

# Moving into the Future: Promoting safe patient handling for worker and patient safety in Massachusetts Hospitals

*“In healthcare, the primary ethical imperative is ‘First, do no harm.’ Although we have traditionally applied this obligation to our patients, this monograph helps to establish it also as our obligation to those with whom we work – and to all within the care setting.”*

The Joint Commission (2012)

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# Why Musculoskeletal Disorders and Patient Handling?

- OHSP working with MA hospitals on sharps injuries
- Hospitals concerned about musculoskeletal disorders (MSDs) due to patient handling
  - Patient population heavier and sicker, increasing risks
- MA SOII\* data: high MSD rates in MA hospitals



2012: Hospital Ergonomics Task Force



OHSP conducted survey of hospitals

\* SOII: Survey of Occupational Injuries and Illnesses



# Hospital Ergonomics Task Force

## Goals:

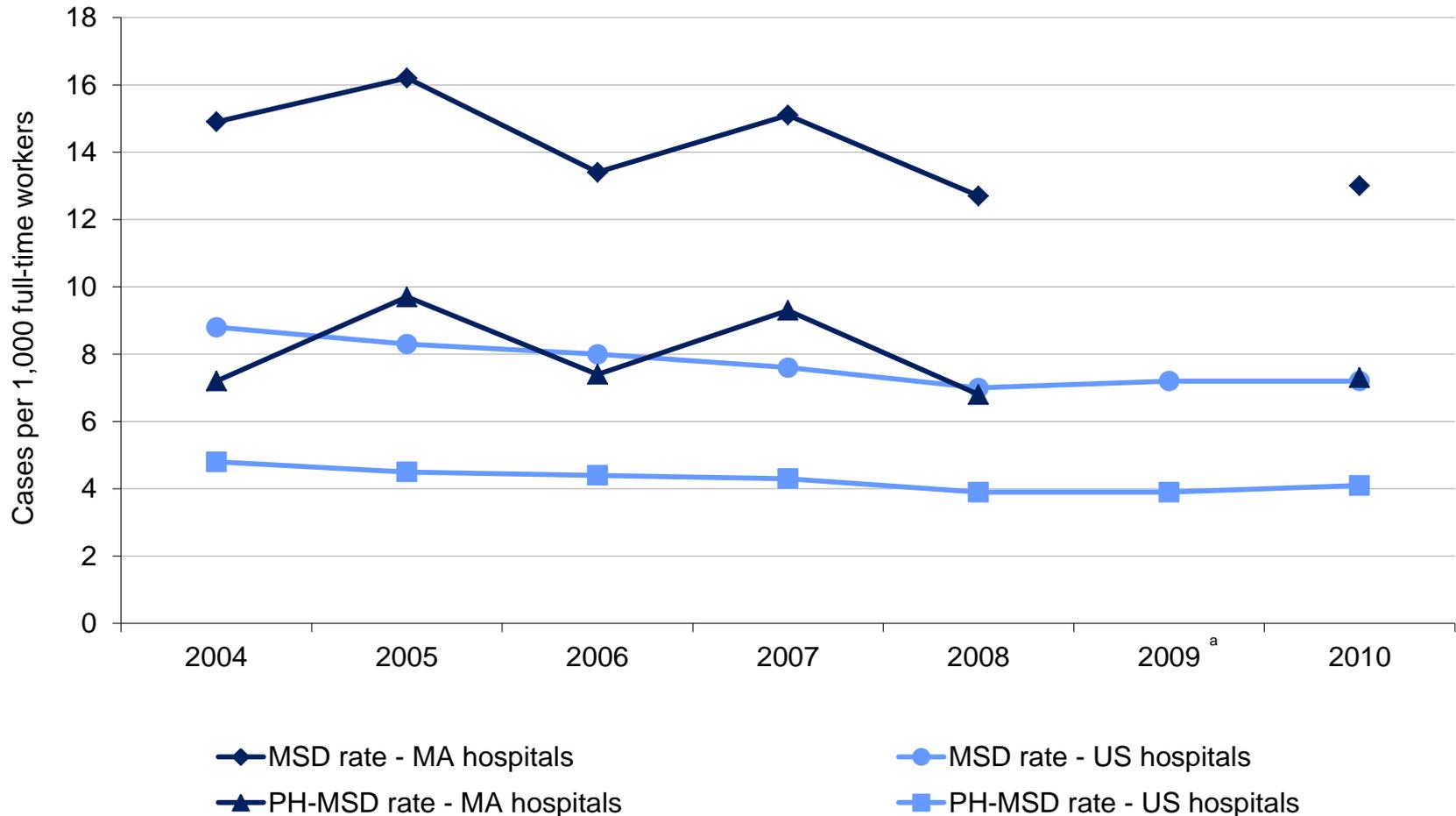
- Reviewed data on MSDs
- Surveyed hospitals regarding SPH activities
- Reviewed literature on efficacy
- Developed recommendations for prevention
  - Hospitals
  - DPH
  - Other stakeholders

