readily accessible**

Team Readiness
Staff proceed with the transfer **without training, adequate equipment or assistance**

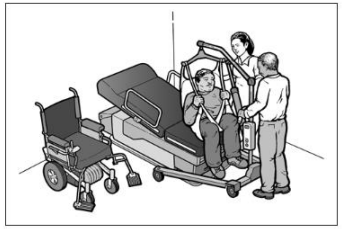
Wiegmann DA, Wood LJ, Cohen TN, Shappell SA. Understanding the "Swiss Cheese Model" and Its Application to Patient Safety. J Patient Saf. 2022 Mar 1;18(2):119-125

Culture and Learning System



Americans with Disability Act (ADA)

Assisted Transfer Utilizing a Portable Floor Lift



To properly and safely assist patients with transfers, medical staff will likely need training on how to operate the equipment and on safe patient handling techniques.

Table of contents

- Access to Medical Care for Individuals with Mobility Disabilities
  - Part 1: Overview and General Requirements
  - Part 2: Commonly Asked Questions
  - Part 3: Accessible Examination Rooms
  - Part 4: Accessible Medical Equipment

Print this page

Part 2: Commonly Asked Questions

Open all sections

- Is it OK to examine a patient who uses a wheelchair in the wheelchair, because the patient cannot get onto the exam table independently?
- Can I tell a patient that I cannot treat her because I don't have accessible medical equipment?
- Is it OK to tell a patient who has a disability to bring along someone who can help at the exam?
- If the patient does bring an assistant or a family member, do I talk to the patient or the companion? Should the companion remain in the room while I examine the patient and while discussing the medical problem or results?
- Can I decide not to treat a patient with a disability because it takes me longer to examine them, and insurance won't reimburse me for the additional time?
- I have an accessible exam table, but if it is in use when a patient with a disability comes in for an appointment, is it OK to make the patient wait for the room to open up, or else use an exam table that is not accessible?
- In a doctor's office or clinic with multiple exam rooms, must every examination room have an accessible exam table and sufficient clear floor space next to the exam table?
- I don't want to discriminate against patients with disabilities, but I don't want my staff to injure their backs by lifting people who use wheelchairs onto exam tables. If my nurse has a bad back, then she doesn't have to help lift a patient, does she?
- What should I do if my staff do not know how to help a person with a disability transfer or know what the ADA requires my office to do? Also, I am unsure how to examine someone with spasticity or paralysis.

Access to Medical Care for Individuals with Mobility Disabilities | ADA.gov

HHS 504

July 2026 Compliance

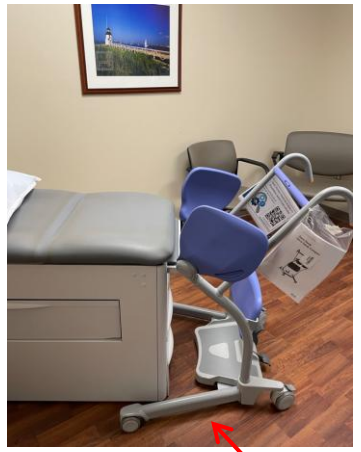
- Effective May/July 2026, HHS 504 regulations require recipients of federal funding (healthcare providers, insurers) to ensure digital, mobile, and kiosk accessibility, adhering to WCAG 2.1 Level AA standards. Key mandates include accessible medical equipment (scales/tables) and non-discrimination in care.
- Section 504 also requires that recipient staff are qualified to successfully operate accessible MDE, assist with transfers, and ensure program accessibility.

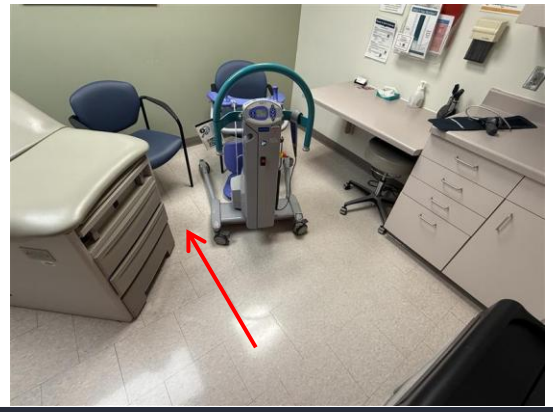
https://www.hhs.gov/civil-rights/for-individuals/disability/section-504-rehabilitation-act-of-1973/ocr-detailed-504-fact-sheet/index.html

Environmental Safety Considerations









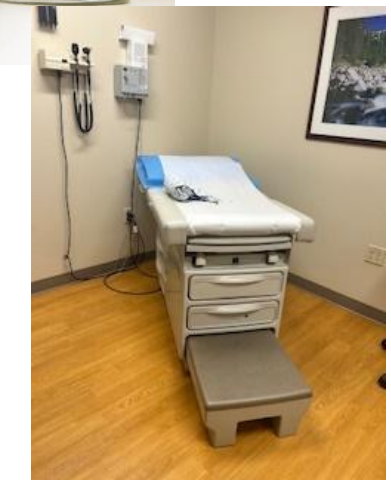


Non-Acute Care Settings

- Free Standing (Primary Care, Urgent Care etc.)
- HOD/ POB
- Surgery Centers
- Sleep Centers
- Specialty Clinic (ALS, SCI, Pain, Amputee, Parkinsons etc.)
- Other







Patient Populations

- Vary based on providers and type of clinic

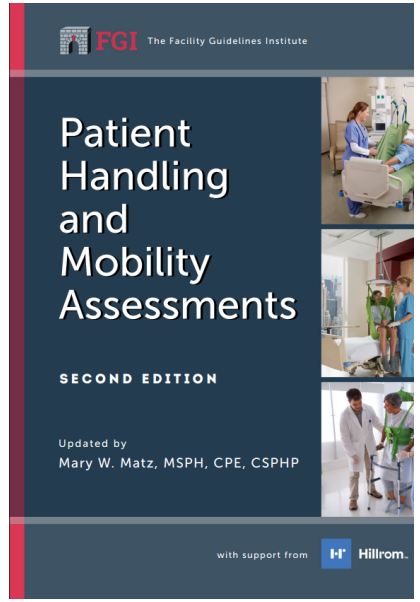
Staffing

- Mix of licensed and unlicensed staff

Environmental Safety Considerations

- Weight capacity of waiting room chairs
- QTY of each type of equipment
- Door widths / hallway configurations
- Scales (step on / wheelchair)
- Transfer space available

- FGI outlines the required type and quantity of SPHM equipment for each area



https://www.fgiguidelines.org/wp-content/uploads/2019/10/FGI-Patient-Handling-and-Mobility-Assessments_191008.pdf

Poll Question

A patient arrives using a wheelchair and requires assistance transferring to the exam table. What should the team consider before initiating the transfer?

