A "Real-Life" Guide to Integrate SPHM into Ambulatory Settings

A Panel Discussion

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Objectives

- Recognize how SPHM practices can impact regulatory compliance for equal access to healthcare services for people with mobility disabilities
- Verbalize key design guidelines and assessment for the design of ambulatory environments, to facilitate SPHM practices
- Review two case scenarios illustrating how SPHM practices impacted accessibility, fall prevention, quality care, satisfaction and safety for both patients and healthcare workers
- Understand strategies for making a business case to administration on expanding and sustaining a SPHM program in ambulatory settings

Overview

Why Include SPHM in Ambulatory Settings and in Future Design?

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Patient Safety Center of Inquiry

Healthcare of the Future is Moving to Ambulatory Care Settings

- Ambulatory care accounts for more than one-third of healthcare spending in the United States
- Factors such as new care protocols, reimbursement models and the consumerization of healthcare are driving further growth.
- From 2005 to 2015, hospital inpatient stays declined by 6.6 % while visits to outpatient facilities increased by 14 %

Designing Ambulatory Clinical Space for the Future

- A more thoughtful design of the exam room layout with respect to the placement and physical design of the computing set-up
- May reduce provider cognitive effort and enhance aspects of patient centeredness by viewing the computer and EMR it displays as an important aspect of the provider and patient interaction

Transitioning from Fixed Height to Adjustable Examination Tables

- Reduces risk to the caregiver
- Improves access, safety and comfort for the patient
- Other SPHM considerations now, and for the future

Design & Assessment for Ambulatory Clinics

Incorporating Design Guidelines and Assessments into Facility Design Process to Enhance Safety and Accessibility

Ellen Taylor
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The Center for Health Design

Design and Assessment

- Compliance with FGI Guidelines, PHAMA (2010) and SRA (2014, 2018)
  - Hospital, Outpatient, and Residential (LTC settings)
  - Distinguishing 'Persons of Size' from Bariatric, Obese, etc.
- Cost-Influence: Retrofits are cost prohibitive as compared to proactively thinking through issues first
- More than equipment types
  - What are the interactions and relationships for the model of care?
  - How does facility design best support safe care for patients and staff?
- Guidance through the free, on-line Safety Risk Assessment toolkit
  - Six topic areas, including patient handling & mobility

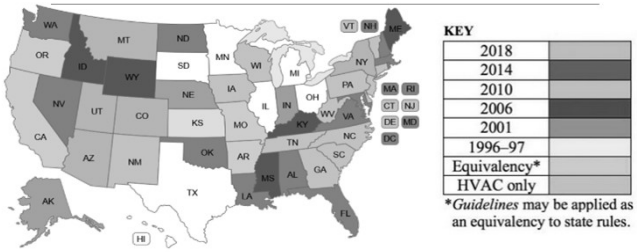
The views and opinions expressed in this presentation are the opinion of the speaker and may not be the official position of FGI or the Health Guidelines Revision Committee.

The Facility Guidelines Institute

Guidelines for Design and Construction

- Hospital
- Outpatient Facilities
- Residential Health Care and Support Facilities

The Facility Guidelines Institute

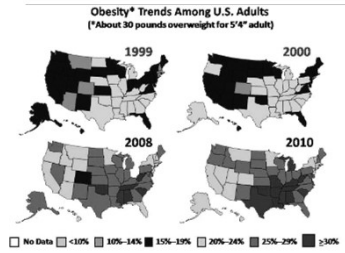


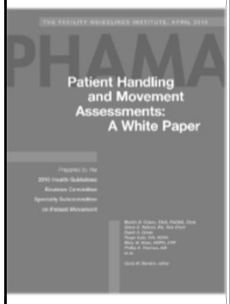
KEY

2018	
2014	
2010	
2006	
2001	
1996–97	
Equivalency*	
HVAC only	

**Guidelines* may be applied as an equivalency to state rules.

2018: From 'Bariatric' to 'Persons of Size'





The FGI Guidelines and Safety

1996: ICRA

2010: PHAMA

2010: PSRA appendix language (largely undefined)

2014: Safety Risk Assessment

Existing risk assessments - Infection Control (ICRA) and Patient Handling and Movement (PHAMA); Psychiatric injury - moved to Part 1; New medication safety, fall prevention, and security risk considerations

1.2-3.1.1 SRA Requirement

All health care facility projects shall be designed and constructed to facilitate the safe delivery of care.

