Safe Patient Handling and Movement Algorithms

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Assessment Criteria and Care Plan for Safe Patient Handling and Movement

I. Patient’s Level of Assistance:
   - Independent — Patient performs task safely, with or without staff assistance, with or without assistive devices.
   - Partial Assist — Patient requires no more help than stand-by, cueing, or coaxing, or caregiver is required to lift no more than 35 lbs. of a patient’s weight.
   - Dependent — Patient requires nurse to lift more than 35 lbs. of the patient’s weight, or is unpredictable in the amount of assistance offered. In this case assistive devices should be used.

   An assessment should be made prior to each task if the patient has varying level of ability to assist due to medical reasons, fatigue, medications, etc. When in doubt, assume the patient cannot assist with the transfer/repositioning.

II. Weight Bearing Capability
   - Full
   - Partial
   - None

III. Bi-Lateral Upper Extremity Strength
   - Yes
   - No

IV. Patient’s level of cooperation and comprehension:
   - Cooperative — may need prompting; able to follow simple commands.
   - Unpredictable or varies (patient whose behavior changes frequently should be considered as “unpredictable”), not cooperative, or unable to follow simple commands.

V. Weight: _______ Height: _______

Body Mass Index (BMI) [needed if patient’s weight is over 300]¹: ___________

If BMI exceeds 50, institute Bariatric Algorithms

VI. Check applicable conditions likely to affect transfer/repositioning techniques.

   - Hip/Knee Replacements
   - History of Falls
   - Paralysis/Paresis
   - Unstable Spine
   - Severe Edema
   - Paralysis/Paresis
   - Splints/Traction
   - Fractures
   - Contractures/Spasms
   - Amputation
   - Postural Hypotension
   - Urinary/Fecal Stoma
   - Respiratory/Cardiac Compromise
   - Severe Pain, Discomfort
   - Very Fragile Skin
   - Wounds Affecting Transfer/Positioning

Comments: __________________________________________________________________________________________

VII. Care Plan:

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Sling Type (circle choice):

- Seated
- Seated (Amputation)
- Standing
- Supine
- Ambulation
- Limb Support

Sling Size: ________________

Signature: ___________________________________________ Date: ________________

¹If patient’s weight is over 300 pounds, the BMI is needed. For Online BMI table and calculator see: http://www.nhlbi.nih.gov/guidelines/obesity/bmi_tbl.htm
Algorithm 1: Transfer to and From: Bed to Chair, Chair to Toilet, Chair to Chair, or Car to Chair

Start Here

Can patient bear weight?

- Fully
  - Caregiver assistance not needed; Stand by for safety as needed.

- Partially
  - Is the patient cooperative?
    - Yes
      - Stand and pivot technique using a gait/transfer belt (1 caregiver) or powered standing assist lift (1 caregiver)
    - No
      - Use full body sling lift and 2 caregivers.
  - No
    - Caregiver assistance not needed; Stand by for safety as needed.

Is the patient cooperative?

- Yes
  - Does the patient have upper extremity strength?
    - Yes
      - Seated transfer aid; may use gait/transfer belt until the patient is proficient in completing transfer independently.
    - No

- No
  - Caregiver assistance not needed; Stand by for safety as needed.

- Caregiver assistance not needed; Stand by for safety as needed.

Instructions:

- For seated transfer aid, must have chair with arms that recess or are removable.
- For full body sling lift, select a lift that was specifically designed to access a patient from the car (if the car is the starting or ending destination).
- If patient has partial weight bearing capability, transfer toward stronger side.
- Toileting slings are available for toileting.
- Bathing mesh slings are available for bathing.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs. of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
Algorithm 2: Lateral Transfer To and From: Bed to Stretcher, Trolley

Start Here

- Partially Able or Not At All Able
  - Can patient assist?
    - Yes
      - > 200 Pounds: Use a friction reducing device* and 3 caregivers.
    - No
      - < 200 Pounds: Use a friction reducing device*.

Caregiver assistance not needed; Stand by for safety as needed.

