



Safe Patient Handling and Mobility National Program Veterans Health Administration

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Veterans Health Administration

NORA Healthy Work Design in HCSA Sector Workshop

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Veterans Health Administration (VHA)

Who Are We?

Where are we

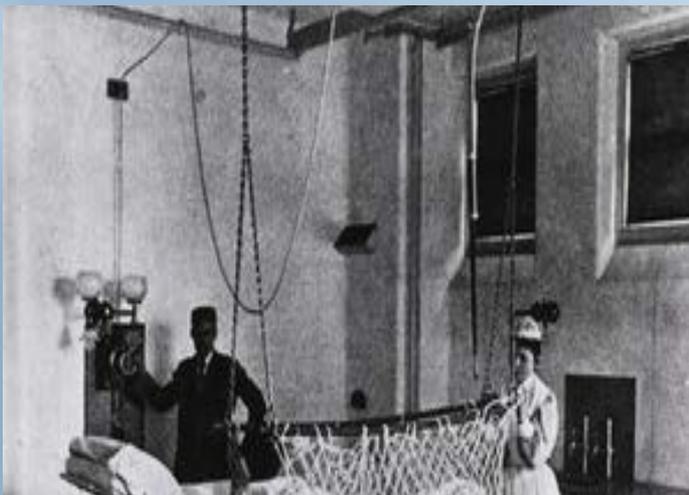
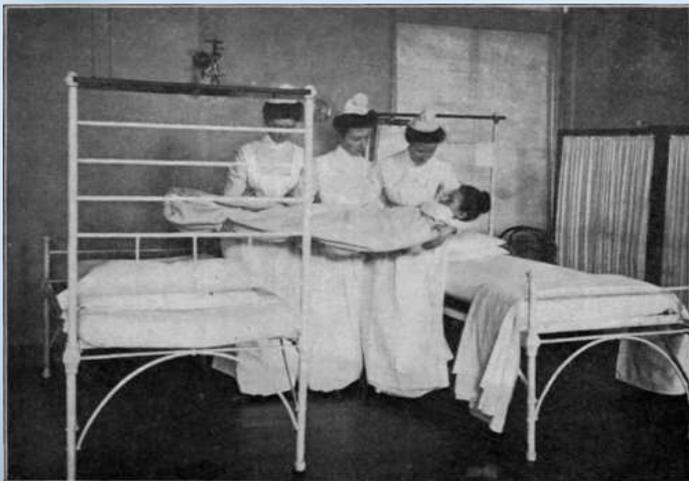
- VHA >9 million vets
- 1,242 health care systems
- 175 Medical Centers
- >99,400 nurses
- 18 regions and integrated network systems
- United States of America

Veterans Health Administration





“the way we were” (around the world)

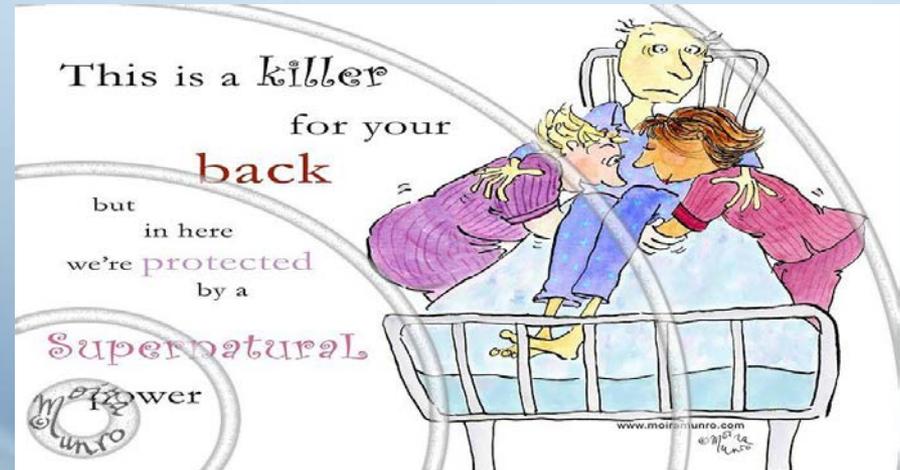




THEN THIS HAPPENED

Veterans Health Administration (VHA) has mandated that each facility develop, institute and maintain a Safe Patient Handling and Movement Program (SPH&M VHA Directive 2010-032).