To support this goal, an interdisciplinary team shall develop a safety risk assessment.

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*A1.2-3 Safety Risk Assessment (SRA)

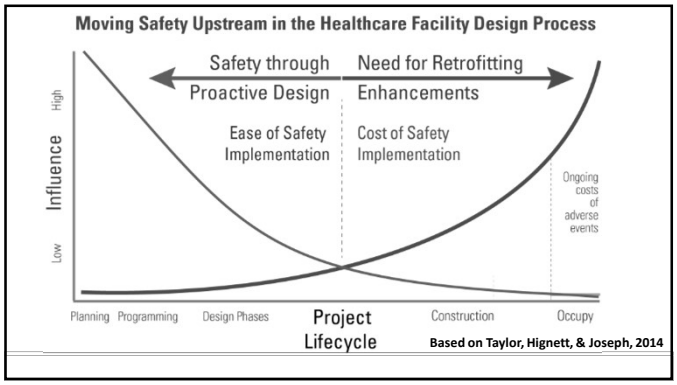
The SRA is intended to **proactively identify hazards and risks** and **mitigate underlying conditions of the environment** that contribute to adverse safety events.

The process includes

- Evaluation of the population at risk, and
- The nature and scope of the project.

Why a Safety Risk Assessment (SRA) for healthcare facility design?

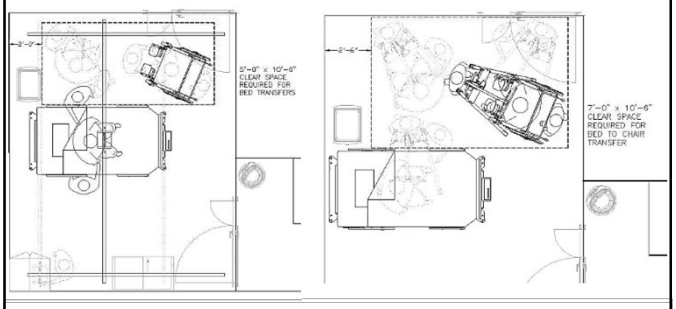
Current Practice Fails to Deliver Safety

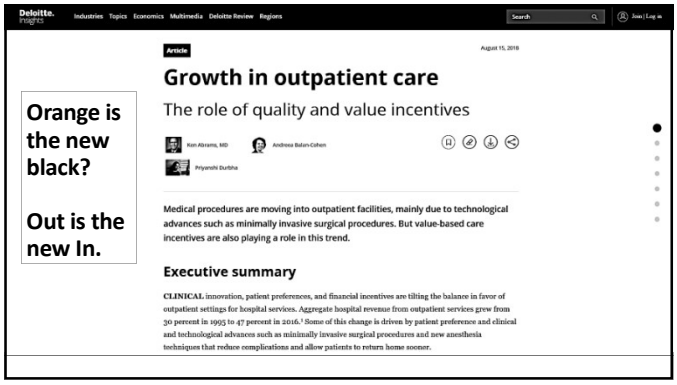


You thinking what I'm thinking?

(U.S. Navy photo by Mass Communication Specialist 2nd Class Todd Frantom/Released)

FGI Bariatric Accommodations Topic Group (2015-16)





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Article August 15, 2018

Growth in outpatient care

The role of quality and value incentives

Ken Abrams, MD Andressa Balan-Cohen Priyanshi Durbha

Medical procedures are moving into outpatient facilities, mainly due to technological advances such as minimally invasive surgical procedures. But value-based care incentives are also playing a role in this trend.