## Member organizations:

- DPH
- MNA
- MHA
- Researchers:
  - UMass Lowell
  - Northeastern
- Veterans Administration
- Hospitals
- Bureau of Labor Statistics
- Workers' Comp insurance



**Figure 2-2. Rates of musculoskeletal disorders (MSDs) and patient handling MSDs (PH-MSD) for Massachusetts hospitals compared to rates for US hospitals, cases with days away from work (DAFW), private industry, 2004-2010**

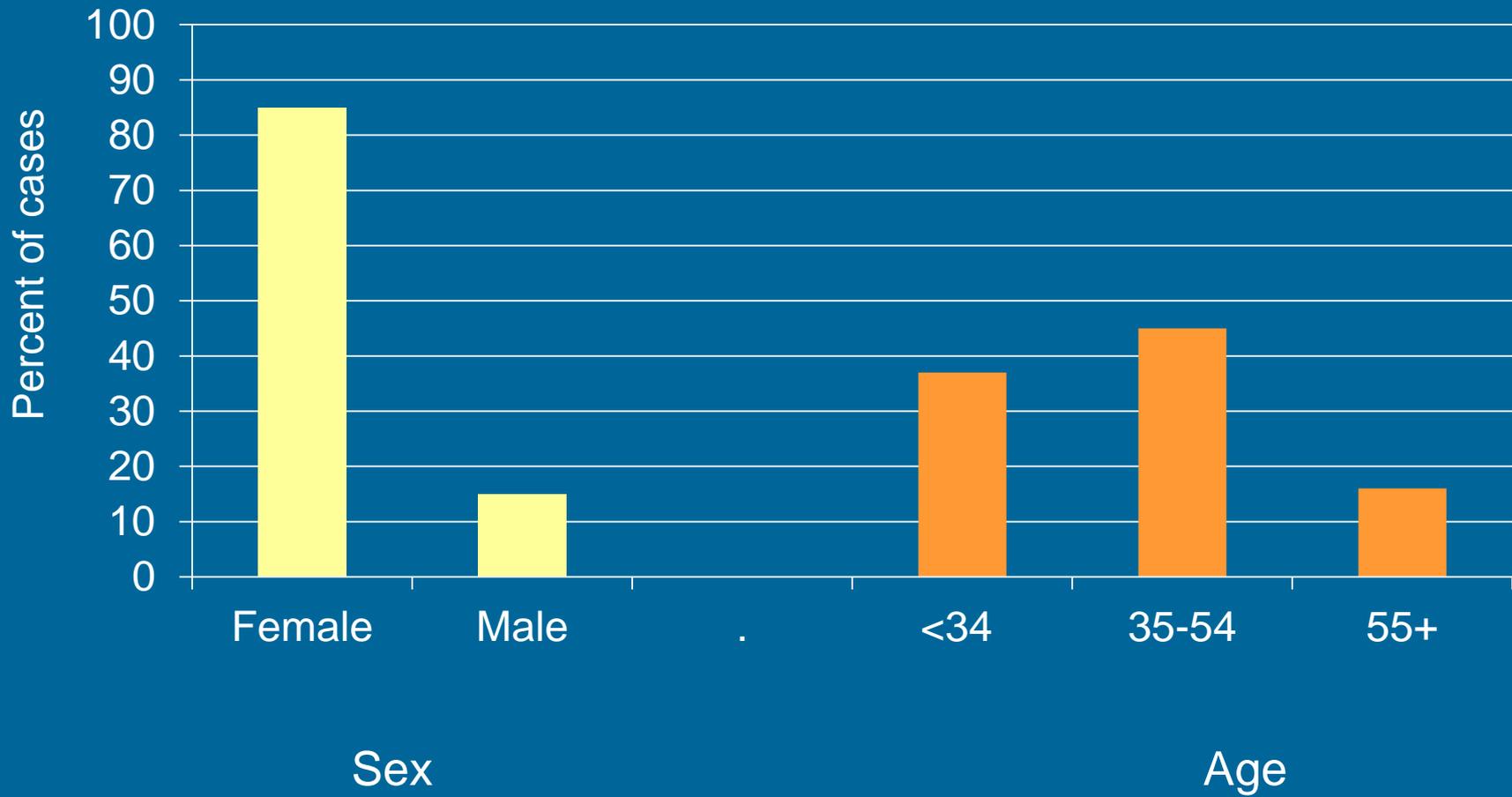


Source: BLS Survey of Occupational Injuries and Illnesses

<sup>a</sup> MA data not available for 2009



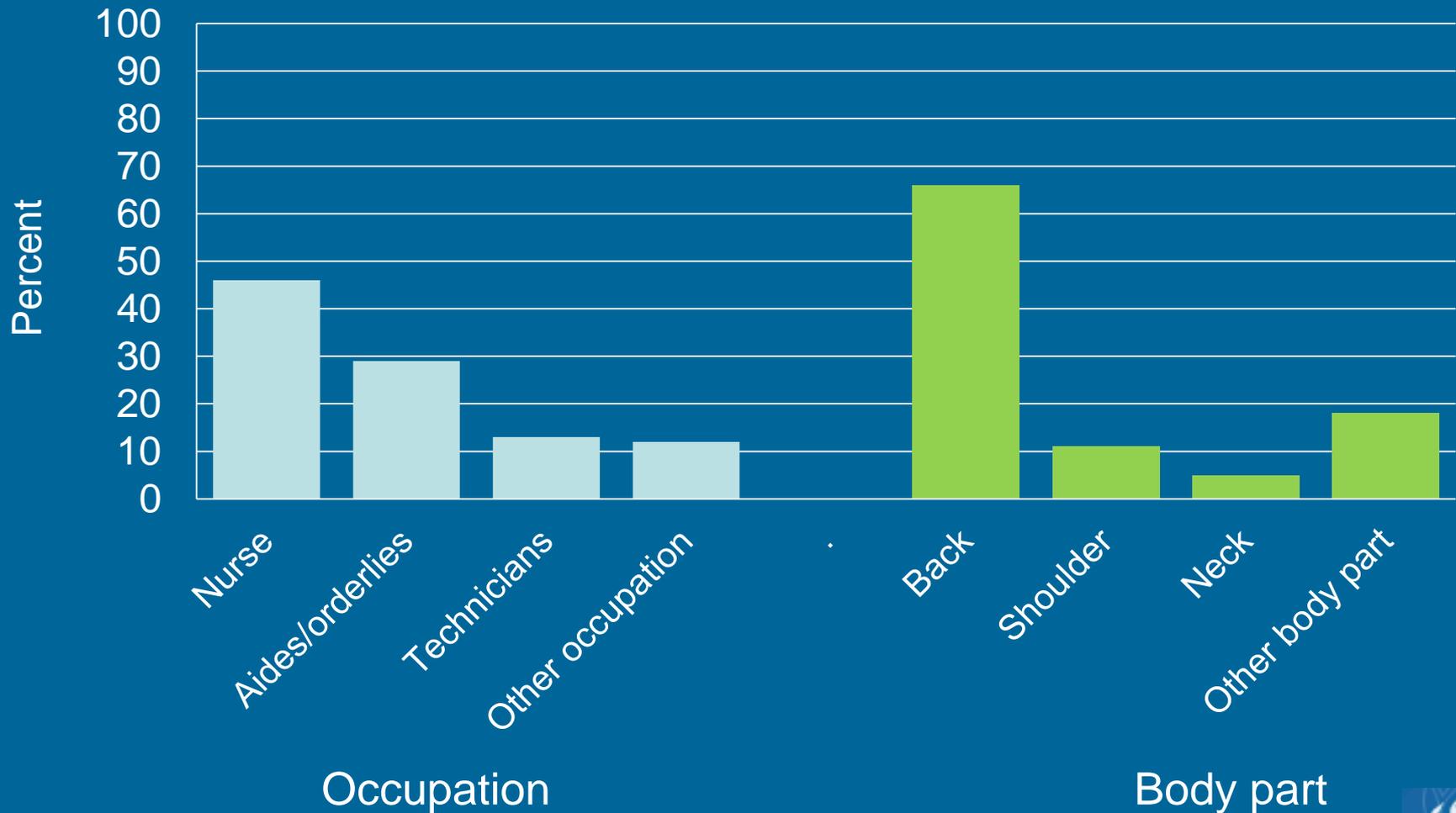
# Distribution of PH-MSD cases by sex and age, MA hospitals, 2010\*