The essence of this cultural change is that SPH equipment and supplies are considered Personal Protective Equipment (PPE) for staff similarly to gloves, gowns and masks. This is not an optional procedure for patients or caregivers whenever equipment is available





VHA 'Model' SPHM Program

- National SPHM Program Mgr.
- Facility SPHM Coordinator
- Clinical Unit/Area SPHM
- Peer Leader
- SPHM Equipment
- Ergonomic Evaluation
- Patient Assessment/Algorithms
- Training/Education
- Knowledge Transfer Facilitators (Safety Huddles)
- Program Evaluation
- SPHM Design Criteria
- Maintenance/Installation Guidelines
- Collaboration with other facility departments
- Union involvement

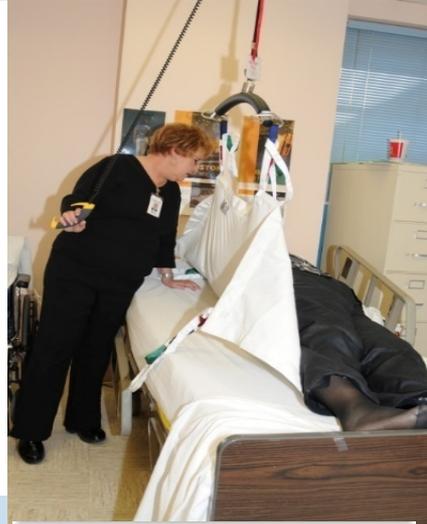




SPHM is the Standard of Care.

- SPHM technology **protects** staff and patients with safety & dignity.
- SPHM technology **supports mobility** & better outcomes.
- Lifts can **prevent patient falls** during transfers or ambulation.
- SPHM technology can allow **access to care** – from therapy & exams to home transfers.

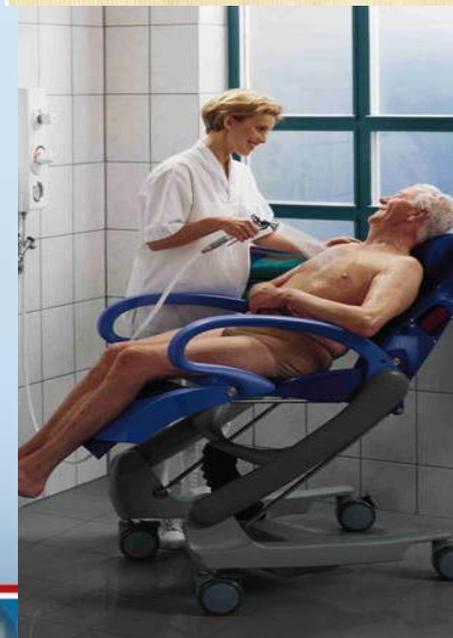






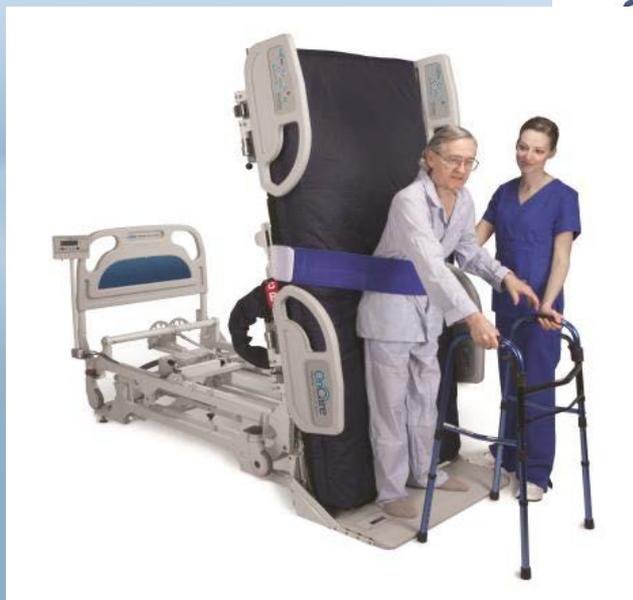
Ergonomic bathroom equipment

- **Powered toilet lift seat**
- **Ergonomic shower chairs**
- **Ergonomic shower trolleys**
- **Bathing/whirlpool lifts**





Specialty beds, exam tables and chairs





TRANSPORT ASSISTIVE DEVICES AND POWER ADD-ONS

- **Motorized Beds/Stretchers**
- **Battery-powered Bed Pushers**
- **Battery-powered Wheelchair Pushers**
- **Stretcher/Chairs**



Motorized Bed



Battery-powered Wheelchair Pushers



Battery-Powered Bed Pusher



Stretcher/Chair



Obesity and Veterans Trends

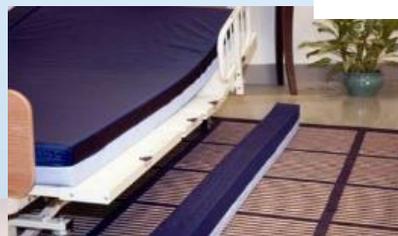
- More than 7 in 10 Veterans in 2015 considered obese
- More than 165,000 Veterans have a BMI of more than 40, over 300lbs - morbid obesity. VHA have current patients up to 900lbs.
- Nearly 66 percent of VA's Spinal Cord Injury (SCI) patients are either overweight or obese.
- Nearly 500,000 Veterans, 75 percent of Iraq and Afghanistan Veterans were either overweight or obese at their first encounter with VA health care
- Veterans with PTSD and depression in particular were at the greatest risk of being either obese without losing weight or obese and continuing to gain weight.
- <http://www.research.va.gov/topics/obesity.cfm>