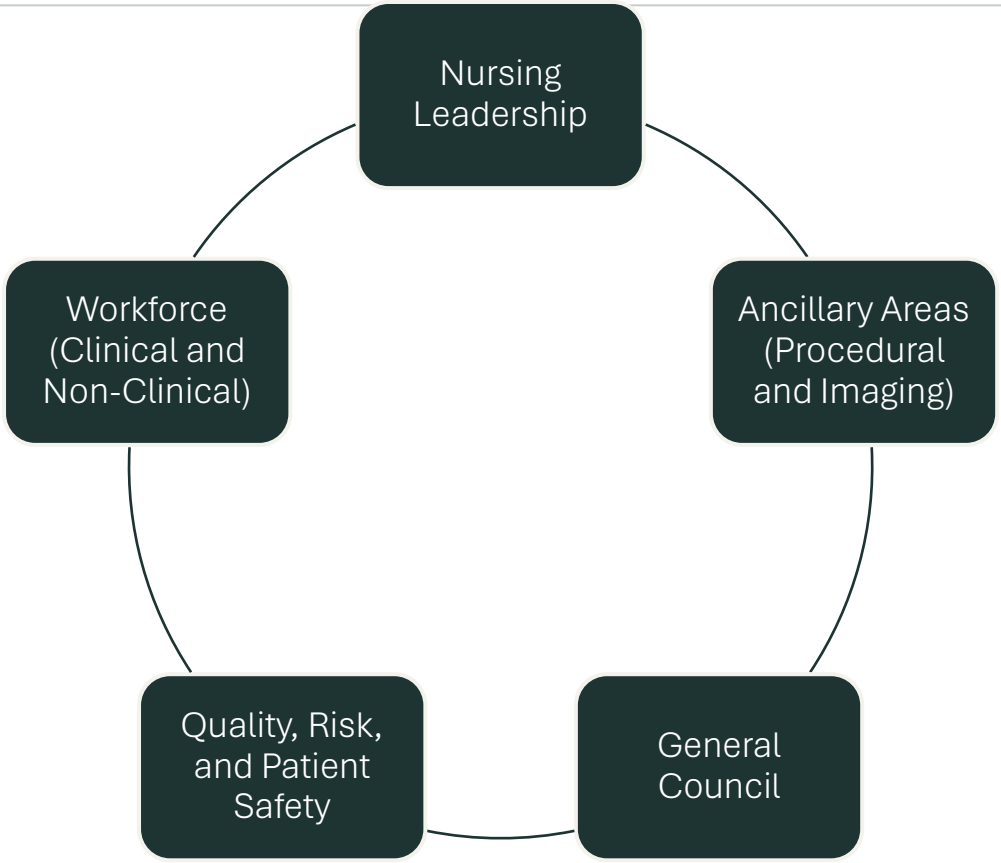
A. Whether the wheelchair fits through the doorway

B. Whether there is adequate space for the transfer

C. Whether the appropriate equipment is available and accessible

D. All of the above

Interdisciplinary Stakeholders



Elements of Sustaining a Successful Program

- Leadership Support
- Staff Engagement
- Regular Training
- Policy Development
- Equipment Accessibility
- Program Evaluation
- Interdisciplinary Collaboration
- Culture of Safety

Poll Question

Does your organization have an Ambulatory Falls Committee?

A. Yes
B. No

The Financial and Human Benefits of SPHM Technology



Investment in SPHM Technology

Reduce caregiver injuries dramatically, leading to long-term savings in workers' compensation claims and reduced absenteeism



Impact on Workforce

Decreases in injury rates among nurses and aides, with some studies showing reductions of up to 50% or more



Injury Costs

$8,700 to $13,400, depending on the affected body part.

Environment of Care Scorecard-Key Performance Measures

Employee Safety

Measure Name	Threshold	System	Northshore	Swedish	NCH	Edward	Elmhurst	Linden Oaks	Medical Group
Total TMH Reported Incident Rate*	11.27	11.18 (2253)	9.99 (624)	11.95 (215)	19.78 (472)	13.13 (362)	12.07 (279)	20.91 (54)	5.62 (247)
Total Recordable Incident Rate (TRIR) (Hospitals)*	5.20	5.59 (881)	4.15 (259)	3.89 (70)	8.67 (207)	6.64 (183)	6.01 (139)	8.91 (23)	-
Total Recordable Incident Rate (TRIR) (Medical Group)*	1.43	2.19 (96)	-	-	-	-	-	-	2.19 (96)
Days Away, Restricted/Transfer Rate (DART) (Hospitals)*	1.88	1.41 (223)	0.98 (61)	1.06 (19)	2.22 (53)	2.03 (56)	1.3 (30)	1.55 (4)	-
Days Away, Restricted/Transfer Rate (DART) (Medical Group)*	0.38	0.25 (11)	-	-	-	-	-	-	0.25 (11)
Sharps Injury Rate*	1.62	1.65 (332)	1.63 (102)	1.28 (23)	2.47 (59)	1.67 (46)	2.03 (47)	0.39 (1)	1.23 (54)
Patient Handling Injury Rate*	0.60	0.68 (137)	0.51 (32)	0.5 (9)	1.34 (32)	1.45 (40)	0.82 (19)	0.77 (2)	0.07 (3)
Slip/Trip/Fall Injury Rate*	0.46	0.56 (107)	0.4 (25)	0.61 (11)	1.09 (26)	0.58 (16)	0.43 (10)	1.55 (4)	0.34 (15)
Workplace Violence OSHA Injury Rate*	0.28	0.33 (64)	0.26 (16)	0.33 (6)	0.67 (16)	0.33 (9)	0.22 (5)	3.87 (10)	0.05 (2)

Public Safety

Measure Name	Threshold	System	Northshore	Swedish	NCH	Edward	Elmhurst	Linden Oaks	Medical Group
Assaults - Category 1 - Verbal	-	681	165	150	64	59	58	15	170
Assaults - Category 2 - Verbal with threat	-	331	74	104	46	27	25	10	45
Battery - Category 1 - Physical contact	-	234	65	50	26	36	23	21	13
Battery - Category 2 - Physical contact with injury	-	218	75	34	31	30	17	26	5
Total Assault & Battery incidents Rate*	8.21	7.26 (1464)	6.07 (379)	18.78 (338)	7.00 (167)	5.51 (152)	5.32 (123)	27.88 (72)	5.30 (233)

