

# Lifts and Transfers

### **Employee Orientation**

# Presented by Therapy Services 2017

# **Session Objectives**

To provide an brief overview of:

- 1. Terminology.
- 2. Key steps before beginning a lift or transfer.
- 3. Patient mobility categories.
- 4. Common techniques and supporting equipment.
- 5. Practical scenarios
  - Will be reviewed onsite during orientation

# Terminology

**Repositioning** = procedure where a patient is moved to a new position on the same surface

e.g., repositioning in bed or while seated

**Lift** = procedure used to carry the entire weight of a patient

- e.g., mechanical lift

**Transfer** = procedure used to assist a patient, who can bear weight at least through one leg or both arms to move from one surface to another.

– e.g., sit-to-stand

# Are YOU Assessing?

**Risk Reduction Strategies** 

- 1. Environment
- 2. Equipment
- 3. Patient
- 4. **Provider** (also consider Caregiver)

## **1. Environment**

- Set up is important!
- Scan the room and set it up for success.
  - layout, space, lighting, temperature, obstacles, flooring (clean and dry), etc.
  - Move furniture to make more room.
- Check <u>white board</u> in patient's room for transfer information.
- Have gait aid/chairs ready and accessible.

# 2. Equipment

- Adjustments should be made to bed and/or chair
  - height, lock brakes, remove arm rests, lower bed rails
  - position chair at appropriate angle to bed.
- Supportive aids need to be accessible

   sliding board, sara stedy, mechanical lift, etc.
- Ensure all devices are in good working order.
   belts, lifts, slings, etc.
- Protect lines and tubes.
  - unplug IV pole/move lines and catheters

# **Supportive Equipment/Devices**

### **Transfer/Sliding Boards**

- Vary in material, size, weight and design.
- They are used primarily for patients unable to weight-bear, due to neurological and orthopaedic conditions
- Use requires the patient to have good upper extremity strength.
- The amount of assistance required varies from patient to patient and is usually to help with control of the patient's trunk while he/she pushes his/her body along the board.

### Transfer/Gait Belts

- Wide cloth belts that can be adjusted by either buckles or velcro
- Helpful for patients that need assistance and a more secure handhold is required
- Should be snug at the patient's waist
- Provider grasps the belt at the back with both hands, prior to proceeding with the planned transfer

### **Mechanical Lifts**

- Use for maximally dependent patients and those who are unable to follow instructions , or are unpredictable.
- Decrease the risk of injury by eliminating/reducing forceful movements, awkward postures and repetitive motions associated with manual lifting.

## 3. Patient set-up

### • Assess patient's status

- Change in medical status (decline will make transfers more difficult)
- Patients ability to communicate
- Change in cognitive and emotional status (i.e., confused, drowsy)
- Level of cooperativeness
- Physical abilities (ROM, strength, balance)
- Confirm weight bearing status
- Explain what you are doing, along with the risks and benefits.
- Drape appropriately for patient comfort and dignity.
- Use eye glasses, hearing aids, and footwear (anti-slip socks).
- Encourage patient to participate as much as possible.

### 4. Provider (also applies to Caregiver)

- Think body mechanics and maintain at all times.
  - Good posture, neutral spine (back and neck)
  - Move your entire body in the direction of the transfer by weightshifting, stepping or pivoting.
- Must be comfortable and confident
- Use the adjustable bed to assist
  - $\circ$  raise the height of bed
  - o raise head of bed for supine to sit transfers,
  - o make sure knees are down
  - $\circ~$  apply trendelenburg function
  - o use bed rail
  - foot board can be removed

# **Provider Preparation**

- Complete assessment/re-assessment to ensure appropriate lift
- Discuss the plan to the patient and transfer partners (*if applicable*)
- Perform the transfer in the shortest distance possible.
- Use simple instructions/one step commands with patient and partners
- Be prepared for the unexpected
- Post-pone the lift/transfer if the patient is resisting, unable to follow instructions at the time, or aggressive.
- Position to ensure the patient feels safe, can hear and see the HCP, and you are able to assume the appropriate body mechanics.