- Destination surface should be 1/2 inch lower for all lateral patient moves.
- For patients with Stage III or IV pressure ulcers, care must be taken to avoid shearing force.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs. of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
Algorithm 3: Transfer To and From: Chair to Stretcher, or Chair to Exam Table

Start Here

Is the patient cooperative?

Yes

Caregiver assistance not needed; Stand by for safety as needed.

No

Use full body sling and 2 or more caregivers.

Can the patient bear weight?

Fully

If exam table/stretcher can be positioned to a low level, use non-powered stand assist. If not, use a full body sling lift.

Partially

Use full body sling lift and 2 or more caregivers.

Comments:
- High/Low exam tables and stretches would be ideal.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs. of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
Algorithm 4: Reposition in Bed: Side-to-Side, Up in Bed

Start Here

Can patient assist?

- Fully able: Caregiver assistance not needed; patient may/may not use positioning aid.
- Partially able: Encourage patient to assist using a positioning aid or cues.

No

< 200 Pounds: Use a friction reducing device and 2-3 caregivers.

> 200 Pounds: Use a friction reducing device and at least 3 caregivers.

- This is not a one person task: DO NOT PULL FROM HEAD OF BED.
- When pulling a patient up in bed, the bed should be flat or in a Trendelenburg position to aid in gravity, with the side rail down.
- For patients with State III or IV pressure ulcers, care should be taken to avoid shearing force.
- The height of the bed should be appropriate for staff safety (at the elbows).
- If the patient can assist when repositioning "up in bed," ask the patient to flex the knees and push on the count of three.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
Algorithm 5: Reposition in Chair: Wheelchair and Dependency Chair

**Start Here**

- **Can patient assist?**
  - **Fully**
    - Caregiver assistance not needed; Stand by for safety as needed.
  - **Partially**
    - If patient has upper extremity strength in both arms, have patient lift up while caregiver pushes knees to reposition.
    - If patient lacks sensation, cues may be needed to remind patient to reposition.

- **Does chair recline?**
  - **Yes**
    - Recline chair and use a friction reducing device and 2 caregivers.
  - **No**
    - Use full body sling lift or non-powered stand assist aid and 1 to 2 caregivers.

- **Is patient Cooperative?**
  - **Yes**
    - Use full body sling lift and 2 or more caregivers.
  - **No**
    - Take full advantage of chair functions, e.g., chair that reclines, or use or arm rest of chair to facilitate repositioning.
    - Make sure the chair wheels are locked.
    - During any patient transferring task, if any caregiver is required to lift more than 35 lbs. of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
Comments:
- Use full body sling that goes all the way down to the floor (most of the newer models are capable of this).
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs. of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
Bariatric Algorithm 1: Bariatric Transfer to and from: Bed/Chair, Chair/Toilet, or Chair/Chair

Start Here

- Partially or No
  - Can patient bear weight?
    - Fully
      - Stand-by for safety as needed*
    - Partially or No
      - Is the patient cooperative?
        - Fully
          - Bariatric full body sling lift (minimum of 3 caregivers)
        - Partially or No
          - Does the patient have upper extremity strength?
            - Fully
              - Bariatric stand assist lift (minimum of 2 caregivers) OR Bariatric full body sling lift (minimum of 2 caregivers)
            - No
              - Use seated bariatric transfer aid; may use sliding board until the patient is proficient in completing transfer independently (minimum of 2 caregivers)

* "Stand-by for safety." In most cases, if a bariatric patient is about to fall, there is very little that the caregiver can do to prevent the fall. The caregiver should be prepared to move any items out of the way that could cause injury, try to protect the patient's head from striking any objects or the floor and seek assistance as needed once the person has fallen.
- If patient has partial weight-bearing capability, transfer toward stronger side.
- Consider using an abdominal binder if the patient's abdomen impairs a patient handling task.
- Assure equipment used meets weight requirements. Standard equipment is generally limited to 250-350 lbs. Facilities should apply a sticker to all bariatric equipment with "EC" (for expanded capability) and a space for the manufacturer's rated weight capability for that particular equipment model.
- Identify a leader when performing tasks with multiple caregivers. This will assure that the task is synchronized for increased safety of the healthcare provider and the patient.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
- For seated transfer aid, must have chair with arms that recess or are removable.
- Bariatric toileting slings are available for toileting.
- Bariatric bathing mesh slings are available for bathing.
- Note that a standard porcelain toilet typically has a weight limit of 350 pounds; the patient may need bariatric commode chair or steel toilet.
- In older lifts, more effort is needed to place the sling under the patient, which may require a minimum of 3 caregivers.
**Bariatric Algorithm 2: Bariatric Lateral Transfer to and from: Bed/Stretcher, Trolley**