Care & Mobilization of Persons of Size

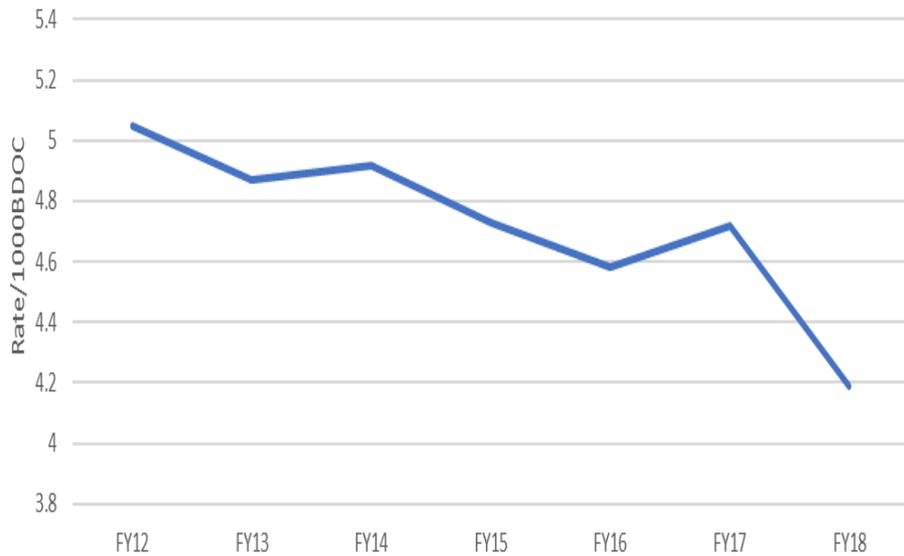
- Overhead Lifts/Slings
- Motorized rolling equipment
- Expanded capacity equipment, beds, exam tables, stretchers, wheelchairs, toilets, commodes, floor lifts
- Room placement



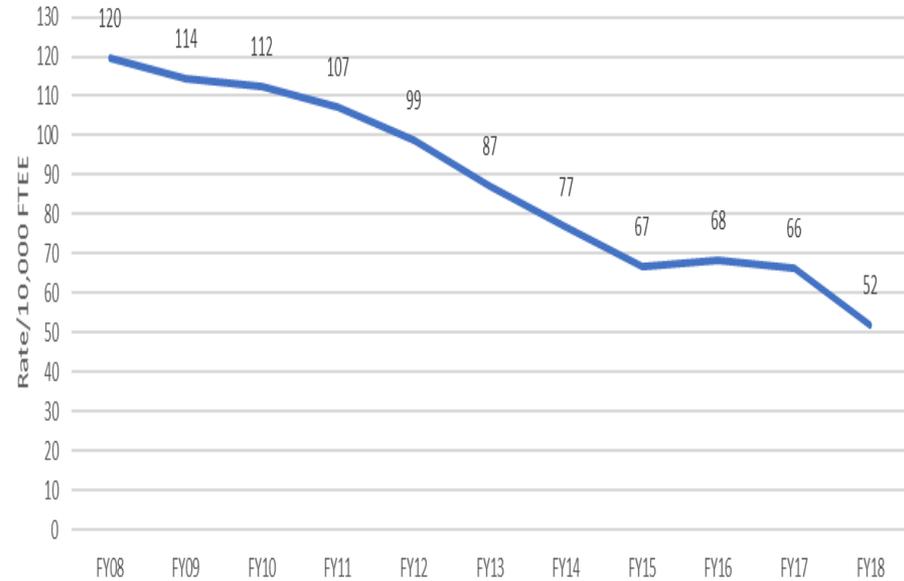


SPHM Outcomes over time-

VHA Patient Fall Rate



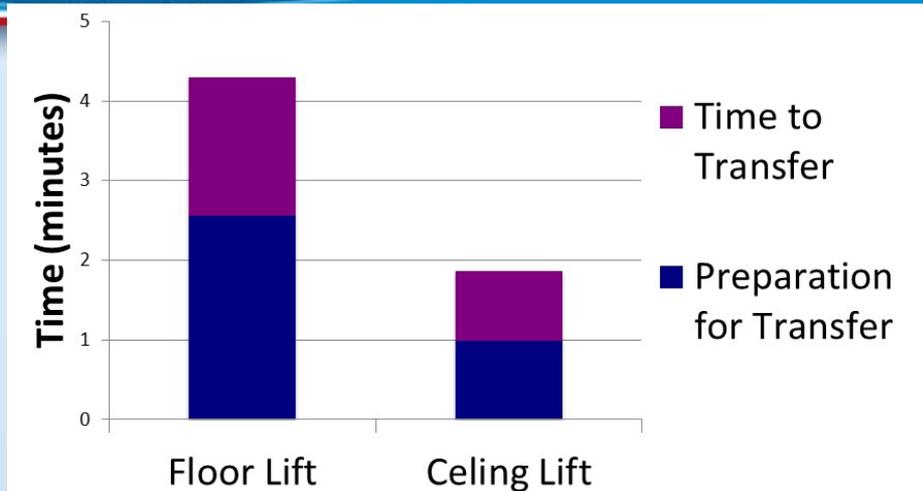
VHA Staff Patient Lifting/Repositioning Injury Rate





Ceiling lifts are more efficient.

