

## *Tips for Equipment Installation & Maintenance*

*Tampa, FL  
September 15-18, 2008*

## *Review List of SPH Program Steps*

- Collect Baseline Injury Data
- Identify High-Risk Units
- Identify High-Risk Tasks
- Conduct Team Site-Visit for Ergonomic Assessment each unit
- Risk Analysis
- Formulate Recommendations
- Implementation
- Long-Term Management

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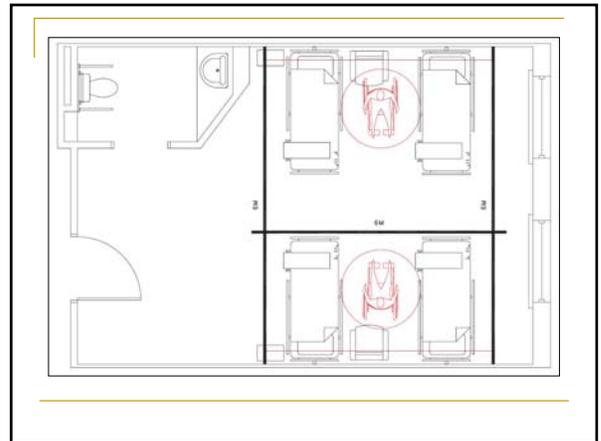
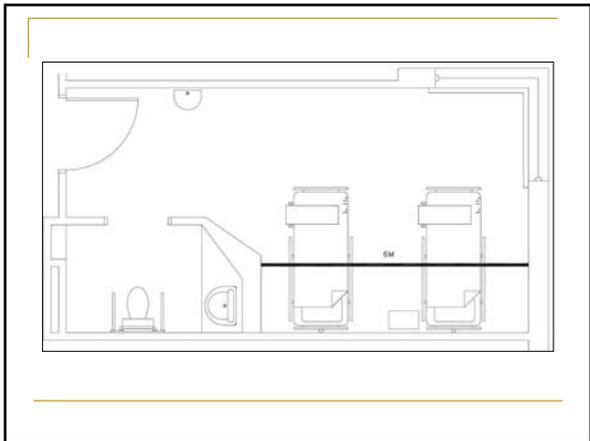
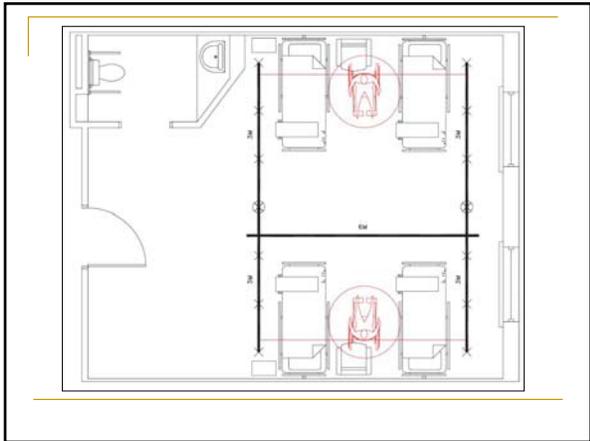
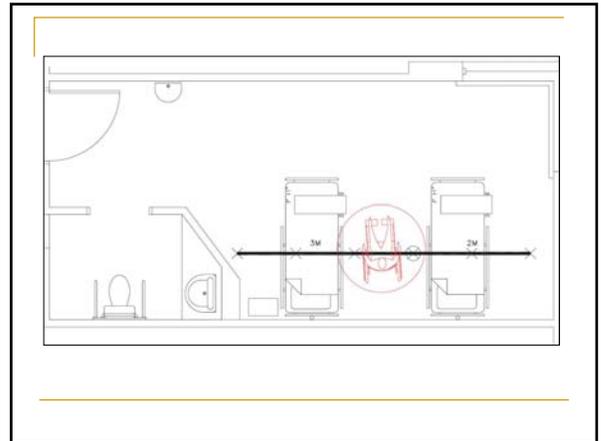
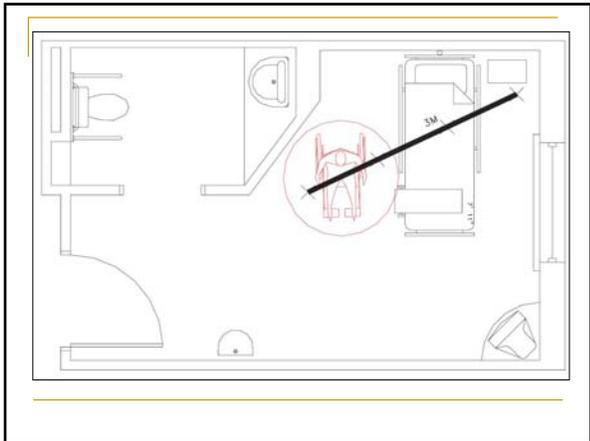
## *Engineering Considerations*