# Are YOU re-Assessing?

- A brief re-assessment must be done prior to a lift/transfer being attempted each time.
  - patient's abilities can change from day to day, or even at different times during a day, due to medications, fatigue, stress or pain.
- Must evaluate when a patient's condition improves or deteriorates to ensure the most appropriate technique is implemented.
  - Communicate any change in mobility status to the PT/OT for s/he to re-evaluate.



# **Patient Mobility Categories**

# **Appropriate Lift or Transfer**

- Is safe and comfortable for the patient, HCP and caregiver.
- Enables the patient to be as independent as possible without harm.
- Provides the least amount of strain on the HCP to reduce any harm.
- HCPs should consult on complex cases, in order to prescribe interventions and/or equipment to improve transfers when indicated.

# Lifting and Transferring Options

- Independent
- Supervised
- Assistance
  - Minimum: patient performs at least 75% of the activity
  - Moderate: patient performs at least 50% of the activity
  - Maximum: patient performs less than 25% of the activity
- One-Person Assist
- Two-Person Assist
- Sit-Stand device (requires 2 staff)
- Total mechanical lift (requires 2 staff)
- Repositioning sheets (not soaker pads)

## Independent



- This patient does not require physical assistance rising from sitting or during walking.
- Verbal cueing and supervision is not necessary.
- Is cooperative.
- Full weight bearing.
- Pivots or steps independently between surfaces.
- Consistently displays reliable standing balance.
- Manages mobility aids and footwear independently.
- Independently transitions from lying and sitting.

# **Supervised**



- The patient does not need physical assistance rising from sitting or during walking.
- Verbal cueing or supervision is necessary.
- Is cooperative.
- Full weight bearing.
- Pivots or steps independently between surfaces.
- Consistently displays reliable standing balance.
- Independently transitions from lying and sitting.
- Pushes up on foot pedals and armrests to move to the back of seat with no physical assistance.

# **Minimum Assistance**



- Patient needs physical and/or verbal cueing rising from sitting or during walking.
- Set up assistance or reminders are necessary to manage mobility aids and required footwear.
- At risk of becoming unsteady and requiring physical assistance.
- Is cooperative and able to follow direction.
- Full weight bearing.
- Steps between surfaces with minimal assist of one HCP.
- Displays no more than a mild deficit in standing balance.
- Moves between lying and sitting positions with no more than one person minimal assistance.

N.B. a transfer belt should be used when walking this patient due to balance concerns.

### **One-Person Assist**



- Patient is full weight bearing and needs assistance rising from a seated position.
- Is cooperative and able to follow direction
- Bears substantial portion of weight consistently.
- Steps between surfaces with one person minimal assistance.
- Displays no more than a mild deficit in standing balance.
- Transitions from lying and sitting positions with no more than one person minimal assistance.
  - N.B. a transfer belt should be used when walking this patient due to balance concerns.

### **Two-Person Assist**



- Patient is full weight bearing, but needs assistance rising from a seated position.
- Is cooperative.
- Bears the majority of weight consistently.
- Steps between surfaces with the assistance of two people.
- Displays mild to moderate standing balance deficits.
- Transitions from lying and sitting with no more than two person minimal assistance.
- If the patient weighs more than 250 lbs, or if you are unsure of their balance, consider a sit to stand or mechanical lift.
  - N.B. a transfer belt should be used when walking this patient due to balance concerns.

# **Sit-Stand Lift**



- Required for a patient that weight bears partially through at least one leg and both arms.
- Can hold onto the handle with at least one hand.
- Patient has unknown or unpredictable balance/strength.
- Is cooperative.
- Follows simple directions consistently.
- Stands securely on the standing platform.
- Transitions from lying and sitting positions with no more than two person minimal assist.
- Can tolerate the sling under his/her arms.