Utilities

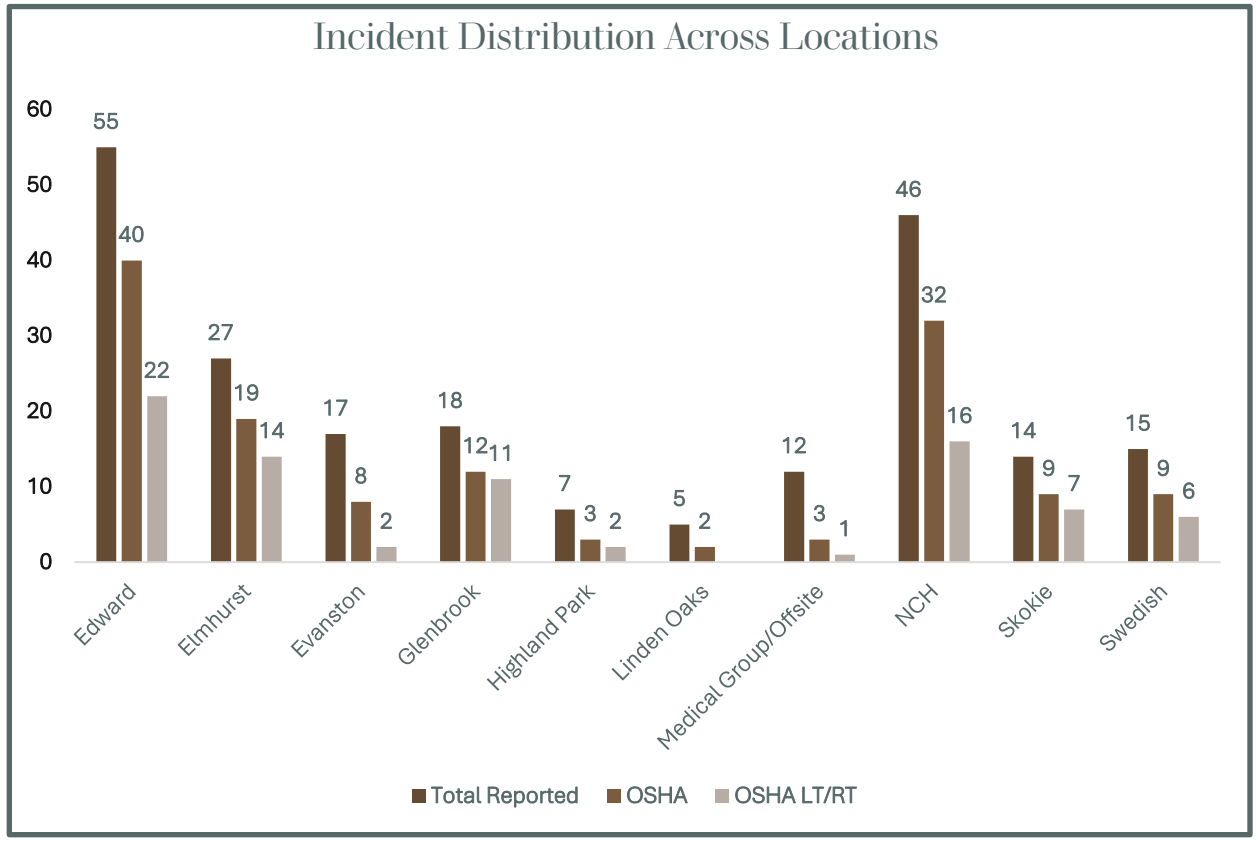
Measure Name	Threshold	System	Northshore	Swedish	NCH	Edward	Elmhurst	Linden Oaks	Medical Group
Elevator Entrapments	6	6	34	2	0	1	0	0	5
Utility Outages/Failures	12	7	58	1	0	0	0	1	4

Life Safety

Measure Name	Threshold	System	Northshore	Swedish	NCH	Edward	Elmhurst	Linden Oaks	Medical Group
True Fire Events	-	13	5	1	0	2	1	0	4
False Fire Events	-	82	32	8	18	5	3	0	16
Fire Alarm Reliability (True Alarms/Total Alarms)	90%	14%	14%	11%	0%	29%	25%	100%	20%