\*SOII estimates for 2010 only



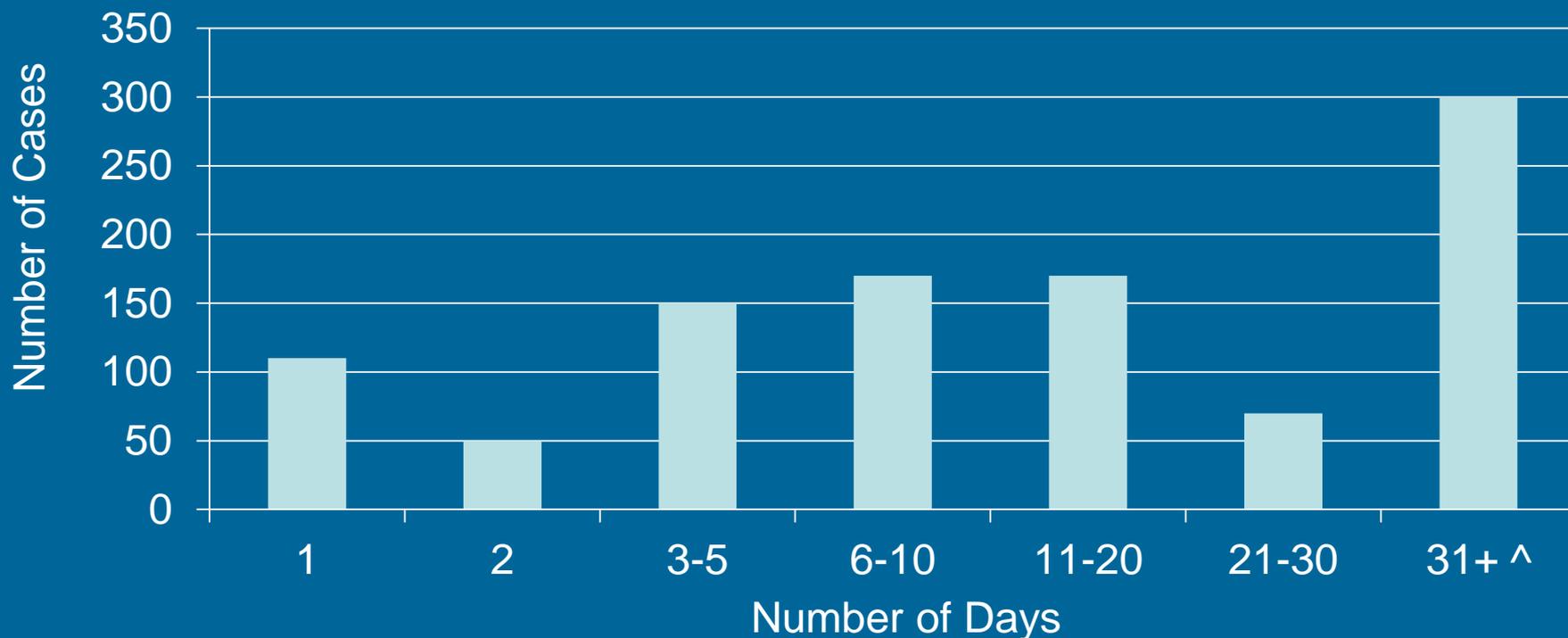
# Distribution of PH-MSD cases by occupation and body part, MA hospitals, 2010\*