# **Mechanical Lift**



- Patient is non-weight bearing or otherwise unsuitable for the sit-stand lift.
- Is not able to cooperate consistently.
- Weight bears inconsistently or unable to do so.
- Displays limited ability to participate in lift/transfer.

### **Important Consideration**

- The lift and transfer definitions are purposely designed to be more conservative than the full assessment completed by a PT or OT.
  - We want to ensure you and the patients are safe until further assessment is completed by a PT/OT.
- When appropriate a PT/OT may challenge a patient to perform at a higher mobility level than the general care plan may indicate.

## When is a Transfer Complete?

- A transfer is not complete until the patient is safely and securely in their new position.
- Appropriate positioning and draping of the patient must be completed.
- Necessary equipment (e.g., call bell) needs to be placed within the patient's reach.



# **COMMON TECHNIQUES**

**IMPORTANT:** If a patient is not able to complete the actions identified in a technique, then his/her transfer level will need to be downgraded until further re-assessment by the Physical Therapist (PT) or Occupational Therapist (OT).

# **Supine to Sitting (One-Person)**

#### **HCP Position**

- Stand facing the patient.
- Once the patient is on his/her side, reach across the patient's top leg and grasp the bottom leg.
- Place the other arm under the patient's shoulders; be mindful to support his/her head and shoulders.

#### **Patient Position**

- Have the patient roll onto his/her side if able. Provide assistance as needed to facilitate.
- Ask the patient to flex his/her hips and knees. If he/she is able, ask to place heels over the edge of the bed.
- Instruct the patient to push up on his/her bottom elbow, pushing up with the other hand.

#### **Action**

- Encourage the patient to be independent throughout the transfer.
- When assistance is required, the HCP shifts weight from front to back leg, lowering the patient's legs over the edge of the bed and at the same time bring his/her head and shoulders to an upright position.

# **Rolling (One-Person)**

#### **HCP Position**

- Stand on the same side of the bed.
- Stand facing the bed as close as possible to the bed with weight on the front foot
- Grasp both ends of the draw sheet (placed under the patient from hips to shoulder) on the far side of the patient.

#### **Patient Position**

- Ensure patient is not touching the foot of bed.
- Position the patient close to the edge of the bed.
- HCP can assist the patient, if he/she is unable to move the arm nearest to you up and away from their body. Other arm is to be placed across his/her chest.
- Instruct the patient to bend his knees up or to cross the farthest leg over the near one if able.

#### <u>Action</u>

- Grasp the draw sheet at both ends of the patient's shoulders and hips
- On the command "1, 2, 3, turn," roll the patient on to his/her side when the HCP transfers weight onto their back foot.

# Repositioning in Bed - Bed Square



- Moving patients up the bed and turning them from one side to the other are the type of tasks that can be carried out easily and with a minimum amount of stress.
- Requires the use of purple Arjo sheets (N.B. bariatric sheets are blue)
- Technique:
  - Have patient roll onto side; reach for bedrail to assist.
- Requires 2 HCPs
  - HCPs need to weight shift with their legs when boosting a patient.
  - Adjust the height of bed for the shortest person.
  - Can use trendelenburg to assist
- Do not leave sheet under patient; laundered between patients
- Can be used to place slings.

# http://www.youtube.com/watch?v=cEZBn7Qw74Us VIDEO

# **Bed to stretcher using Roller Board**

- Must be wiped down between patients.
- Not to be used with patients over 400 lbs
  - Hospital policy
- Used for horizontal transfers only.
- Technique:
  - Roll the patient towards you
  - Use the bedsheet to assist
  - Partner pushes roller board next to patient's back
  - Roll patient onto back
  - $_{\odot}$  Grab edge of sheet in grip with palms up
  - Pull patient towards you and slide board out the other side

# **Slide Board Transfer**

### **Bed to Wheelchair**

#### • Technique:

- Patient sitting at edge of bed and angled towards chair.
- Armrest of wheelchair is removed.
- Have patient lean to the side and slide one end of board under the their hips/buttocks and the other end half-way covering the transfer surface (chair/bed).
- Encourage the patient to use their arms to scoot along the board.
- HCP can assist at the hips/buttocks as needed to complete transfer.
- Once the patient is settled in the chair, have them lean to the side again to remove the board.

