Moving The Patient

- From Our Perspective
- From the Patient’s Perspective
- Techniques, Tips, and Tools
From The Perspective of the Health Care Provider

- Does our training, clinical experience, and knowledge of body mechanics protect us (health care workers) from injury on the job?
- Despite our beliefs, one study found that 32% of PTs and 35% of PTAs reported sustaining work-related musculoskeletal injuries in a 2-year period (Holder 1999).
From The Perspective of the Health Care Provider

- The highest reported prevalence rates for work-related musculoskeletal disorders involved injuries to the low back, followed by wrists and hands, upper back, and neck (Fossnaught 1999).

- Bork (2006) surveyed 1160 PTs for work related injuries. Those responding (928 or 61%) reported work related musculoskeletal symptoms in at least one anatomical area.

- Molumphy (1985) reported that the two most prevalent work settings in which PTs first experienced LBP were acute care and rehabilitation.
From The Perspective of the Health Care Provider

- Perhaps the best summary of factors that impact patient and caregiver safety, were identified by McGliney 2008.
- Both therapists and nursing staff are able to determine these factors which included:
  - Patient’s ability to assist
  - Patient’s level of cooperation
  - Patient’s co-morbidities
  - Patient’s ability to bear weight
  - Patient’s ability to assist in making body parts accessible
  - Patient’s level of respiratory compromise
  - Patient’s upper extremity strength
  - Availability of proper equipment
From The Perspective of the Patient

- In a comparison of ceiling lifts vs. floor lifts, healthcare workers preferred to use ceiling lifts and found them to be less physically demanding than floor lifts. (Alamgir 2008)
Patients found the ceiling lifts to be more comfortable and transit times for ceiling lifts were quicker than the floor lifts.

(Alamgir 2008)
Ceiling lifts also impose acceptable spine forces on the lumbar spine whereas floor lifts have the potential to increase anterior/posterior shear forces to unacceptable levels (Marras 2009)

- This has implications for actually getting our patient’s to the therapy gym as well as for preventing injury.
From The Perspective of the Health Care Provider

Dionne’s Egress Test (DET) (Dionne 2004)

- To prepare for actual standing, Dionne’s Egress Test (DET) may be of value in determining:
  - Patient’s readiness to stand
  - Confidence to participate.
- Acceptable inter-rater reliability between:
  - Therapists who were experienced in using the test
  - Nurses who were inexperienced raters.

(Smith 2008)
Dionne’s Egress Test (DET)

- Objective criteria for determining if the patient is ready to transfer out of bed without a lift.
- Further testing is needed to determine if DET predicts the likelihood of falls. (Smith 2008)
- The test requires the following steps:
Egress Test
Brief Summary

- Is the patient ready to stand?
- Do one inch clearing test from seated position
- Do Full Stand, repeat, repeat without any pillows, sheets, etc to assist
- Three steps marching in place
- Advance step and return each foot
- Document as Egress Test (Smith 2008)
The patient is requested to complete three repetitions of sit to stand.

The first stand is to assess if the patient can clear the buttocks by 1-2 inches.
Egress Test

- The second stand is to assess if the patient is able to stand completely.
- On the third stand, the patient remains standing for the remaining tests.
- The patient takes three steps in place with each foot
Egress Test

- The patient is requested to step forward and return, once with each foot. To qualify as a step, the stepping foot must advance so that the heel is forward of the stance foot without imbalance or buckling of the stance leg.
Techniques, Tips and Tools

- This section is based on clinical practice and recommendations from the body of written or course based clinical techniques.
- Evidence based literature was not found.
Supine to Sit

- Assess the bed features to determine methods to leverage use of the bed and bed sheets to decrease manual force required from the therapist.
- Assess if the mattress system may be inflated or deflated for firmness.
- Assess the bed for removable baffles to decrease the effective space the patient has to move over to get to the edge of the bed. (see next slide)
Techniques, Tips and Tools

Baffles can be removed to decrease the effective space the patient has to move over on to get to the edge of the bed.
The soaker pad or draw sheet is often very effective for assisting the pt to roll, to sit up, or to get to the edge of the bed.

Use of the draw sheet will protect the skin from shear forces.

The patient should assist with his arms by pulling on the bedrails.
Techniques, Tips and Tools

- Rolling may be accomplished by using the Liko sling as demonstrated.
- A soaker pad or draw sheet may be used if the patient is able to assist by pulling on the bed rail.
Techniques, Tips and Tools

- Training to sit edge of bed can be accomplished with the Liko lift.
- These pictures demonstrate full support versus partial support while sitting.
Techniques, Tips and Tools

- The draw sheet may be used as a cradle to spin the patient and pull them to sitting.