\*SOII estimates for 2010 only



## Figure 2-3. Distribution of musculoskeletal disorders associated with patient handling among Massachusetts private sector hospital workers by days away from work category, 2010 (n=1,000)



- About 70% lose 5+ days
- Estimated total days lost: 21,500 (conservative)

Source: BLS Survey of Occupational Injuries and Illnesses

^Median number of lost work days is 75 in this group



Is this similar to the experience in your facility?

What does the data look like in your facility?

Where are patient handling related injuries occurring most?



- Worker & injury characteristics similar for more & less serious injuries (SOII and WC)
- Workers in acute care & larger hospitals  risk

BUT

- Large variation within hospital size categories
  - Policies and practices vary widely
  - Prevention is possible



# Conclusion – the Injury Data Story

Taken together – largely consistent & compelling picture

- PH-MSDs are a significant burden
  - 25%-30% of injuries to hospital workers
  - 1,000 cases per year,
  - 70% cases loose 5+ days
  - > 21,500 lost days
  - Cost per claim is higher than average
- Unknown why MA rate is high, but data underscore the problem



## More of the story

# Survey of Safe Patient Handling Activities

- Sent to all DPH licensed hospitals in April 2012
  - Sent to occupational health staff
  - Generated discussion among departments involved in SPH
  - Established a baseline of activities conducted across hospitals
- 
- Response rate: 90%
  - Respondents reflect distribution of all hospitals by characteristic (e.g., teaching status, size, service type)
  - Mean number of employees: 2,000 (140-20,000)
  - Mean percent of employees involved in direct patient care: 64%



# Aims of the Survey

- Understand current Safe Patient Handling (SPH) policies and practices in Massachusetts hospitals
- Identify program components in place:
  - ✓ SPH policy
  - ✓ SPH committee
  - ✓ Management commitment
  - ✓ Worker involvement
  - ✓ Patient functional assessment
  - ✓ Training
  - ✓ Injury surveillance
  - ✓ Needs assessment
  - ✓ Program evaluation
- Identify barriers to implementing SPH policies
- Provide information to inform Hospital Ergonomics Task Force