- Ceiling lifts are always there.
- Ceiling lifts require less force, space, and time than floor-based lifts.
- Efficiency benefits quality of care.
- If it's easier, staff will use it.



(Stanford Study comparing chair-to-bed transfers using CLs vs Floor-based lifts. Celona, 2014)

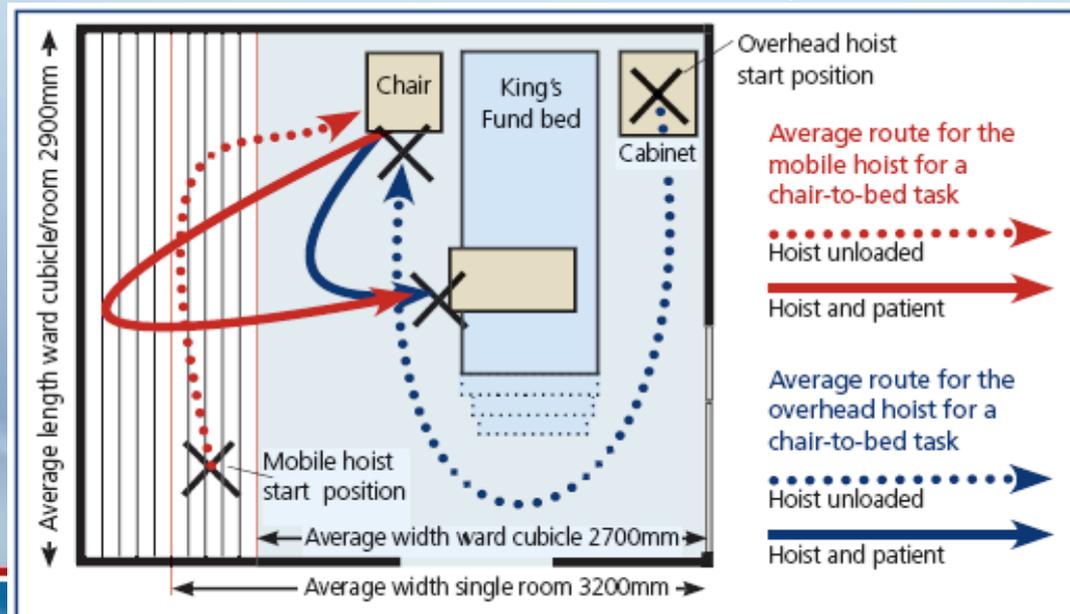
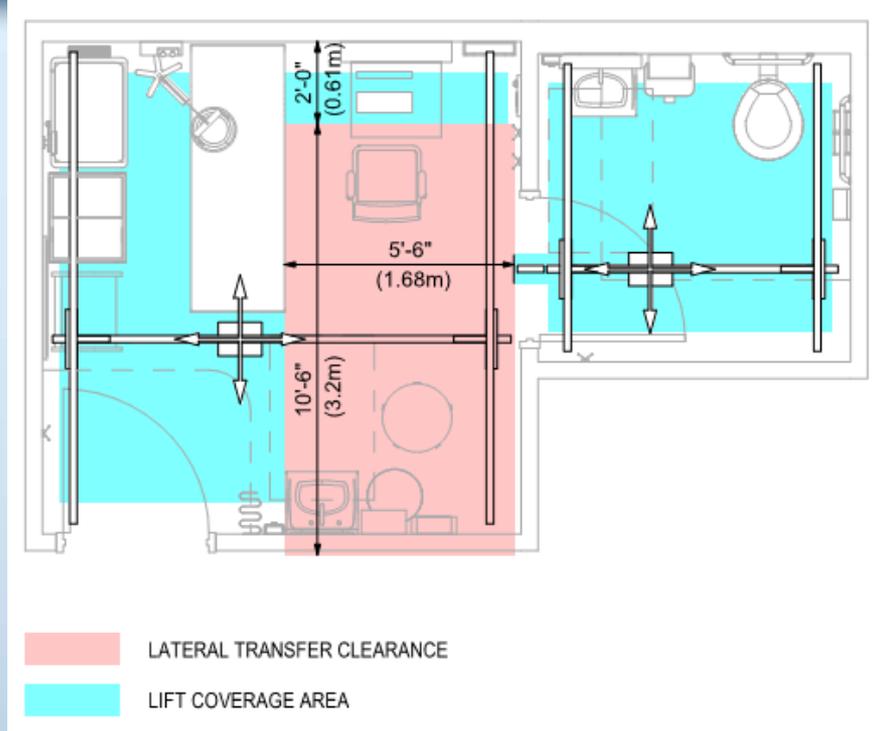
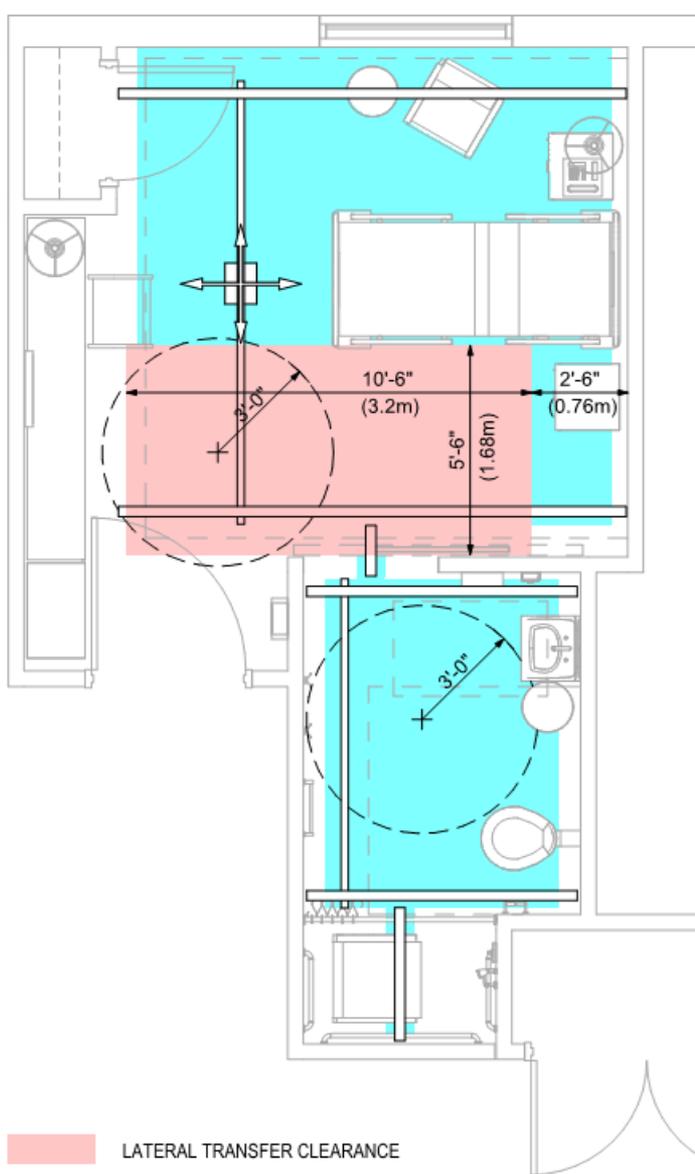