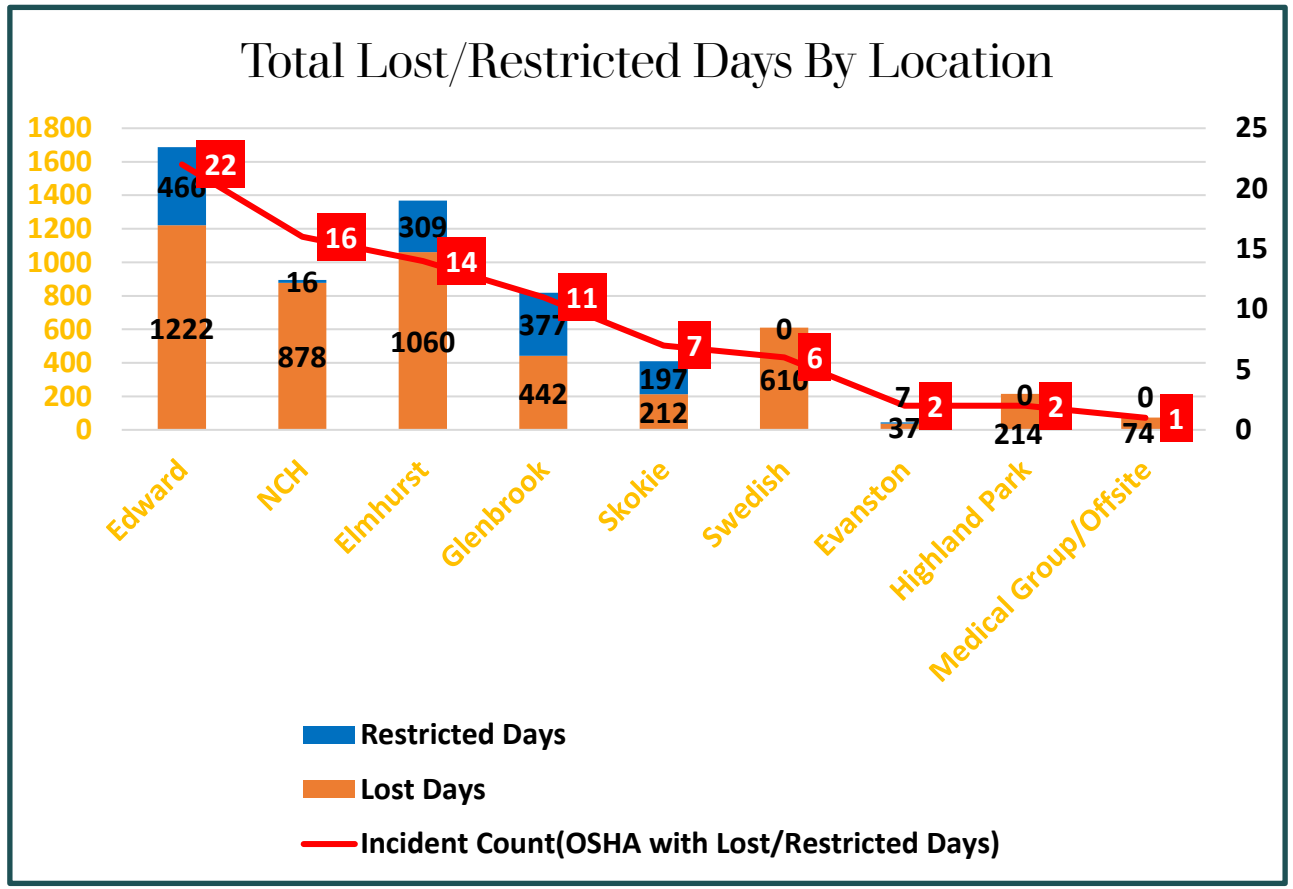
All rates per 100 FTEs

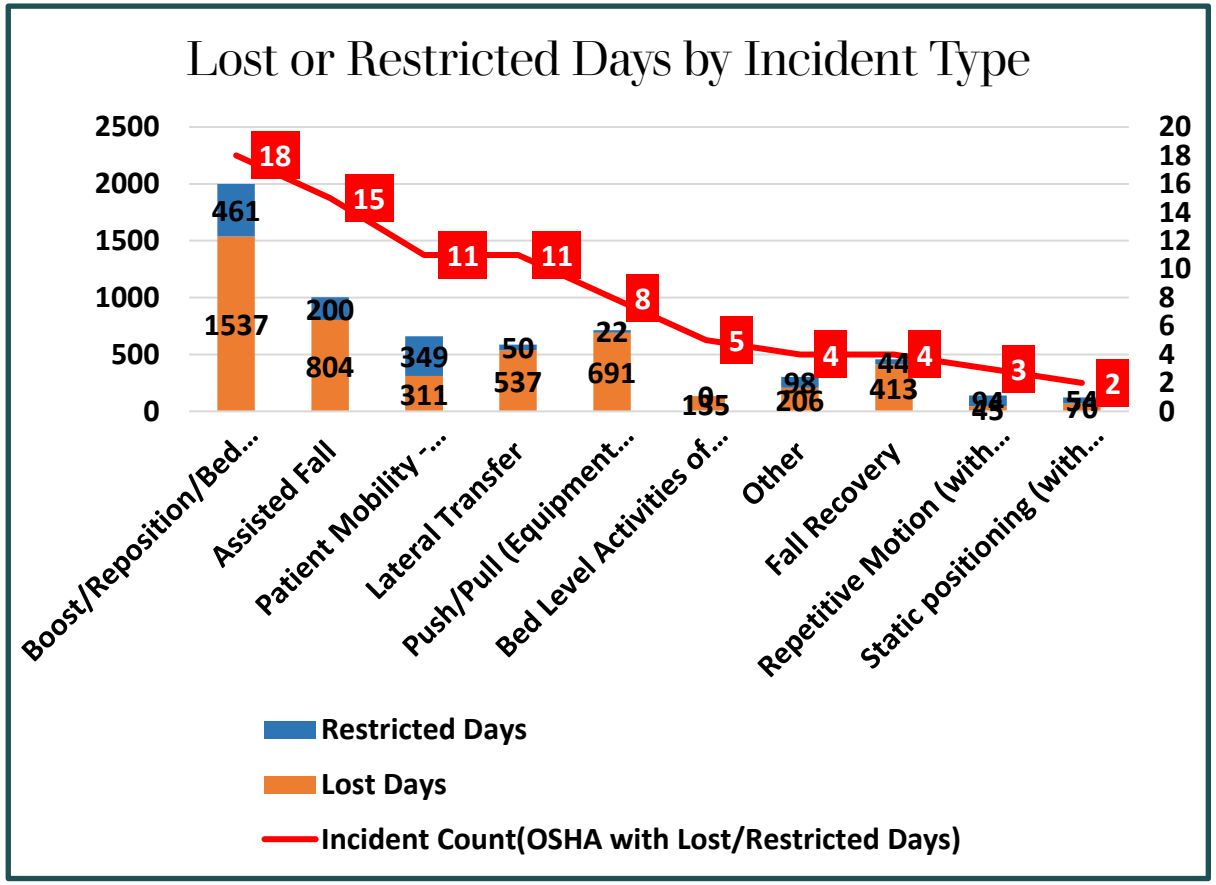
Patient Handling and Mobility Incident Distribution





Incident Reports by Lost or Restricted Days





Poll Question

What are the barriers in your organization for obtaining caregiver injury data?