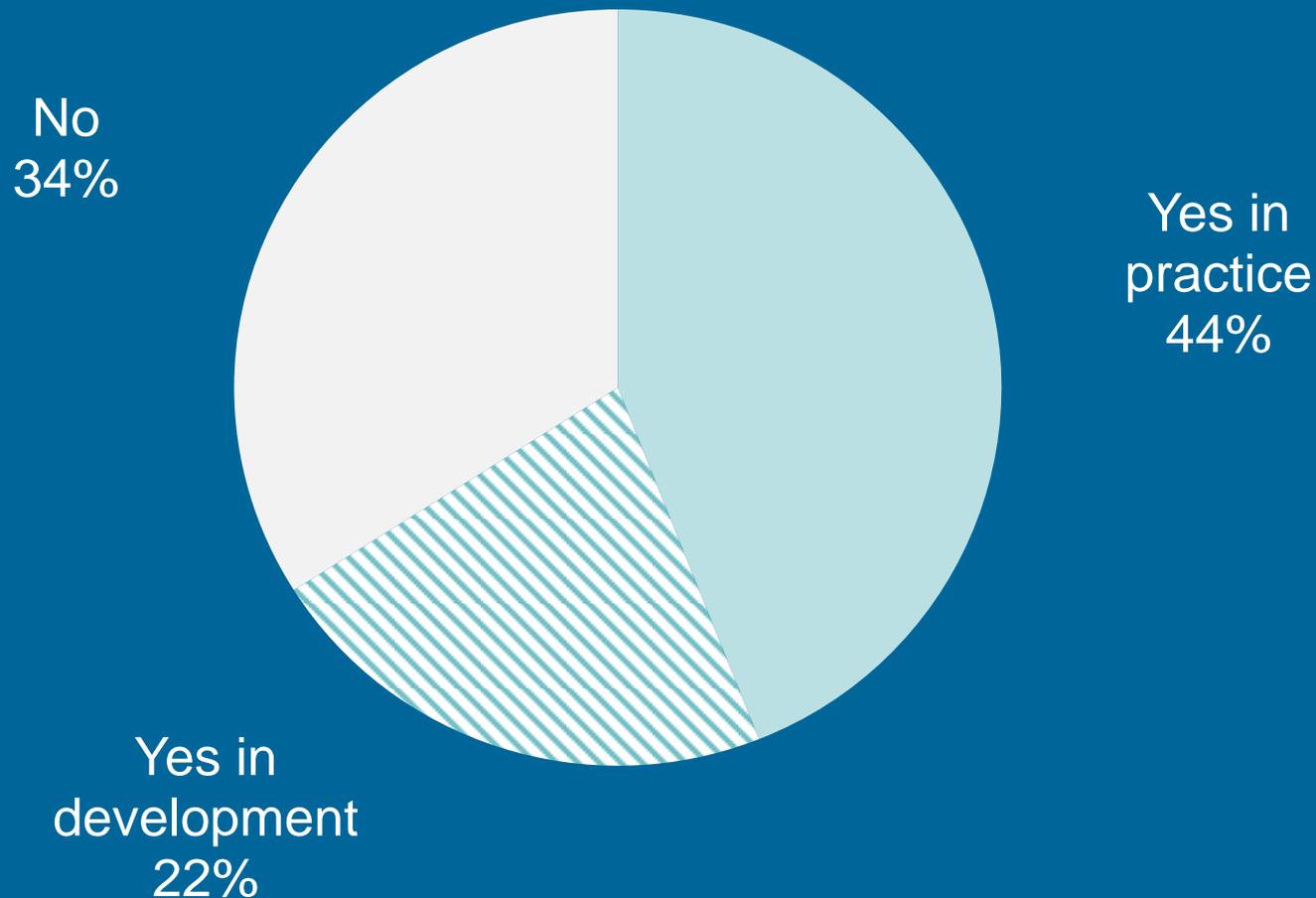


# Does your SPH program have any of the program components listed?

- ✓ SPH policy
- ✓ SPH committee
- ✓ Management commitment
- ✓ Worker involvement
- ✓ Patient functional assessment
- ✓ Training
- ✓ Injury surveillance
- ✓ Needs assessment
- ✓ Program evaluation