#### • Tips:

- Adjust the two surfaces between the sliding board to be a similar height (if possible, position height of bed so patient is going downhill).
- Ensure the patient does not place his/her fingers under the ends of the board, because as they shift their bodyweight their fingers will get pinched underneath.
- If using a wheelchair, ensure the brakes are on, and the arm rest and foot rest on the appropriate side are removed.

## https://www.youtube.com/watch?v=msPBI-LVJ1o VIDEO

# Sit to Stand Transfer (One-Person)

#### **HCP Position**

- Face the patient.
- You can block and support the patients weaker leg by placing your feet on either side of the their feet and using your knee (if necessary)
- Place your hands around the patient's waist or under the buttocks.
- A transfer/gait belt can be helpful to provide handholds.

#### **Patient Position**

- Ensure the patient's feet are flat on the floor
- Have the patient scoot their bottom to the edge of the bed/chair; if unable to do this independently the HCP can assist him/her by "bum walking"
- Patient brings feet back (knee flexion and ankle dorsiflexion) to the chair so they are underneath of him/her when standing. Knees are positioned around 80-90 degrees.
- Patient leans forward (trunk/hip flexion) in preparation for standing. It is imperative that they lean their 'nose over their toes.' To bring their center of mass forward. He/she can hold onto a piece of equipment, the therapist's forearms or hips.

#### <u>Action</u>

- Encourage your patient to become independent. The patient is encouraged to "push-up" through his/her feet and knees.
- Assist the patient to straighten his/her knees and hips by providing a forward and upward pressure on their pelvis.
- The patient's knees can be blocked/supported if required
- Once up, ensure the patient is steady and able maintain their safety independently before letting go.



# MINIMUM ASSISTANCE

Sit to Stand

https://www.youtube.com/watch?v=GqP5\_I\_Lmtw VIDEO



# MAXIMUM ASSISTANCE

Sit to Stand

https://www.youtube.com/watch?v=R4JgmfZFkVw VIDEO

# **One-Person with Sara Stedy**



- Used to quickly and easily transport or transfer residents from one sitting position to another.
- Patient is full weight bearing and needs assistance rising from a seated position.
- Is cooperative.
- Fear and anxiety are a barrier.
- Patient displays mild cognitive impairment.
- Bears substantial portion of weight consistently.
- Can hold onto the handle with at least one hand.
- Displays no more than a mild deficit in standing balance
- Displays limited ability to pivot transfer in standing position.

### **ONE-PERSON** with **SARA STEDY**

# https://www.youtube.com/watch?v=Cnn\_4Rpuq5E VIDEO

# **Standing Pivot (One-Person Assist)**

### **HCP Position**

- Standing in a walk stance with knees slightly flexed and toes pointing toward the chair.
- Maintain lumbar lordosis, lean forward and place hands behind the patient's lower back/pelvis
- When necessary, therapist blocks the patients weaker leg by placing his/her feet on either side of the patient's feet and using their knees to support the patient's weaker leg.

### **Patient Position**

- Patient sits on edge of the bed with his/her feet on the floor, toes pointing away from the chair.
- When necessary, protect the affected side in a hemiplegic patient (e.g., shoulder)
- The patient is to lean forward "nose over toes"
- The patient can place his/her hands on the transfer surface, or the HCP's waist or forearms.
- Transfer toward the patient's stronger side.
- Patient assists by full or partial weight bearing.
- Position (wheel) chair at a 30-degree angle to the side of the bed. The chair should be positioned so that transfer occurs towards the patient's stronger side
- If applicable, remove the foot rest and arm rest nearest to the patient. **Action**
- Patient stands at the side of bed (with assistance from the HCP as necessary)
- HCP assists patient to swing hips around to the chair as necessary
- Patient places hands on arm of chair and lowers down.