A. I don't know who to contact

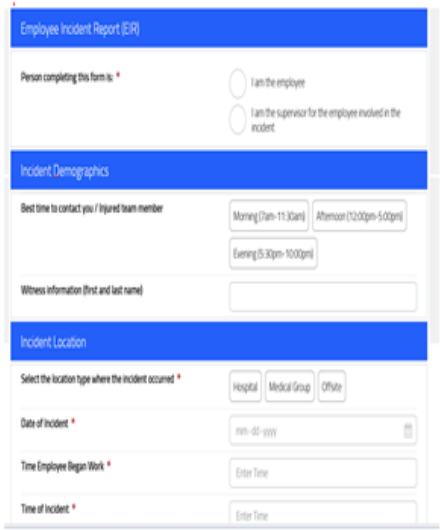
B. Siloed work

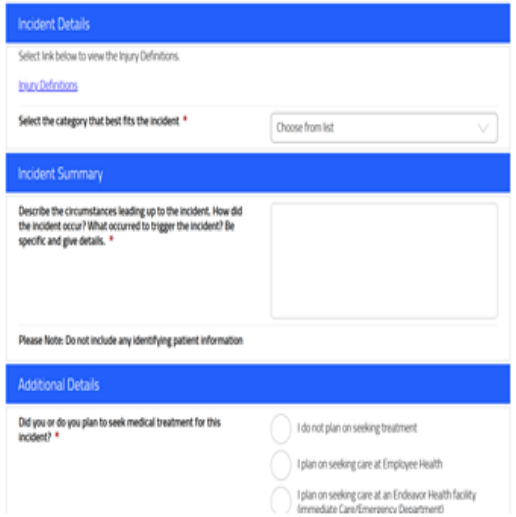
C. Reporting system platform

D. Other

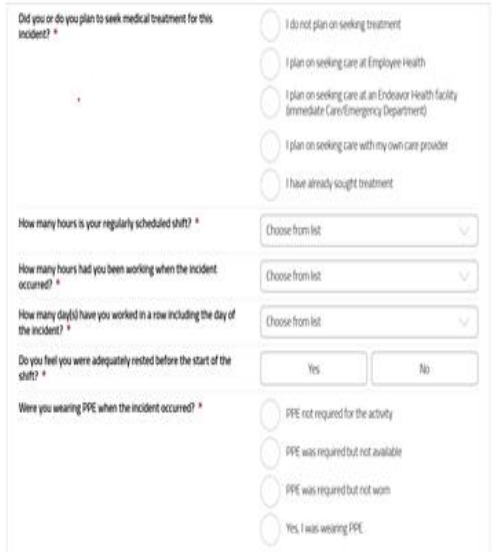
Electronic Incident Reporting Systems

Employee Incident Form





Employee Incident Form





Incident Reports in Clinic Setting

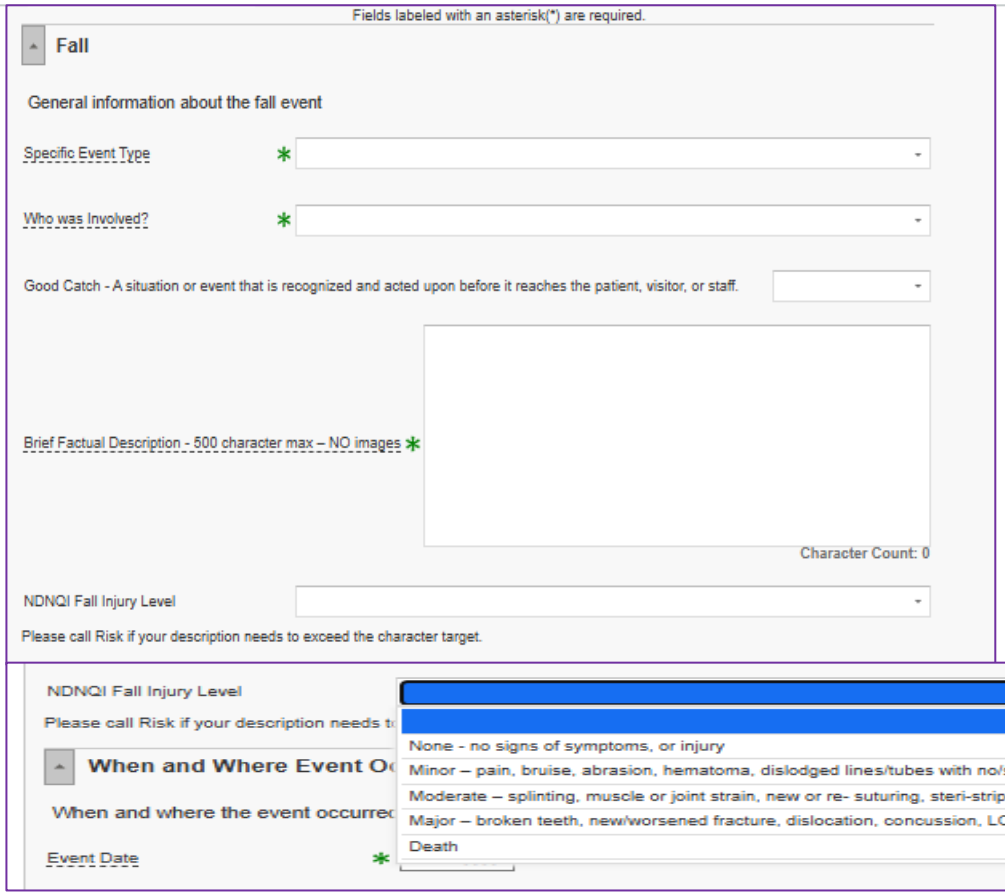
Description of Incident

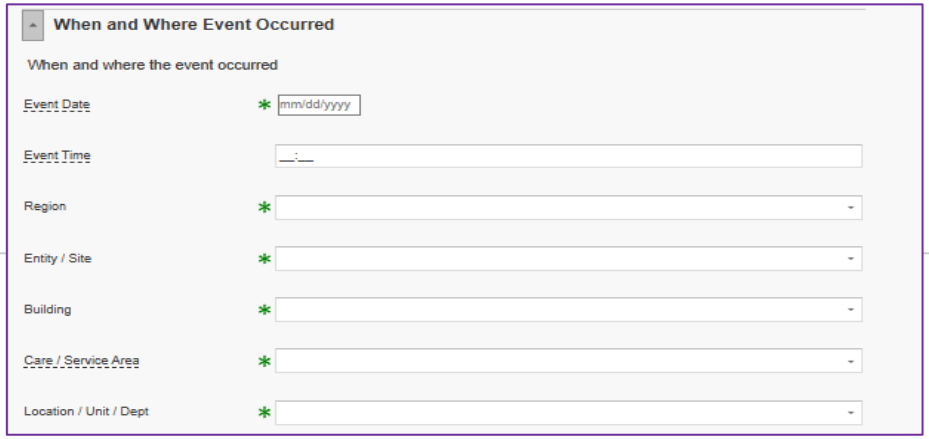
Type Of Incident	Patient Handling Incident	Was lift equipment used?	No
Incident Location	Outside of Edgerton Urgent care	If not used, why not?	Do not have on unit
Activity During Incident	lifting a patient off of the ground	Was a CMET completed?	No
Incident Description	I went outside to assist another co worker with getting a patient off of the ground. Patient was dead weight and couldn't help at all.	What was the patient mobility task?	Assist in/out of vehicle
		How many teammates were assisting with the Patient Mobility Task?	2
Injury Description	I woke up the next morning and didn't have full range of motion while turning my head as well as my body. I struggled sitting up in bed as well as breathing. I've been experiencing pain behind my breast bone in my back.	Patient weight	257lbs
Body Part	Back		
Body Part Position	Left		