- **Items to include in the procurement request (R) and/or process (P).**
  - Structural review of the facility rooms for attachment of ceiling lift (R/P).
  - Fire Safety review of the facility rooms for clearances and sprinkler concerns (R/P).
  - Electrical review of the facility rooms for cables and their routing (R/P).

## *Structures*

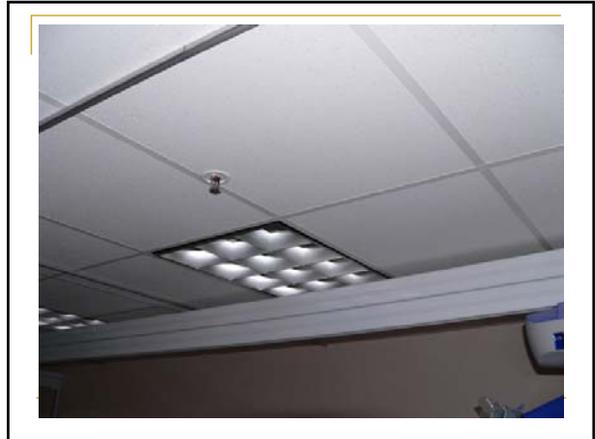
- Plan for a Structural Engineer to review the existing ceiling/roof structure to determine if it can support the additional load for the lift.
- If okay for ceiling attachment, have estimate performed for any VA work which must be performed. Include mechanical and electrical.
- Have independent Structural Engineer review submissions from vendor as part of submittal process. Don't forget seismic considerations.
- Remember, structural is only part of the full installation package.





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- Vendor should address the parking location for lift drive unit and clearances required around the patient bed(s).
- Recommend lift rail systems not extend beyond the patient room due to interface at doorways.
- Remember bed curtains and how they will need to be relocated after installation.





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- Have an electrical engineer review submittals for compliance with NEC and NFPA 99.
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- Make sure the installation does not interfere with maintenance of lighting and HVAC systems.



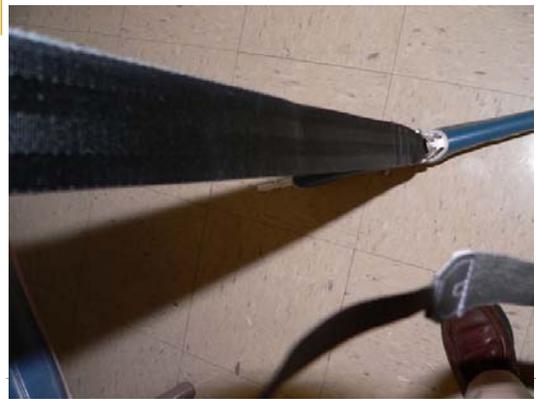
## *Maintenance Items*

- ALWAYS follow manufacturers inspection requirements AS A MINIMUM.
- Inspect structural above ceiling annually.
- Inspect structural below ceiling annually.
- Inspect motor and trolley components annually.
- Inspect electrical cords and connections annually.



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- HAVE NURSING inspect the electrical cords, lift web belting, and safety cord BEFORE each use.