### **Standing Pivot (Two-Person Assist)**

### Refer to Standing Pivot (One-Person Assist) for technique.

### **HCP #1 Position**

- Standing in a walk stance with knees slightly flexed and toes pointing toward the chair.
- Maintain lumbar lordosis, lean forward and place hands behind the patient's lower back/pelvis
- When necessary, therapist blocks the patients weaker leg by placing his/her feet on either side of the patient's feet and using their knees to support the patient's weaker leg.

### **HCP #2 Position**

- Stands behind the patient.
- His/her hands are behind the patient's lower back/pelvis.
- Facilitates the patient to stand, swinging their hips around to the chair, and then lowering them onto the chair.

## **Standing Low Pivot (Two-Person Assist)**

Similar to "Standing Pivot" but the patient does not stand upright

- Patient is encouraged to assist by reaching for bedrail/armrest
- Remove armrest of wheelchair to assist.

#### **HCP #1** Position

- Standing in a walk stance with knees slightly flexed and toes pointing toward the chair.
- Maintain lumbar lordosis, lean forward and place hands behind the patient's lower back/pelvis
- When necessary, therapist blocks the patients weaker leg by placing his/her feet on either side of the patient's feet and using their knees to support the patient's weaker leg.

### **HCP #2 Position**

- Stands behind the patient.
- His/her hands are behind the patient's lower back/pelvis.
- Facilitates the patient to stand, swinging their hips around to the chair, and then lowering them onto the chair.

# **Re-Positioning in a Chair** (One-Person)

### **HCP** position

- Stand in front of the patient
- Block/support the patient's knees if required
- Place hands under the patient's pelvis/buttock

### Patient position

- Patient sitting with feet flat on the floor and slightly apart
- Patient will lean forward to offload his/her buttocks

### <u>Action</u>

- Encourage/facilitate the patient to "bum walk" back in the chair
- Assist as necessary by raising one side of the sacrum and then the other. Apply gentle pressure to the patients legs to assist in shifting them backward



# **Group Facilitation Exercises**

In a small group, you will demonstrate various lifts, transfers or repositioning techniques.

See you on day #3



# Alarms and Call Bell System

# **Employee Orientation**

# Presented by Therapy Services 2017

# **Wheelchair Alarm**

- Lightweight compact fall alarm
- Alerts HCPs to attempted bed, chair or toilet seat exits by high fall risk patients.
- Alarming Mechanisms:
  - $\circ$  clip
  - o belt
  - $\circ$  pad



## **Room Display Lights**

- Red is Fire
- Solid Green is Patient Call
- Flashing Green is Washroom Call
- Yellow is Bed Exit and Staff Assist
- Blue is Code Blue
- Each colour has a distinctive tone.
- Flashing has an intermittent tone.
- Annunciator wording is what shows on the console.
- Yellow will read whichever is activated; bed exit or staff assist.

### 1. RESETTING / ZEROING BED

### STANDARD INSTRUCTION

Date Issued: April 1st, 2013

Number of Steps: 3

Issued by: Falls Quality Working Group

NO.	PROCESS STEP	KEY POINTS	REASONS
1	Ensure bed is empty and in lowest position	Fig. 1	Bed must be empty for the alarm to be reset and activated
2	Press enable button on bed alarm keypad – green button with key	Green light on- Fig. 2	
3	Press and hold zero/ reset exit button	Press and Hold until lights flash 3 times - Fig. 3	