Start Here

Can patient assist?

- Fully
- Partially Able or No

Stand by-for safety as needed*
(2 caregivers)

Mechanical lateral transfer device, bariatric ceiling lift with supine sling or air assisted friction-reducing device (minimum of 3 caregivers)**

- The destination surface should be about 1/2” lower for all lateral patient moves.
- Avoid shearing force.
- Make sure bed is the right width, so excessive reaching by caregiver is not required.
- Lateral transfers should not be used with specialty beds that interfere with the transfer.
  - In this case, use a bariatric ceiling lift with supline sling.
- Ensure bed or stretcher doesn't move with the weight of the patient transferring.
- Use a bariatric stretcher or trolley if patient exceeds weight capacity of traditional equipment.

* "Stand-by for safety." In most cases, if a bariatric patient is about to fall, there is very little that the caregiver can do to prevent the fall. The caregiver should be prepared to move any items out of the way that could cause injury, try to protect the patient's head from striking any objects or the floor and seek assistance as needed once the person has fallen.

** Assure equipment used meets weight requirements. Standard equipment is generally limited to 250-350 lbs. Facilities should apply a sticker to all bariatric equipment with "EC"(for expanded capability) and a space for the manufacturer's rated weight capability for that particular equipment model.
- If patient has partial weight-bearing capability, transfer toward stronger side.
- Consider using an abdominal binder if the patient's abdomen impairs a patient handling task.
- Identify a leader when performing tasks with multiple caregivers. This will assure that the task is synchronized for increased safety of the healthcare provider and the patient.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patients weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
**Bariatric Algorithm 3: Bariatric Reposition in Bed: Side-to-Side, Up in Bed**

**Start Here**

- **Can patient assist?**
  - Fully: Caregiver assistance not needed; patient may/may not use weight-specific positioning aid
  - Partially or No
    - **Is patient cooperative?**
      - Fully: Bariatric ceiling lift with supine sling, air-assisted device or friction-reducing aid (minimum of 2 to 3 caregivers)
      - Partially or No
        - Bariatric ceiling lift with supine sling, air-assisted device or friction-reducing aid (minimum of 3 caregivers)

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- When pulling a patient up in bed, place the bed flat or in a Trendelenburg position (if tolerated and not medically contraindicated) to aid in gravity; the side rail should be down.
- Avoid shearing force.
- Adjust the height of the bed to elbow height.
- Mobilize the patient as early as possible to avoid weakness resulting from bed rest. This will promote patient independence and reduce the number of high risk tasks caregivers will provide.
- Consider leaving a friction-reducing device covered with drawsheet, under patient at all times to minimize risk to staff during transfers as long as it doesn't negate the pressure relief qualities of the mattress/overlay.
- Use a sealed, high-density, foam wedge to firmly reposition patient on side. Skid-resistant texture materials vary and come in set shapes and cut-your-own rolls. Examples include:
  - Dycem (TM)
  - Scoot-Guard (TM): antimicrobial; clean with soap and water, air dry.
  - Posey-Grip (TM): Posey Grip does not hold when wet. Washable, reusable, air dry.