# Percentage of hospitals with written SPH policies (n=85)



# Distribution of hospitals by presence of written policies and committees to prevent patient handling injuries (n=85)<sup>1</sup>

Patient handling committee	Written SPH Policy			Total
	No	Yes, in development	Yes, in practice	
Yes	13	13	29	55
No	16	6	8	30
<b>Total</b>	<b>29</b>	<b>19</b>	<b>37</b>	<b>85</b>

<sup>1</sup>Excludes missing observation(s)



# Evaluation of equipment

	n	%
Department involved in the evaluation of patient lifting devices (n=88) <sup>3</sup>		
Front line nursing staff	74	84
Materials Management	59	67
Other direct patient care staff	59	67
Other	48	55

Result indicate there is a lack of equipment in many departments, particularly outpatient areas.



# Additional Findings

- Functional mobility assessments:
  - 94% of hospitals assess inpatients
  - 62% of hospitals assess outpatients
- Training:
  - 98% train direct care staff on mechanical lifts, assistive devices and manual lifting
  - 69% provide training annually
  - 35% provide training on hire and annually
- Patient handling related event assessments:
  - 98% always assess patient incidents
  - 87% always assess worker incidents

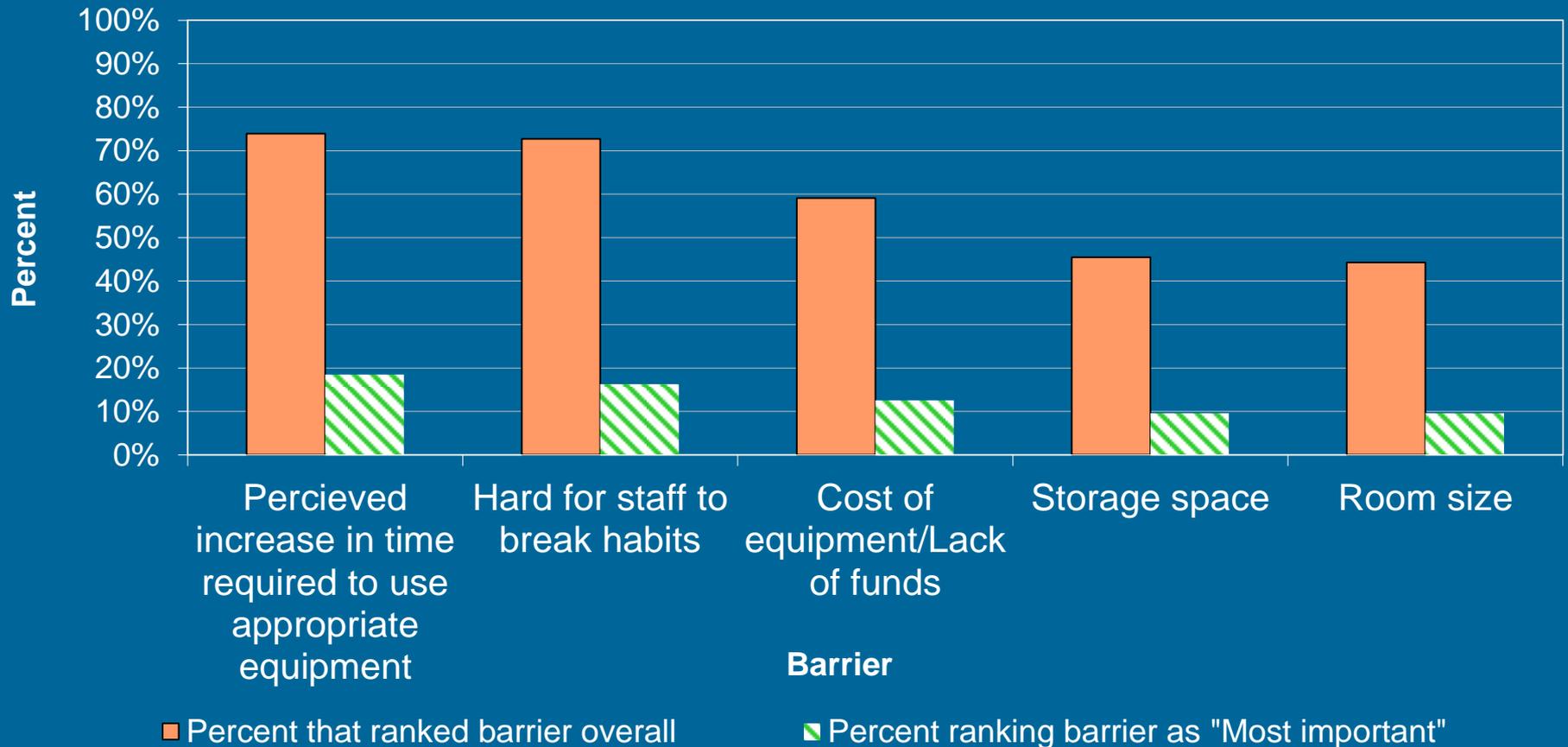


What barriers have you experienced in your facility?

How have you overcome those barriers?



# Top five barriers to addressing SPH in MA hospitals as perceived by respondents (n=88)<sup>1</sup>



<sup>1</sup> Several hospitals tied multiple barriers as "Most important"



# Impacts of SPH Programs with Equipment

- Decreased frequency and severity of work-related injuries and associated costs
- Decreased staff turnover
- Cost of program recovered in < 5 years in many cases
  
- Decreased skin tears and pressure ulcers
- Some studies demonstrate a reduction in patient falls
- Increased mobilization

“few activities in health care link patient and worker safety more directly than lifting, transferring, repositioning, and ambulating patients.”



# *Hospital Ergonomics Task Force Report*

## Moving into the Future: Promoting safe patient handling for worker and patient safety in Massachusetts hospitals

[www.mass.gov/eohhs/docs/dph/occupational-health/  