**Bed Alarm** 

keypad

#### Head of Bed Fig. 1



Fig. 2







### 2. Setting Bed Alarm STANDARD INSTRUCTION

Date Issued: April 1st, 2013

Issued by: Falls Quality Working Group

Number of Steps: 4

NO.	PROCESS STEP	KEY POINTS	REASONS	
1	Have patient in bed	Both sides of the bed have the same keypad functions	You can work from	
2	Locate the key pad to set the bed alarm	Bed Alarm keypad		
3	Press the Enable button followed by the Sensitivity button (choose sensitivity) and hold for 2 seconds	Green light will go on and when you let go <b>1</b> audible beep confirms alarm <b>IS</b> set <b>Multiple</b> rapid beats then alarm is <b>NOT</b> set If all lights in the sensitivity area are flashing, follow standard instruction for "Resetting Bed Sensitivity"	Enable Button	
4	Adjust the volume setting	Lights indicate volume level		

### 3. DISARMING BED ALARM STANDARD INSTRUCTION

Date Issued: 9 February, 2017 Issue

Issued by: Falls Quality Working Group Number of Steps: 4

NO.	PROCESS STEP	KEY POINTS	REASONS	
1	Have patient in bed	Both sides of the bed have the same keypad functions	You can work from either side of the bed	
2	Locate the key pad to set the bed alarm	Bed Alarm keypad		
3	Press the Enable button followed by the Sensitivity button (choose sensitivity) and hold for 2 seconds	Green light will go off and <b>1</b> audible beep confirms alarm <b>IS</b> Deactivated	Enable Button Sensitivity Buttons	
4	Press Reset button "Red C"on Code Blue Button	Red light will go off		

### 4. CHECK CORD CONNECTIONS STANDARD INSTRUCTION

Date Issued: 9 February 2017

Issued by: Falls Quality Working Group

Number of Steps: 3

NO.	PROCESS STEP	KEY POINTS	REASONS	PHOTOS
1	Ensure the bed <b>power</b> is plugged into the wall at the power outlet	It is best to check from the wall to the bed, then patient to head wall	Ensure the 3 cables are plugge into place and are snug. 1 cable for power, 1 for communication and 1 for the patient call bell	
2	Ensure the communication cable for bed exit is plugged into the bed at one end and into the Y connector in the bottom of the Code Blue button. The green dome light will appear over the door and the scrolling marquis will announce "Patient call - Room #" Clear the call by pressing the "Red C" not the Code Blue button			
3	Ensure the Call Bell for the patient is plugged into the Head Wall receptacle	Make sure the call bell is left within the patient's reach so they may use it		

If after these connections have been checked, the call bell does not work, please contact Maintenance through Megamation request.

### 5. CALL BELL REPLACEMENT AND CONNECTION STANDARD INSTRUCTION

Number of Steps: 5

Issued by: Falls Quality Working Group

NO. PROCESS STEP **KEY POINTS** REASONS PHOTOS 1 Call ESA ext 4900 for replacement call Call bells are kept in Environmental Call bells are logged to track bell. inventory in Central Supply. Services 2 Unplug old call bell from the Grasp firmly and pull straight back Headwall input To maintain functionality of 3 Plug new call bell into the headwall. Press firmly into place. call bell lights and bed alarm system. Check to ensure the communication 4 To ensure correct connections cable from bed to wall is plugged into This cable is different from the Call Y Connector on the Code Blue Button Bell cable and functionality on the Headwall. If the call bell does not work, try 5 another call bell cable. If it To ensure the bed is fixed Test call bell continues to fail, contact immediately to prevent falls. Maintenance.

Date Issued: 10 February 2017

If after these connections have been checked, the call bell does not work, please contact Maintenance through Megamation request.

# **Problem Resolution**

The Communication Stations all have the number for <u>KR Communications</u> to deal with any problems. They offer 24-hour response and can dial-in for most issues. If onsite presence is required they are 35-45 minutes away based in New Hamburg.

Contact Number: (519) 684-7570

- Please ensure that if beds have been red-tagged for repair that they do not remain on the units and that a work order is generated through Megamation.
- Call bells and Y-connectors are to remain in the patient rooms when beds are moved.



# **Group Demonstration**

In a small group, the demo will take place.

See you on day #3