

How Much SPH Equipment Do you Need?

Factors to Consider:

- # of beds/unit
- Patient characteristics and variability e.g., medical (typical diagnoses), surgical (type), orthopedic, neurological, Bariatric etc.
- % Dependent; Semi-Dependent; Independent patients
- Patient Census (daily average; peak load; range)
- # and frequency of patients over 300lb and 600lb
- Type and frequency of patient handling tasks performed
- Staff perception of high risk patient tasks
- Future changes to patient characteristics and/or census
- Future changes to unit/dept. design
- Staff mix and numbers per shift
- Existing equipment: functionality and use, etc
- Viability of and access to storage
- Evaluation of unit layout and physical attributes

Example typical Med-Surg unit:

- # of Ceiling lift systems (permanent or portable motors) to match at least average # of dependent patients in a typical 24 hour period
- 1-2 rooms with dual ceiling lift motors for capacity to 1000lbs (depending on bariatric census etc)
- Ceiling lift tracking/rails to 1000lbs capacity with feasibility to add 2nd transverse rail as needed
- A portable weigh scale that can be used with each ceiling lift – if beds are not used to weigh patients
- Floor lift with ambulation capability (with scale as needed). Consider 600lb weight capacity
- 1-2 powered sit to stands (may have ambulating capacity and scale)
- Repositioning and transfer sheets (e.g. tube sliders, SLIPP, etc) *for rooms without ceiling lifts*- quantity: 1.5 per patient room to allow for laundry return and loss
- Air assist mats and motor e.g Hovermatt - quantity depends on # transports to imaging services etc
- Gait belts – use determined by therapy. Not for lifting patients. Ergonomic design – padded with vertical handles; available in various sizes or adjustable)
- **Slings** – quantity and type depend on laundry return time and patient handling tasks performed etc. E.g. 48-72 hour return from laundry:
 - Turning/repositioning slings 3-4 per ceiling lift to allow enough for par stock
 - # of seated slings will be based on patient weight range typically seen on unit and the weight range of the seated sling you purchase
 - Limb slings: 2 for every 3-4 ceiling lifts. Could start with smaller number and evaluated use before purchasing more

Note the # of portable floor and sit to stand lift depend patient dependency mix; census and ease of access to equipment, etc.

Other Depts/Units

ICU – typically needs ceiling system & motor per room due to dependent patient census

ER; OR; Imaging; Transportation – consider facility wide ‘Lateral Transfer System’ using Air Assist Matts and Friction reducing devices. Add ceiling lifts as feasible.

Source: L Enos, HumanFit, LLC, 2014

SPH Equipment Solutions by Patient Dependency

Dependency Level	Possible SPH Solutions (most commonly used in acute care)	Tasks that can be completed with this solution
<p>Total Dependence- E.g., Cannot or should not help at all with transfers or repositioning. Cannot follow simple directions, cannot get themselves to the side of the bed without extensive assistance from staff; cannot bear weight. Requires full staff assistance at all times. Caregiver lifts more than 35lbs</p>	<p>Ceiling Lift</p>	<p>Repositioning in bed, chair etc. Vertical Transfers - moving patient to and from bed to chair commode etc.; Lateral Transfers (supine) -moving patient to and from bed to gurney; exam table etc., Holding limb or part of body; assisting patient during labor if support body part etc. Making a bed Applying CPM Lift from floor All of the above with the appropriate sling</p>
	<p>Floor lift with scale - must interface with beds, equipment room clearance etc. Needs to be accessible; storage a challenge</p>	<p>As with ceiling lifts except Lateral Transfers are more challenging; clearance above a bed/gurney can limit tasks that can be completed</p>
	<p>Air Assist mats and other devices (slippery sheets) *Not all devices reduce risk equally</p>	<p>Repositioning in bed Lateral Transfers (supine) -moving patient to and from bed to gurney; exam table etc.,</p>
	<p>HoverJack</p>	<p>Lift from floor; emergency evacuation</p>
	<p>Bathing carts</p>	<p>mobile carts that can be used to shower patients</p>
<p>Semi-Dependent – E.g., Has some upper body strength and can get the edge of the bed with minimal assistance; has good trunk control when seated upright; can bear some weight on legs or can bear weight well on one leg. Can follow simple directions. May be able to stand pivot transfer with staff assistance. Caregiver does not lift more than 35lbs</p>	<p>Sit to Stand assist – powered with ambulating option</p>	<p>Vertical Transfers - moving patient to and from bed to chair commode etc.; Some limitations with ortho patients, back and abdominal surgeries and post cardiac surgery depending on design of lift. Ambulation with belt for safety - prevents falls</p>
	<p>Sit to Stand assist –non powered</p>	<p>Vertical Transfers - moving patient to and from bed to chair commode etc.; patient may need to be more independent to use some types of non powered sit to stand devices</p>
	<p>Ergo Gait belt with handles. (least preferred)</p>	<p>Vertical Transfers - moving patient to and from bed to chair commode etc.; Stand pivot assist</p>
	<p>Low tech devices e.g. one way sliders for chairs; pivot disks, transfer boards</p>	<p>Assist getting in and out vehicles, repositioning in chairs etc.</p>
	<p>Ceiling Lift</p>	<p>Ambulation with walking harness</p>
	<p>Floor lift with ambulating option</p>	<p>Ambulation with walking harness</p>

Dependency Level	Possible SPH Solutions (most commonly used in acute care)	Tasks that can be completed with this solution
Supervised – E.g., Oversight, encouragement, or cueing required during movement, ambulation, when performing ADLs. Assistive aides e.g. cane, walker, crutches needed when transferring and/or ambulating. Limited staff assist required.	Sit to Stand assist – powered with ambulating option Ergo Gait belt with handles.	For guidance and cueing only
	Some low tech devices to aid independence e.g. bed poles, ladders, stand assist - gimme a lift	
	Powered lift seats - toilet	to raise patient to standing position after toileting
Independent – E.g., Can ambulate, move in bed and perform ADLs etc., without staff assistance.	N/A	
Other Solutions	Powered bariatric wheel chairs Powered Wheelchair pushers Powered bed pushers Scales options for ceiling, floor and sit to stand lifts	Reduces forces exerted when manually pushing w/c's and beds/gurneys Weighing