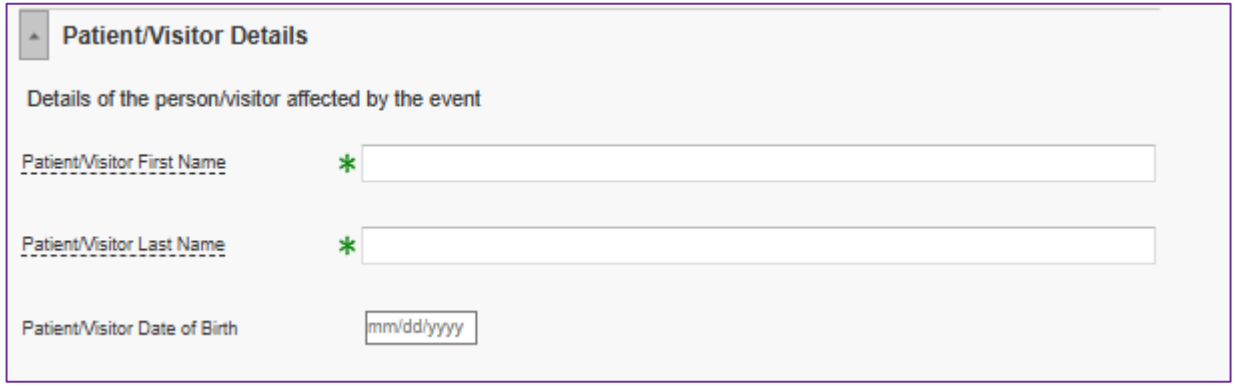
Team Member Health Reporting

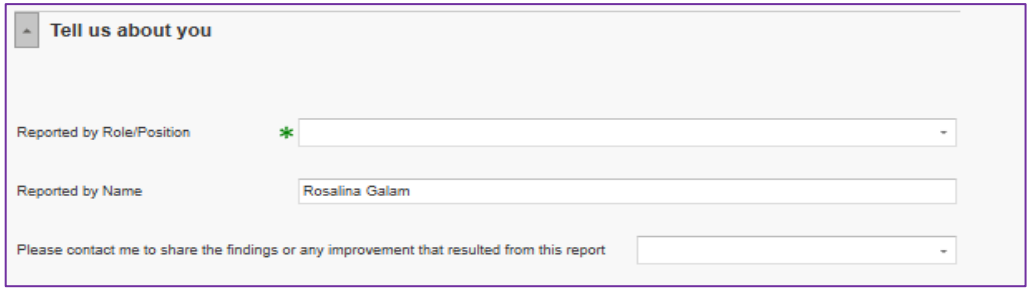
CT Technologist II	Offsite	9600 Rollins Rd. Radiol	Patient Mobilit	transferring pt from wheelchair to MRI bed/table. when turning pt to sit my left hand got caught up between pt ar
Clinical Imaging As	Offsite	7900 rollins road 1st floo	Patient Mobilit	i was transferring the patient from the wheelchair to the table hand got caught under him while putting him on th
Registered Nurse S	Offsite	Transition Center School	Patient Mobilit	Nurse assists Paraprofessionals anywhere from 2-7 times a day with student transfers, repositioning, on/off bus,
Medical Assistant/	Medical Group	2650 Ridge Ave Evanston	Assisted Fall	Patient got up from a chair in the waiting area, walked from the opposite side of the floor to the entrance of the n
CT Technologist II	Offsite	FRONT DESK, FIRST FLOO	Other	PER MANAGEMENT IN THE MORNING WHEN WE COME IN, WE ARE SUPPOSE TO GO AND HELP THE FRONT DESK
Mammography Tec	Offsite	Edward Outpatient Imag	Static positioni	While positioning a patient with a large body habitus (67" 245 lbs) for a mammography view, I had to pull her arm
Instructional Desig	Hospital	Glenbrook Hospital	Assisted Fall	I was helping the patient go to the toilet. Patient felt dizzy. I assisted the patient back to bed and she pulled forwa
Physical Therapist	Hospital	Elmhurst Hospital	Fall Recovery	I was escorting a patient from the treatment area back to the front waiting room to sit with his family member. Tl
Phlebotomist I	Medical Group	drawing room	Assisted Fall	pt was actively fainting and my coworkers were assisting pt in reclining chair. pt was seated but the chair needed
Medical Assistant	Medical Group	7900 Rollins Rd Suite 210	Patient Mobilit	Patient was being seated in bariatric wheelchair that does not fit thru exam room doors and chair became wedgec
Medical Assistant	Medical Group	21481 N Rand Rd, Kildee	Push/Pull (Equi	I would like to report an incident that occurred yesterday while assisting a patient in a wheelchair. The patient we
Mammography Tec	Offsite	Yorkville xray room	Patient Mobilit	My patient is recovering from a T12 fracture and is weak. The patient's niece was in the room with me when we v

Reporting a Fall for a Patient or Visitor









Dedicated SPHM Coordinator or SPHM Program Manger

The American Nurse Journal (ANJ)

https://www.myamericannurse.com/who-handles-the-handling/

Having protected time to oversee the SPHM Program is essential!

- Association of Safe Patient Handling Professionals (ASPHP) Membership
- Certified Safe Patient Handling Professional Certification
- Budgeted Role
- Protected Time
- Program Implementation Through Sustainment

Poll Question

Does your organization have an individual who is only dedicated to the SPHM program?

- Yes
- No
- I Don't Know

Fall and Mobility Champions Roles and Responsibilities

Using Evidenced Based Best Practices Provides:

- Leadership / Influencer /Clinical Support
- Education & Training
- Rounding (ensures access to slings, equipment and tools)
- Data Review (caregiver injury and patient injury)
- Post Injury Re-education
- Ensures Policy is followed

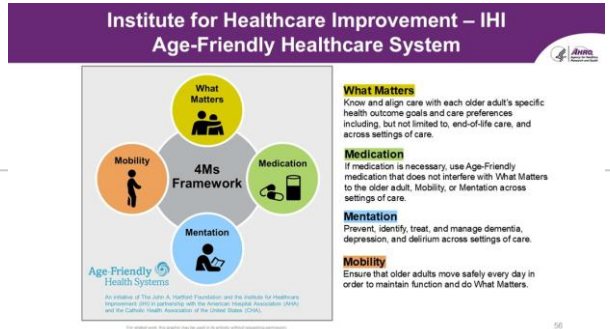
Experience -1 year of clinical experience