Figure 2. Experimental cubicle layout, showing average mobile and overhead hoist routes



Example Clearance & Coverage



■ LATERAL TRANSFER CLEARANCE
■ LIFT COVERAGE AREA

Left: Patient Bedroom - Small House Model, Bariatric
Above: Exam Room, Multipurpose with Toilet

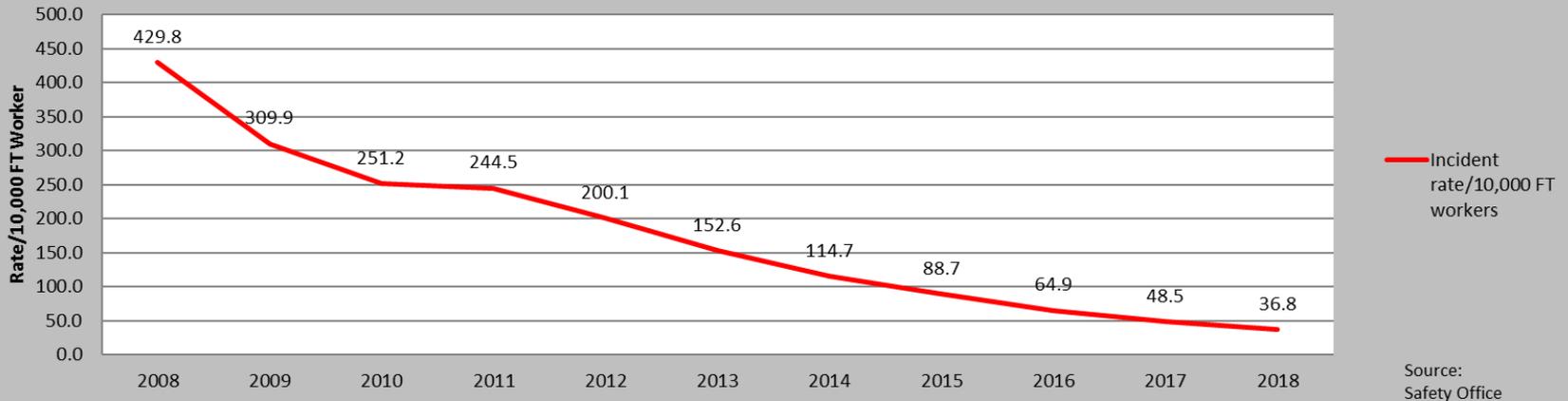
■ LATERAL TRANSFER CLEARANCE
■ LIFT COVERAGE AREA