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- If patient has partial weight-bearing capability, transfer toward stronger side.
- Consider using an abdominal binder if the patient's abdomen impairs a patient handling task.
- Assure equipment used meets weight requirements. Standard equipment is generally limited to 250-350 lbs. Facilities should apply a sticker to all bariatric equipment with "EC" (for expanded capability) and a space for the manufacturer's rated weight capacity for that particular equipment model.
- Identify a leader when performing tasks with multiple caregivers. This will assure that the task is synchronized for increased safety of the healthcare provider and the patient.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
**Bariatric Algorithm 4: Bariatric Reposition in Chair: Wheelchair, Chair, or Dependency Chair**

*Stand-by for safety.* In most cases, if a bariatric patient is about to fall, there is very little that the caregiver can do to prevent the fall. The caregiver should be prepared to move any items out of the way that could cause injury, try to protect the patient's head from striking any objects or the floor and seek assistance as needed once the person has fallen.

- If patient has partial weight-bearing capability, transfer toward stronger side.
- Consider using an abdominal binder if the patient's abdomen impairs a patient handling task.
- Assure equipment used meets weight requirements. Standard equipment is generally limited to 250-350 lbs. Facilities should apply a sticker to all bariatric equipment with "EC" (for expanded capabity) and a space for the manufacturer's rated weight capacity for that particular equipment model.
- Identify a leader when performing tasks with multiple caregivers. This will assure that the task is synchronized for increased safety of the healthcare provider and the patient.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.

- Take full advantage of chair functions, e.g., chair that reclines, or use an arm rest of chair to facilitate repositioning.
- Make sure the chair wheels are locked.
- Consider leaving the sling under the patient at all times to minimize risk to staff during transfers after carefully considering skin risk to patient and the risk of removing/replacing the sling for subsequent moves.
Can patient sustain limb position to assist in making body part accessible?

Start Here

Assemble multidisciplinary team to develop creative solutions that are safe for patient and caregiver.

**Examples:**
- Modify use of a full body sling lift to elevate limbs for bathing or wound care (i.e. bariatric limb sling).
- Use draw sheet with handles for 2 caregivers (one per side) to elevate abdominal mass to access the perineal area (e.g., catheterization, wound care).
- To facilitate drying a patient between skin folds, use the air assisted lateral transfer aid to blow air or use a hair dryer on a cool setting.
- Use sealed high-density foam wedge to firmly reposition patient on side. Skid-resistant texture materials vary and come in set shapes and cut-your-own rolls. Examples include:
  - Dycem(TM)
  - Scoot-Guard(TM): antimicrobial; clean with soap and water, air dry.
  - Posey-Grip(TM): Posey Grip does not hold when wet. Washable, reusable, air dry.

A multidisciplinary team needs to problem solve these tasks, communicate to all caregivers, refine as needed and perform consistently.
- Consider using an abdominal binder if the patient's abdomen impairs a patient handling task.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
- If the patient has respiratory distress, the stretcher must have the capability of maintaining a high Fowler's position.
- Newer equipment often is easier to propel.
- If patient is uncooperative, secure patient in stretcher.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient’s weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.
**Bariatric Algorithm 7: Toileting Tasks for the Bariatric Patient**

**Start Here**

- **Stand by for safety to escort to toilet or bedside commode.** (1-2 caregivers)
  - **Yes**
    - **Can toilet accommodate patient's weight?**
      - **Yes**
        - **Use full body sling lift with a toileting sling to transfer to bedside commode.** (3 caregivers)
      - **No**
        - **Can patient bear weight and ambulate?**
          - **Yes**
            - **Partial**
          - **No**
            - **Use stand assist lift and transfer patient onto bedside commode.** (2 caregivers)
  - **No**
    - **Stand by for safety to escort to bedside commode.** (1-2 caregivers)

- **Is patient cooperative?**
  - **No**
    - **Use full body sling lift with a toileting sling to transfer to bedside commode.** (3 caregivers)
  - **Yes**
    - **Does patient have upper extremity strength?**
      - **Yes**
      - **No**

**Considerations:**
- Is bathroom doorway wide enough to accommodate entry of mechanical lift device and patient?
- Assure equipment used meets weight requirements and is appropriately sized for patient.
- Typically, standard toilets are rated to 350 lbs. maximum capacity.
- During any patient transferring task, if any caregiver is required to lift more than 35 lbs of a patient's weight, then the patient should be considered to be fully dependent and assistive devices should be used for the transfer.