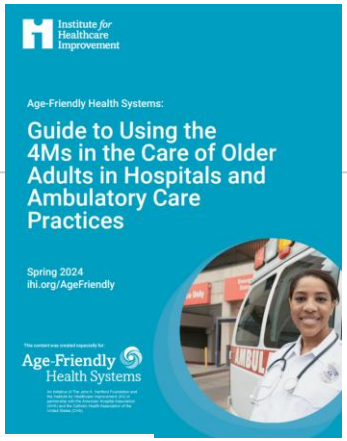
Motivated

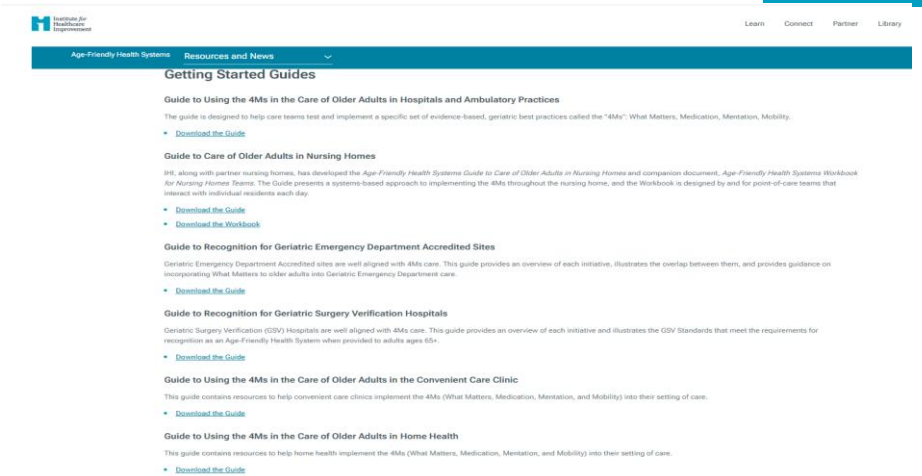
Career laddering opportunity

Ambulatory 4 M's Framework

	Assess	Act On
	Know about the 4Ms for each older adult	Incorporate the 4Ms into care delivery and document in the care plan
Hospital	**Key Actions**	
	• Ask the older adult What Matters, including their health outcome goals and care preferences • Document What Matters • Document the older adult's preferred support person or caregiver • Review medications and document high-risk medication use • Screen for delirium at least every 12 hours and upon any change in function or behavior • Screen for mobility limitations	• Align the care plan with What Matters • Deprescribe, adjust doses, and avoid high-risk medications • Ensure sufficient oral hydration • Orient to time, place, and situation (or validation and orienting cues with dementia) • Ensure that older adults have their personal adaptive equipment and hearing and vision devices • Prevent sleep interruptions; use nonpharmacological interventions to support sleep • Ensure early, frequent, and safe mobility
Ambulatory	**Key Actions (to occur at least annually or after change in condition):**	
	• Ask the older adult What Matters • Document What Matters • Document the older adult's preferred support person or caregiver • Review medications and document high-risk medication use • Screen for dementia/cognitive impairment. (Consider using a staging tool for older adults who have been diagnosed with dementia.) • Screen for depression • Screen for mobility limitations	• Align and provide care according to What Matters • Deprescribe, adjust doses, and avoid high-risk medications • If screen is positive for cognitive impairment, refer for further evaluation and manage manifestations of cognitive impairment • If depression screen is positive, identify and manage factors contributing to depression and initiate, or refer out for, treatment • Ensure safe mobility, including safe home environment; identify and set a daily mobility goal







https://241684.fs1.hubspotusercontent-na1.net/hubfs/241684/AgeFriendlyHealthSystems_GuidetoUsing4MsCare_FINAL_July2020.pdf
https://forms.ihi.org/hubfs/Ambulatory%204Ms%20Forms.pdf

Poll Question

Are your clinic staff members allowed to assist with car transfers?

A. Yes

B. No

C. This is currently under review

Car Assist

How many of you are allowed to assist vs not allowed to assist with car transfers?

- Who is allowed to assist in your facility?
- What is your process around this?



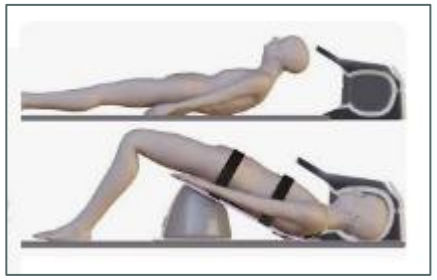




Imaging Services



- Mammography
- Ultrasound – Sonography
- CT/MRI
- Time considerations
- Space for transfers
- Equipment availability













Radiation Oncology

- Frailty of patients – changes over their treatment
- Appointment time allotments
- Equipment considerations



Lab

- Toileting
- Falls
- Mobility Status
- Environmental concerns
- Access / training for SPHM equipment
- Volume of patients



Long Term Care

- Equipment (access, condition of equipment, funding)
- Staffing (turn over)
- Who owns this? Education handled?
- Culture of Safety
- Resident fear or acceptance of equipment



Home Health

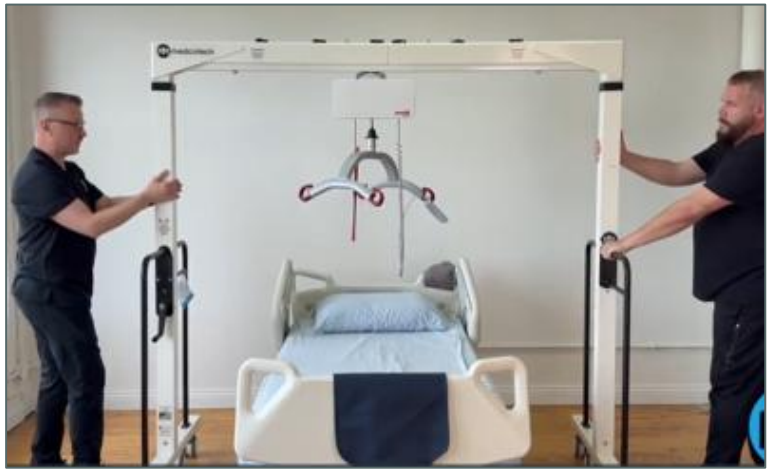
- Insurance coverage for SPHM equipment
- Patient acceptance of equipment in home
- Theft
- Falls
- Family dynamics
- Condition of home
- Staffing alone, public transportation used by caregivers
- Training of family and caregivers
- Maintenance of equipment in the home
- Some equipment purchased through re-sale



Hospice

- Home
- Dedicated unit at hospital
- Free standing location
- Respite care
- Dedicated vs portable lifts
- Fall recovery resources
- Design & Installation Challenges





Equipment Variations

- Sling management – reusable wipeable vs disposable
- Wipeable gait belts
- Slide sheets
- Multi-functional equipment (i.e., patients of size, footprint, and storage)
- Seated transportation options other than standard wheelchairs
- Use of lift utilization software is available

Non-powered sit to stand



Powered sit to stand



Ceiling Lift/ Portable Lift





Floor Recovery



Key SPHM program components that can set a program up for success

- Culture of Safety
- Policy and Procedures
- Mobility Assessment
- Superuser/Champion Role
- Budget
- Leadership Support
- SPHM Technology
- Data Trends (patient and workforce)
- Falls Committee
- Patient and Family Involvement
- Accountability

Culture Change Is Slow — Structure Makes It Stick



Dedicate safety science expertise



Secure visible leadership support



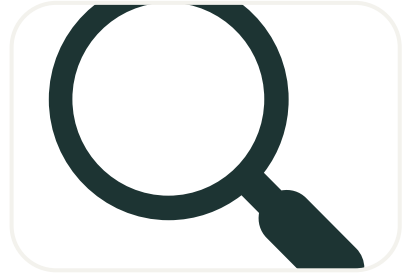
Tailor education by role



Monitor compliance



Provide ongoing support



Be visible and present

Questions?