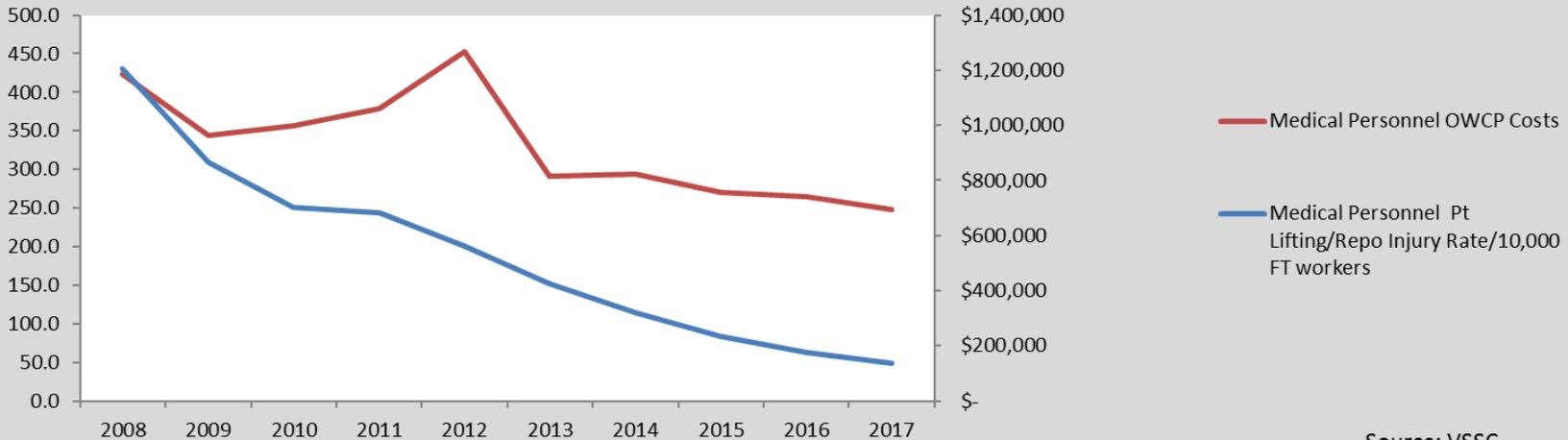


Evaluate success: post early mobility protocol implementation at the Asheville VA

Asheville VA FY Lifting Injury Rate/10,000 FT Worker



Asheville Comparison of Medical Personnel OWCP Costs and Patient Lifting/Repositioning Injury Rates





Safety Culture: Patient & Caregiver





Patient Outcomes in Acute Care with SPHM/Early Mobility Programs

- **27% decrease in LOS (ave from 6 studies)**
- **26% decrease in Vent days (ave 4 studies)***
- **30% decrease in Patient Falls (CSI)****
- **60% decrease in Pressure Injuries (2 studies)**
- **72% decrease in Employee Injuries with SPHM (8 facilities)**
- **20-100% decrease in Pressure Injuries with SPHM programs (3 facilities)**

* Evidence for increased risk with increased vent days

** This reduction included more interventions than JUST EM

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Safe Patient Handling Makes Patient **Early Mobility** Possible:

- **Mobility improves outcomes:**
 - Decrease Pneumonia, UTIs, Delirium
 - Decrease Length of Stay
- **Without Early Mobility, decline in walking ability begins within 2 days of hospitalization and stays persistent**
 - 67% of patients fail to improve by discharge
 - 27% still dependent in walking *3 months* after discharge



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Early Exercise And Progressive Mobility

Why is **MOBILITY** using SPHM Technology the Key to Positive Patient Outcomes?

What difference does 1 day in bed make?

Day 1*

- Contractures begin
- Skeletal muscle atrophy begins
- Pressure areas develop
- Plasma volume begins to decrease
- Orthostatic hypotension begins
- Hypoxemia
- Insulin resistance
- Altered triglyceride levels
- Increased calcium in the urine

Day 2*

- Sarcopenia 1-3% per day (up to 20% per week)
- Dorsal atelectasis begins
- Increase in thoracic fluid volume
- Loss of calcium in urine and risk of renal calculi
- Decrease peristalsis, risk for impaction



Benefits: Patient Safety and Quality of Care

- Early Mobilization (1) (2) (3)
- Early, more effective, ambulation
- Facilitates mobilization within bed
- Decreased incidences of pneumonia, urinary tract infections (UTIs)
- Decreased Length of Stay (LOS)



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2 National Public Radio (2015) People With Brain Injuries Heal Faster If They Get Up And Get Moving. 'Your Health', Gretchen Cuda Kroen, July 6, 2015. Retrieved July 18, 2015 from http://www.npr.org/sections/health-shots/2015/07/06/419519145/people-with-brain-injuries-heal-faster-if-they-get-up-and-get-moving?utm_campaign=storyshare&utm_source=twitter.com&utm_medium=social.