Executive summary

CLINICAL innovation, patient preferences, and financial incentives are tilting the balance in favor of outpatient settings for hospital services. Aggregate hospital revenue from outpatient services grew from 30 percent in 1995 to 47 percent in 2016.[1] Some of this change is driven by patient preference and clinical and technological advances such as minimally invasive surgical procedures and new anesthesia techniques that reduce complications and allow patients to return home sooner.

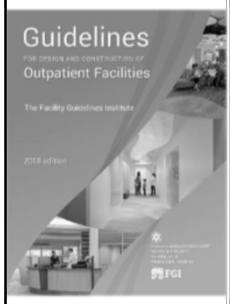
Orange is the new black?

Out is the new In.

Moody's Investor Service Hospital Report

Estimates show:

45% of joint replacement procedures could be outpatient by **2025**.



Design for the highest threat?

Consider the consequence
- Minor: first aid
- Catastrophic/serious: death, permanent injury

Consider the likelihood
- Unlikely: Not expected, but possible
- Almost Certain: Undoubtedly will happen/ frequent event

What is "acceptable" risk to the organization

The Safety Risk Assessment Toolkit

A Proactive Process for Design of Health Care Facilities Mitigates Risk

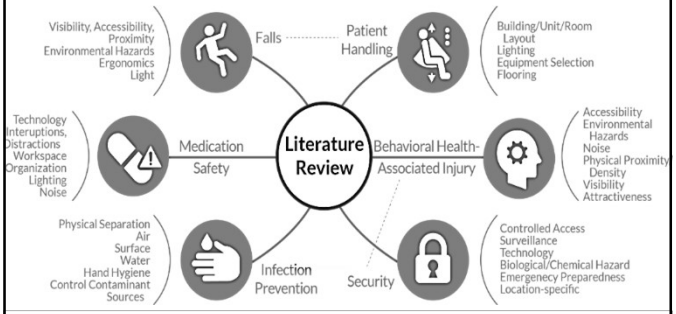
Acknowledgements/Credits

The SRA Toolkit was developed through grants from the Agency for Healthcare Research and Quality (AHRQ).

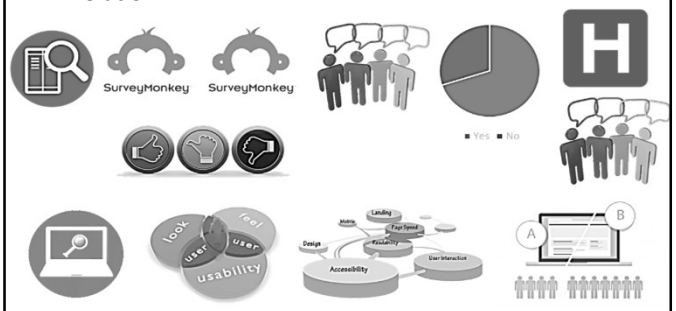
The content is solely the responsibility of the author and does not necessarily represent the official views of AHRQ.

www.healthdesign.org/sra

The Content



An Evolution



The Center for Health Design presents

Safety Risk Assessment Tool

WHAT is the SRA?

The **Safety Risk Assessment (SRA)** Toolkit is:

- a proactive process that can mitigate risk
- a discussion prompt for a multidisciplinary team
- an evidence-based design (EBD) approach to identify solutions.

The SRA targets six areas of safety (infections, falls, medication errors, security, injuries of behavioral health, and patient handling) as required in the FGI Guidelines.

LEARN MORE | LOG IN & GET STARTED

Introducing the Safety Risk Assessment Toolkit

Watch the user guide video

This is a free toolkit made possible with funding by the Agency for Healthcare Research and Quality (AHRQ)*.