- Check your facilities lifting policy.
Both ceiling lifts and floor lifts can be used to train sit ↔ stand as well as advance to ambulation, but skin breakdown and/or skin tearing may be an issue.
Techniques, Tips, and Tools

- The Golvo Lift can be used to initiate standing, balance, and pre-gait activities.
- The lift is rated to 440 lbs and requires a second individual to guide the lift.
Once the patient is ready, ambulation may be started by using the handles of the lift to simulate a wheeled walker or similar device.

The patient may also be turned 180 degrees to use an actual wheeled walker.
Techniques, Tips and Tools

- The standard EZ stand is rated to 300 lbs
- Foot plate is present in this picture
- Passive transfer used from bed to chair/commode
Techniques, Tips, and Tools

- EZ Stand Bariatric lift will move patients up to 800 lbs.
- In this picture, the foot plate has been removed.
Techniques, Tips, and Tools

- With the foot plate removed, the patient may also ambulate in this lift.
- Note that posture is not completely upright.
Techniques, Tips and Tools

Sit to Stand - Use of Transfer Belts

- Assess the body shape to determine where the belt can best be secured.
- Educate the patient on why the belt is used.
Techniques, Tips and Tools

Sit to Stand-Blocking Knees into Extension During Standing (10)

- Block the knees from flexing, once the patient is standing but may not have sufficient endurance to remain standing.
- Inside Out vs. Outside In
Techniques, Tips and Tools

- Inside Out – Therapist’s foot is medial to the patient’s foot and the therapist’s knee is lateral to the patient’s knee.
Outside In – Therapist’s foot is lateral to the patient’s foot and the therapist’s knee is medial to the patient’s knee.
Techniques, Tips, and Tools

- Miscellaneous tools
  - Hover Mat
  - Portable Overhead Lift
  - Plastic Boards
  - Barton Chairs
  - Easy Mover Chairs
  - Lat or foam blocks
  - Transfer Poles
  - Standing Frames
  - Lite Gait
  - Walking Frame
Get Creative
Theraband Leg Press
Get Creative
4WW or Rollabout
Equipment

- What Are the Weight Limits for Your Equipment
- What Are You Trying To Accomplish
## Fairview Home Medical Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Height Range</th>
<th>Weight Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ambulatory Products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Walker</td>
<td>5'4” – 6'2”</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>Youth Walker</td>
<td>4’7” – 5’3”</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>Adult Heavy Duty Walker</td>
<td>5’4” – 6’2”</td>
<td>500 lbs.</td>
</tr>
<tr>
<td>Youth Heavy Duty Walker</td>
<td>4’7” – 5’3”</td>
<td>400 lbs.</td>
</tr>
<tr>
<td>Hemi Walker</td>
<td>5’4” – 6’2”</td>
<td>250 lbs.</td>
</tr>
<tr>
<td>Youth Crutches</td>
<td>4’6” – 5’2”</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>Adult Crutches</td>
<td>5’1” – 5’9”</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>Tall Adult Crutches</td>
<td>5’10” – 6’6”</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>Heavy Duty Crutches</td>
<td></td>
<td>500 lbs.</td>
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</tbody>
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## Bath Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Weight Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Duty Bath Seat</td>
<td>400 lbs.</td>
</tr>
<tr>
<td>Heavy Duty Bath Seat with Back</td>
<td>400 lbs.</td>
</tr>
<tr>
<td>Bath Transfer Bench</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>Heavy Duty Bath Transfer Bench</td>
<td>400 lbs.</td>
</tr>
<tr>
<td>Standard Commode</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>Heavy Duty Commode</td>
<td>450 lbs.</td>
</tr>
</tbody>
</table>
Additional Vendors

Sammons Preston Bariatric Select Supplement
- www.pattersonmedical.com
- 800-323-5547
- Transfer pole

Home Health Superstore
- www.homehealthsuperstore.com
- info@HomeHealth411.com
- Mattresses, walkers, wheelchairs, canes and bathroom equipment.

Aria Medical
- www.ariamedical.com
- 800-330-3591
- Beds and lifts.
Additional Vendors

Bariatrics Unlimited
- www.bariatricsunlimited.com
- 888-761-1999
- Recliners and bathroom equipment

Medical Products Direct
- www.medicalproductsdirect.com
- 800-804-9549
- Beds, lifts, canes, crutches, walkers, wheelchairs, scooters, bathroom equipment.
Additional Vendors

**Tranquility Products**
- Incontinence Products for waist size up to 90”.
- [www.tranquilityproducts.com/products/index.htm](http://www.tranquilityproducts.com/products/index.htm)
- 800-467-3224

**Core Products-Abdominal binders**
- 3X, 4X and 5X
- “Better Binder”
  - XL can be used for a waist circumference of 56-75”
  - 877-249-1251
  - [www.coreproducts.com/babyhugger/fitting_betterbinder.asp](http://www.coreproducts.com/babyhugger/fitting_betterbinder.asp)
Case Presentations