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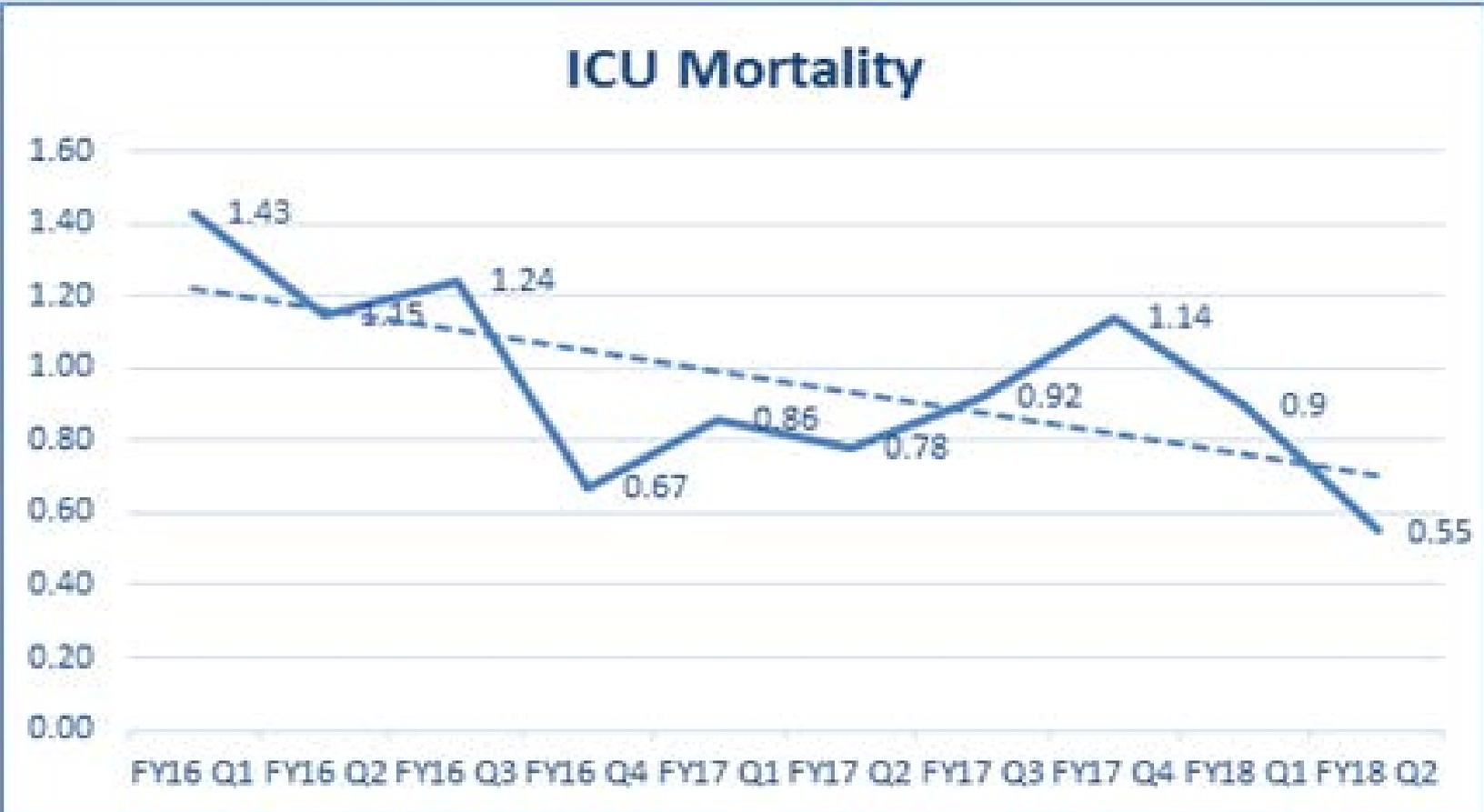
Evaluate success: post early mobility protocol implementation at the Phoenix VHA

Outcome Data	January 2016 to June 2016	January 2017 to June 2017	% Change
ICU Average Length of Stay (ALOS)	3.09	2.71	-12.3%
# of Ventilator Days (Rate Per 1000 BDOC)	352.53	306.47	-13.1%
Functional Status at Discharge – Return to Community-Independent (Rate Per 1000 BDOC)	52.89	68.19	+ 28.9%
Fall Rate (Per 1000 BDOC)	1.78	1.13	-36.5%
ICU Staff Injuries related to Patient Mobilization	0	1	-----