WHY USE THE SRA? Safety is a top priority in healthcare. Designing for safety needs a systematic approach.

HOW DO WE USE THIS SRA TOOLKIT?

Create an **ASSESSMENT** for your project → Determine relevant **RISK COMPONENTS** → Track progress towards objectives with the **SAFETY ALIGNMENT TOOL** → Use the **HISTORICAL DATA** page to identify vulnerabilities → Identify solutions with the **DESIGN CONSIDERATIONS**

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My Assessments | User Guide

ACTIVE ASSESSMENTS | ARCHIVED ASSESSMENTS | NEW ASSESSMENT

Assessments will be listed here when you have created a project and work is underway. (If you have completed a project, it can be archived.)

If you have a larger project scope (for example, multiple unit/space types), you may want to create several smaller project assessments to address specific risk and design considerations for each unit type.

Hospital of Good Deeds

PROJECT DESCRIPTION

Project South Tower renovation, ED expansion , this is a aging infrastructure of of 1950 hospital, CMS citations and immediate jeopardy. Would like to keep the park like setting and green space.

Creating a New Assessment Project Readiness

Determining Assessment Scope Project Readiness

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Project Profile

My Assessments | User Guide | Safety Alignment Tool

Hospital of Good Deeds

STATUS: ACTIVE CREATED: 8/8/17 9:15AM

PROJECT READINESS | HISTORICAL DATA | DESIGN CONSIDERATIONS

PROJECT PROFILE | SAFETY ALIGNMENT TOOL | PROJECT SETTINGS | COLLABORATORS

Project Settings

Complete the Project Settings form to begin your Safety Risk Assessment.

PROJECT NAME *

Hospital of Good Deeds

PROJECT DESCRIPTION *

Project South Tower renovation, ED expansion , this is a aging infrastructure of of 1950 hospital, CMS citations and immediate jeopardy. Would like to keep the park like setting and green space.

PROJECT VISION (OPTIONAL)

Guiding principals ... Create a healing environment with respect for the needs of all users:
- Promote a safe environment that is informed by research and evidence, where possible;
- Establish a family friendly environment, meeting the needs of patients and their loved ones;
- Design for flexibility and standardization

RISK COMPONENTS

Consider the location where there is a risk of the hazard components

Per FGI Guidelines, all projects must consider:

☑ INFECTION CONTROL ☑ SECURITY

In addition, does your project include any of the following?:

☑ Areas Where Patient Handling, Transport, Transfer And Movement Occur? [PATIENT HANDLING]

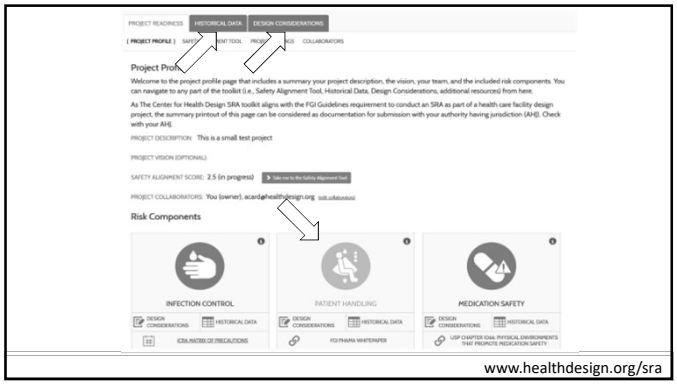
☑ Areas Where Medication Preparation, Processing And Distribution Occur? [MEDICATION SAFETY]

☑ Areas Accessed By Patients, Visitors, Or Staff? [FALLS]

☑ Areas Where Patients With Behavioral Health Issues May Be Present? [BEHAVIORAL HEALTH]

Note: If you do not select a component when you set up a project, you can return to this form at any point by clicking "Project Settings" to edit your risk component selections.