### *Market Survey & Procurement Process*

- 1) **Determine method of purchase;** in our case (V15) it was FSS Competitive, where we are required to review the products of at least 3 FSS contractors. Other methods:
  - Open Market-Sole Source to 8a Vendor
  - Open Market-Sole Source to SDVOSB
  - Open Market-SBA Set-Aside
  - Open Market-Full and Open Competition

- 2) After evaluating each facilities research and preference, three vendors were selected for demonstrations at one site, Columbia, MO. Lifts were installed and removed at no cost to the VA.

- 3) One day was devoted to demonstrations by all three vendors. All VISN facilities were invited to attend.

- 4) Prior to demonstrations, vendors surveyed each facility and developed bid proposals and submitted these proposals to VISN Contracting shortly thereafter.

- 5) After demo, facilities conducted evaluations based on technical and past performance. VISN Contracting Officer (CO) evaluated proposals on cost proposals.

- 6) Evaluations submitted to VISN CO; these generated additional questions and allowed vendors an opportunity for Final Proposal Revisions (FPR).
- 7) VISN CO and facilities POC evaluated FPR received.
- 8) VISN CO made FSS Delivery Order awards.

***“Take Home” Worksheet for  
Facility Champions and Engineering***

- Assemble small Task Force; include Patient Safety representative.

- Procurement process; jointly decided by VISN Contracting and Capital Assets Manager (CAM).

- VISN Contracting will guide Market Survey and procurement process. Market Survey may not be necessary since there are many VA (s) that have expertise; telephone exchanges may be sufficient to identify best vendors.

- When proposed vendors visit site for surveying needs, Engineering and Facility Champion should review survey data before vendor submission as initial response to RFP.

- Engineering will need to evaluate structural and electrical needs for lifts. It may be necessary for Engineering to consult a Structural Engineer to assess the former.

- NRM funds for the structural analysis and site prep needs are available in the special appropriation for the SPH Initiative. They will have to be requested through the VISN CAM. Timeline with a Continuing Resolution in place is unclear; CO Program Managers are targeting 12/31/08 for initial estimates of NRM site prep and equipment estimates.

- Be aware of special warranty items, like life-time guarantee for all installed support structure and rails by the lift equipment manufacturer if installed by them. These may be significant.

### *“Lesson Learned”*

- **PATIENT PRIVACY** needs will have to be addressed since lift systems interfere with patient privacy curtain closing.

### *After Installation*

- Facilities Management and/or Engineering will primarily be interested in:
  - Service-after-the-sale capability.
  - Battery replacement appears to be the only recurring maintenance cost.
  - However, annual inspection and three-year load test is recommended.
  - Cleaning of the unit.

- Keep in mind that the highest risk for staff occurs when installing a lift sling under the patient; make sure there are a sufficient number of staff members to perform this and that the bed is wide enough to allow the patient to be turned to the side.

### *The Impact of Getting the Right Solution, Purchase and Installation*

- Identifying the right solutions.
- Controlling the project with the right information and team members.
- The functional result and the FC's role.

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### *Instructor Info*

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## Further Information

Company	Website
Arjo	<a href="http://www.arjo.com/us">www.arjo.com/us</a>
BHM Medical	<a href="http://www.bhm-medical.com">www.bhm-medical.com</a>
Guldmann	<a href="http://www.guldmann.com">www.guldmann.com</a>
Horchler	<a href="http://www.barrierfreelifts.com">www.barrierfreelifts.com</a>
Invacare	<a href="http://www.invacare.com">www.invacare.com</a>
Liko	<a href="http://www.liko.com">www.liko.com</a>
Surehands	<a href="http://www.surehands.com">www.surehands.com</a>
T.H.E. Medical	<a href="http://www.themedical.com">www.themedical.com</a>
Vancare	<a href="http://www.vancare.com">www.vancare.com</a>
Waverley Glen	<a href="http://www.waverleyglen.com">www.waverleyglen.com</a>
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