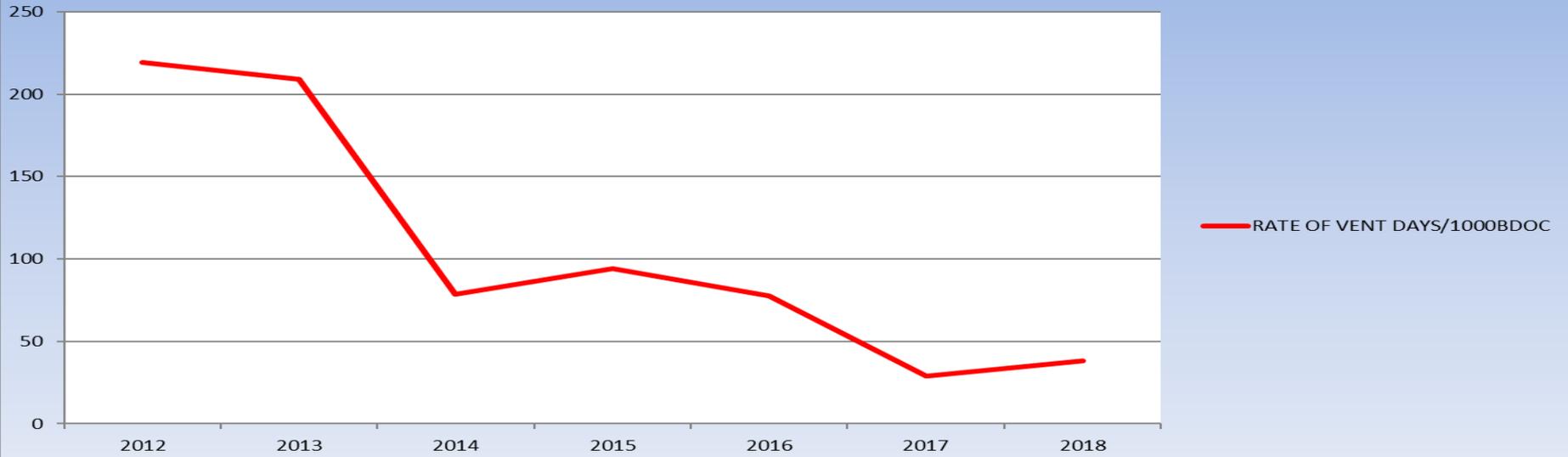




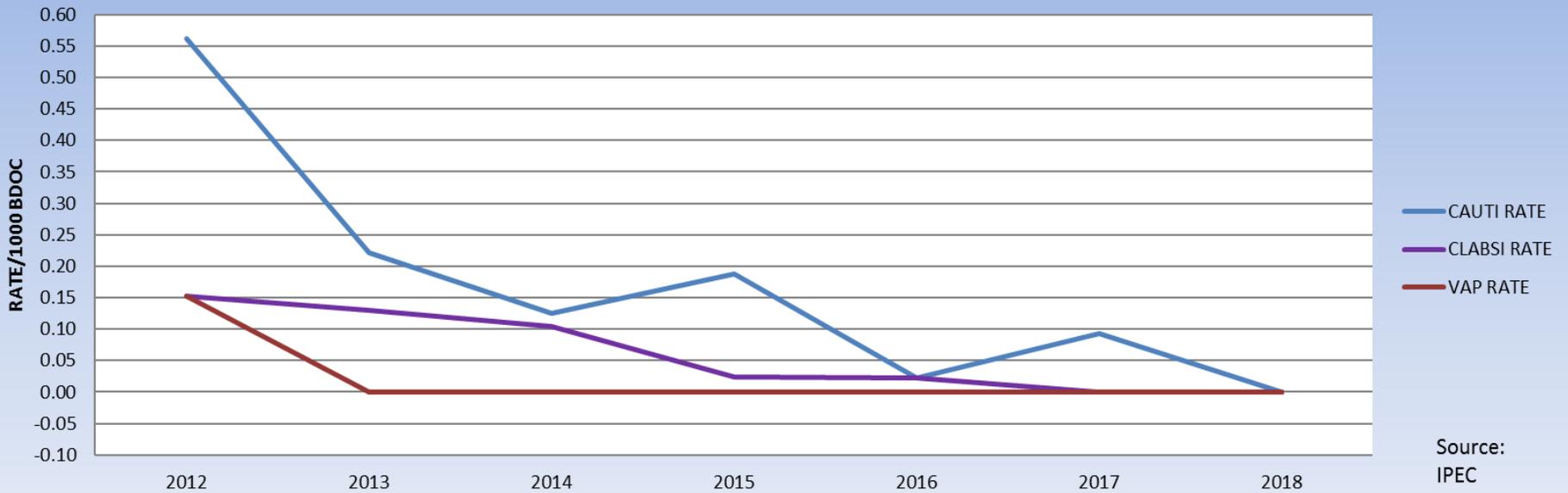
Phoenix decreased mortality



ASHEVILLE VA EARLY MOBILIZATION OUTCOMES - RATE OF VENT DAYS/1000 BDOC



ASHEVILLE VA EARLY MOBILIZATION OUTCOMES - HAI RATES/1000 BDOC



Source:
IPEC



Protocols for implementing: A VHA story of early mobility

- 78 y.o. WW II Veteran
- Admitted with pneumonia
- Intubated and failed extubation X2
- Ambulated for 10 minutes
- Extubated 6 hours later
- D/C to SSR two weeks later
- Home after two weeks in SSR





And sometimes mobility is about honoring a patient's last wish



'A Swimming Pool in the ICU?' - WSJ
Tennessee Valley VA Healthcare System



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Additional Resources

[Injured Nurses by National Public Radio](#)

<http://www.npr.org/series/385540559/injured-nurses>

[SPHM VHA APP](#)

<https://staff-sqa.mobilehealth.va.gov/sph/#/cpaa/single-task>