Save



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PROJECT READINESS | HISTORICAL DATA | DESIGN CONSIDERATIONS

INTRODUCTION | ALL CONSIDERATIONS | INFECTION CONTROL | [PATIENT HANDLING] | MEDICATION SAFETY | FALLS | BEHAVIORAL HEALTH | SECURITY | ICRA MATRIX

Design Considerations

For at-risk populations, identify potential harms and areas within the proposed project associated with those potential harms. Review and discuss the following design considerations for each risk component. Consider the at-risk groups, the spaces these groups are in, all of the potential areas of risk, and the potential outcomes.

This process may help identify the likelihood of events specific to your organization. Consider circumstances before, after, and during construction.

Patient Handling

Search & Filter

Search

Search text

Risk Components

- ☐ Infection Control
- ☑ Patient Handling
- ☐ Medication Safety
- ☐ Falls
- ☐ Behavioral Health
- ☐ Security

PATIENT HANDLING - P1

Locate departments and units that patients are frequently transported from/to as close to each other as possible (e.g., ED and imaging if ED imaging is a most frequent patient transport route). Why?

IS THIS CONSIDERATION APPLICABLE TO THIS ASSESSMENT?

Yes | No | Needs Review

BACKGROUND INFO

DESIGN CATEGORY: Building Layout

GENERIC RISK ESTIMATE: Med-Low

LOCATION/UNIT: General Consideration

EVIDENCE SOURCE: Opinion

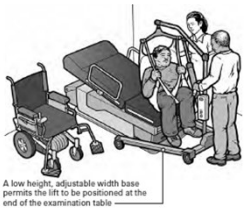
www.ada.gov

U.S. Department of Justice Civil Rights Division, Disability Rights Section | U.S. Department of Health and Human Services Office for Civil Rights

Americans with Disabilities Act

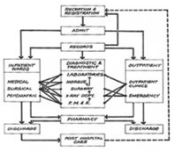
Access To Medical Care For Individuals With Mobility Disabilities

PART 4: ACCESSIBLE MEDICAL EQUIPMENT



ADA is required, and…

Building Layout



- Locate departments and units that patients are frequently transported from/to as close to each other as possible (e.g., ED and imaging if ED-imaging is a frequent patient transport route).
- Minimize the time, physical effort, and risks associated with transporting patients between departments and units through building design (e.g., ample corridor width, minimal turns, wide doorways without thresholds, open layout, elevators with ample space to accommodate bariatric beds etc.)

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Building Layout

- Provide patient elevators to accommodate patient beds/stretchers for the transport of special patients (such as bariatric patients).

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Unit & Room Layout

- Consider flexibility and adaptability of patient room design (e.g., bariatric patient room, universal room, spaces for portable CT scanners) in order to reduce the needs of patient transport.
- Provide adequate clearance (width and ceiling height) in corridors and patient rooms to accommodate use of patient handling / movement assistive equipment.

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Unit & Room Layout

- Design room and bathroom layouts to facilitate safe and effective use of patient handling and movement equipment (e.g., patient rooms as well as diagnostic / operating / holding area / rehabilitation rooms).
- Designate enough conveniently located storage spaces for patient handling equipment and accessory supplies in the rooms where PH will occur (e.g., slings, lateral transfer devices, slide boards).

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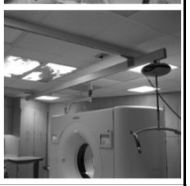
Equipment



Select patient handling and movement devices based on:

- Patient dependency
- Patient weight and size
- Projected patient populations
- Patient handling tasks
- Transfer time
- Risk of injury
- Ease of use
- Space/structural/other requirements

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Other Considerations

Structural Design

- Support the current and anticipated requirements for using ceiling- and/or wall-mounted overhead patient lifts.

Lighting

- Provide enough illumination in ambient and task lighting for patient handling and movement tasks.
- Position lighting fixtures appropriately to accommodate clinical needs, as well as requirements of using patient handling and movement tasks.