ergo-sph-hospitals-2014.pdf](http://www.mass.gov/eohhs/docs/dph/occupational-health/ergo-sph-hospitals-2014.pdf)



# Recommendations to Hospitals

- Implement comprehensive and sustainable SPH programs, including:
  - surveillance,
  - methods for staff to communicate concerns, and
  - incorporating physical infrastructure needs of SPH into construction.



# Recommendations to DPH

- Provide guidance to hospitals regarding SPH programs including surveillance systems, and use website to share resources.
- Incorporate the FGI requirements for patient handling and movement assessment into the design review and approval process
- Produce periodic surveillance reports using existing data sources on MSDs associated with patient handling



# Recommendations to Others

- Establish an ongoing coalition of stakeholders to promote SPH awareness.
- Collaborate with other stakeholders to hold informational meetings with hospitals regarding SPH
- Training programs for direct healthcare workers and those in fields related to the design of healthcare facilities should include education on SPH and physical infrastructure needs.



# Next steps:

- Establish ongoing stakeholder group
- Update website with resources
- Update data section of report looking at workers' compensation data, SOII data, and incident data among state workers
- Provide technical assistance to hospitals regarding safe patient handling programs



# Case definition: PH-MSDs

- MSDs: Disorders of muscles, tendons, nerves ligaments, joints, spinal discs caused by: over-exertion, repetitive motion, bending, twisting, climbing
  - Excludes MSDs due to select single traumatic events including slips, trips falls, motor vehicle incidents, assaults.<sup>1</sup>
- Associated with PH tasks: lifting, moving, sliding, transferring or otherwise mobilizing patients<sup>2</sup>
  - Excludes MSDs associated with restraining patients

<sup>1</sup>Bureau of Labor Statistics definition. <sup>2</sup> Facilities Guidelines Institute definition