- Tricia Jaworski: patricia.jaworski@advocatehealth.org
- Rosalina Galam: Rosalina.galam@nm.org
- Stephanie Wilson: stephanie.wilson@endeavorhealth.org

Thank you!

Resources

VA:

- https://www.publichealth.va.gov/employeehealth/patient-handling/
- https://www.publichealth.va.gov/docs/employeehealth/SPHM-Solutions-Everywhere-for-Everyone.pdf
- https://mobile.va.gov/sites/default/files/SPH_PF_Bariatric_GB.pdf

CDC:

- https://www.cdc.gov/niosh/healthcare/prevention/sphm.html

OSHA:

- https://www.osha.gov/healthcare/safe-patient-handling

References

- Kielich, R., Jaworski, T., Boynton, T.& Hopewell, N. Who Handles the Handling? The need for a fulltime dedicated Safe Patient Handling and Mobility Coordinator. American Nurse Journal June 2025.
- An evaluation on the effects of safe person handling program implementation at long term care facilities for persons with complex intellectual, developmental, and medical conditions Daniel Ryan MS, MEd, Conor Anderson BEng, Ann Marie Connolly MA, OTR/L, Lindsey Veety PT, DPT, ATP/SMS, Tania Villavicencio MAS, Lindsey Parks, Hurtado, David A., et al.
- "Use of Champions Identified by Social Network Analysis to Reduce Health Care Worker Patient-Assist Injuries." Joint Commission Journal on Quality and Patient Safety, vol. 46, no. 11, 2020, pp. 608–616, https://doi.org/10.1016/j.jcjq.2020.08.003.
- Boynton, Teresa. "Coding, Tracking and Trending Injury Data to Improve Practice and Safety for Caregivers and Their Patients 1145."
- Archives of Physical Medicine and Rehabilitation, vol. 106, no. 4, 2025, pp. e20–e20, https://doi.org/10.1016/j.apmr.2025.01.050. Speth, Jennifer. "Guidelines in Practice: Safe Patient Handling and Movement." AORN Journal, vol. 120, no. 2, 2024, pp. 82–89, https://doi.org/10.1002/aorn.14191.
- Wiggermann, Neal, et al. "Individual and organizational factors associated with injury history and patient handling behaviors: Results from a nationwide survey of healthcare workers." Applied Ergonomics, vol. 118, 2024, p. 104251, https://doi.org/10.1016/j.apergo.2024.104251.
- Kumble, Sowmya, et al. "Development of a New Tool to Combine the Promotion of Patient Mobility With Safe Patient Handling Equipment: The Johns Hopkins Safe Patient Handling Mobility (JH-SPHM) Guide."
- Workplace Health & Safety, vol. 72, no. 11, 2024, pp. 503–513, https://doi.org/10.1177/21650799241268745. Evans, Kimeran W., et al.
- Work-related injury or work-related pain? A qualitative investigation of work-related pain and injury management among rehabilitation professionals." Work (Reading, Mass.), vol. 78, no. 1, 2024, pp. 99–109, https://doi.org/10.3233/WOR-230453.
- Simulation to Teach Safe Patient Handling and Mobility for Home Caregivers by Roberts, Toni Home health care management & practice , 11/2020, Volume 32, Issue 4

References

- Elements of a successful safe patient handling and mobility program. Program success hinges on leaders' and nurses' commitment. John Celona, BS, JD, 2014.
- Condie., E. Interface. Safe Patient Handling Lessons Learned from Program Ups & Downs. September 2015.
- The Facility Guidelines Institute. 2010 Health Guidelines Revision Committee Specialty Subcommittee on Patient Movement. Patient handling and movement assessments: A white paper. April 2010. https://www.dli.mn.gov/wsc/PDF/FGI_PHAMAwhitepaper_042710.pdf. Accessed June 24, 2014
- Wiegmann DA, Wood LJ, Cohen TN, Shappell SA. Understanding the "Swiss Cheese Model" and Its Application to Patient Safety. J Patient Saf. 2022 Mar 1;18(2):119-123.
- Gallagher, S. The Challenge of Caring for the Obese Patient. Matrix Medical Communication. Edgemont, PA. 2005. Page 131.
- *Safe Patient Handling and Mobility : Interprofessional National Standards Across the Care Continuum, 2nd Edition*. Vol 2ND EDITION. Nursesbooks; 2021.
- Newkirk, E., & Allison, A. (2024). Decreasing Nurse Injuries: Outcomes of a Safe Patient Handling and Mobility Program. Clinical Nurse Specialist, 38(4), 193-194. DOI: 10.1097/NUR.0000000000000833
- Lee, S. J., Lee, J. H., & Harrison, R. (2022). Safe patient handling legislation and musculoskeletal disorders among California healthcare workers: Analysis of workers' compensation data, 2007–2016. American journal of industrial medicine, 65(7), 589-603. https://doi.org/10.1002/ajim.23366.
- Lee, c, Knight, S, Smith, S, Nagle, D DeVries, L (2018). Safe Patient Handling and Mobility. Development and Implementation of a Large-Scale Education Program. *Critical Care Nursing Quarterly, Volume 41 (Issue 3)*, 253-263,
- Olinksi, C., Norton, C. (2017). Implementation of a Safe Patient Handling Program in a Multihospital Health System From Inception to Sustainability. *Workplace Health & Safety, Nov 2017,* 546-559.

References

- Guideline Quick View: Safe Patient Handling and Movement AORN journal , 06/2024, Volume 119, Issue 6
- Speth, Jennifer. “Guidelines in Practice: Safe Patient Handling and Movement.” AORN Journal, vol. 120, no. 2, 2024, pp. 82–89, https://doi.org/10.1002/aorn.14191.
- Tautonico, M. , Voltmer, C. , Lee, T. , DiCandia, E. & Silberman, N. (2024). A Novel Approach to Safe Patient Handling and Mobility Training in Physical Therapist Education. Journal of Acute Care Physical Therapy, 15 (3), 77-88. doi: 10.1097/JAT.0000000000000238.
- https://www.ihi.org/partner/initiatives/age-friendly-health-systems/resources-and-news
- https://www.ahrq.gov/news/blog/ahrqviews/transforming-healthcare-older-americans.html
- https://www.healthpartners.com/ucm/groups/public/@hp/@public/documents/documents/vgn_pdf_56420.pdf
- https://psnet.ahrq.gov/primer/ambulatory-care-safety
- https://asphp.org/wp-content/uploads/2024/12/Safe_Patient_Handling_and_Mobility_WhitePaper-Final.pdf