(U.S. Navy photo by Mass Communication Specialist 2nd Class Todd Frantom/Released)

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Other Considerations

Interior design/finishes

- Design the ceiling and floor (including ceiling track systems, ceiling height, flooring materials, thresholds, and ramps) to support the use of ceiling-mounted or floor-based patient handling and movement equipment as needed.

Electrical design

- Optimize locations of electrical supply for charging and/or using patient handling equipment so they are easily accessible to the users.

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Case Study Number 1

The Cyclical Impact of a Pre-Op Appointment

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The Cyclical Impact of a Pre-Op Appointment

A wheelchair bound patient needed eye surgery

- Safe transfers between wheelchair & OR table
- Current lift: 500 lb. capacity
- Patient's weight: 552 lbs

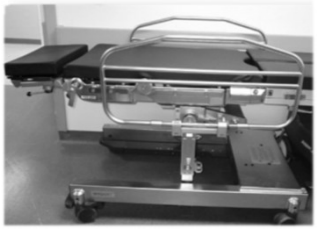
Needs

- A lift with a higher capacity
- Current and accurate weight
- Weight capacity of specialty OR tables

704 lbs. capacity

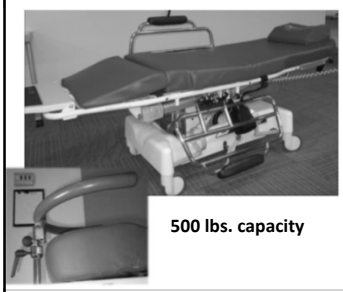
Specialty OR Tables & Stretcher-chair

396 lbs. capacity

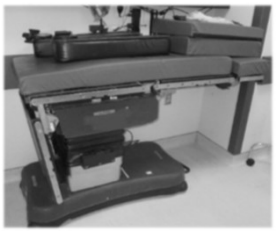


496 lbs. capacity

Specialty OR Tables & Stretcher-chair



500 lbs. capacity



600 lbs. capacity

Other Potential Options

650 lbs. capacity

Removable Wrist Rests

Outcomes

- Team work
- Satisfaction
- Safety
- Quality of care
- SPHM practices as a continuum care package

Case Study Number 2

Accommodating a Patient with Complex Diagnoses

Edie Kubicek
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Gundersen Health

Accommodating a patient with complex diagnoses

- 56 year-old male; on bedrest for 1.5 years; weight = 306 lbs.
- Entered ambulatory clinic on a stretcher and must receive all services on the stretcher
- Medical services needed in Neurology, Neuro-Surgery, I.D., Family Medicine, Behavioral Health, Podiatry, Cardiology and Interventional Radiology
- Equipment used: Hospital bed, walker, wheelchair, gait belt, slider sheet, scooter ramp (donated), and multiple carts

Challenges

- Bedrest since 9-17-2017; ambulance arrival
- Came to large clinic sites via drivable “Stryker” cart
- Staff cart competency
- Ambulance transport team moving him on their cart
- Large room for cart to fit in any clinic
- Five + appointments in one day and laboratory services
- Staff communication – communication - communication

What would your clinic do for Mike?

- Where is your cart in the clinic settings?
- Do you have consistent outpatient program and care coordinators to help?
- Care conference and safety huddle to ID who are the right people?
- Will providers change their care delivery?
- How many times do we ask the same things over and over and over?

Outcomes in 2018

- No bed sores and avoided nursing home, for 1.5 years
- Began therapy in October, 2018; no need for in-home hospital bed
- Transitioning to out-patient therapy; hope for pool therapy by spring 2019
- Came in via wheelchair for first time on October 30, 2018
- Pivoted to walker for the first time to get into car to enter clinic
- Care Coordinator wears "**Green Bay Packer** Hat"

This is why we do it after all…

The Big Rewards!

"Life is finally looking brighter on the other side."

Making the Business Case & Implementing a Program

How do I Begin?

Patti Wawzyniecki
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SPHM Consultant

Implementing a Program

1st	2nd	3rd	4th
Identify high risk clinic	Investigate an incident	Perform assessment	Present recommendations and ROI

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Implementing a Program

Accommodate key organizational differences

- Leadership
- Data recording
- Staffing of clinical functions
- Financial recording and reporting

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Implementing a Program

Adjust program to unique ambulatory characteristics

- Leadership Structure: business managers and physicians have more influence, in general
  - ✓ For example: equipment trials, include in hands-on contact
- Education & Training: include managers & physicians
  - ✓ Scheduling Time: availability during vacation weeks or Grand Rounds
  - ✓ Anticipate more push-back; may be less understanding of risks and costs
- Environment: conducive to sharing of some resources

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Implementing a Program

Adjust program to unique ambulatory characteristics

- Assessment
  - ✓ In-person observations of clinic activities
  - ✓ In-depth interviews with manager and front-line staff
  - ✓ Inventory equipment and evaluate environment
  - ✓ Collect data with a survey – design survey tool to gather information on patient characteristics
    - functional mobility level
    - use of mobility aides
    - was exams or treatment performed in wheelchair or patient moved to table

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Building the Business Case

Return on Investment: (ROI) when benefits are greater than costs, this is a value proposition for leadership = a worthwhile investment

How long will it take to pay off the initial investment?

Calculation:
- Basic: Use commonly available SPHM data
- More Complete: Include quality and satisfaction data

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Building the Business Case

Calculation $\frac{\text{Costs}}{\text{Expected Savings (per year or month)}}$ = Years or months to recoup costs

	Direct Costs	Indirect Costs *Estimated* (Multiplier = 3)	3-Yr. Estimated Total Costs	Average Annual Costs	Average Monthly Cost
Expected Savings	**$255,000**	**$765,000**	**$1,020,000**	**$340,000**	**$28,333**

	3-Year Total
Total Cost of Equipment	**$261,000**

$$\frac{\$261{,}000}{\$28{,}333/\text{month}} = 9.2 \text{ months}$$

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Building the Business Case

Understand unique factors influencing ROI at your facilities
- Cost justification method(s) used at your facility
- Key measurements of success or failure
- Specific forms or investment policy guidelines
- Facility/Organization profit margin
- Expected return on investment (ROI)
- Capital expense policy and planning cycle
- Supervisor signature limit

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Key Take-Aways

- **Ambulatory SPHM programs are the RIGHT thing to do, and it's the LAW**
- **Will ensure that ALL patients receive equal, quality care**
- **Tailor program to ambulatory organizational structure**
- **Follow FGI guidelines**
- **Partner with your design department proactively**

Resources

2018 Edition -Guidelines for design and construction for outpatient facilities; The Facility Guidelines Institute (FGI)

Access to Medical Care for Individuals with Mobility Disabilities www.ada.gov/medcare_ta

American Nurses Association. Safe Patient Handling and Mobility Interprofessional National Standards Across the Care Continuum. Silver Spring, MD: American Nurses Association: 2013.

Celona, John N., (2014) Making the Business Case for a Safe Patient Handling and Mobility Program. American Nurse Today Vol. 9 No. 9 The American Nursing Association

Fragala, G.; Labreche, M.; Wawzyniecki, P. (2017). Benefits Achieved for Patients Through Application of Height-Adjustable Examination Tables. Journal of Patient Experience; Sage Journals: Volume: 4 issue: 3, page(s): 138-143.

Pharr, J. (2014). Accommodations for patients with disabilities in primary care: a mixed methods study of practice administrators. Global Journal of Health Science. 6(1). 23-32.

United States Access Board: Standards for Accessible Medical Diagnostic Equipment; https://www.access-board.gov/guidelines-and-standards/health-care/about-this-rulemaking/final-standards

THANK YOU