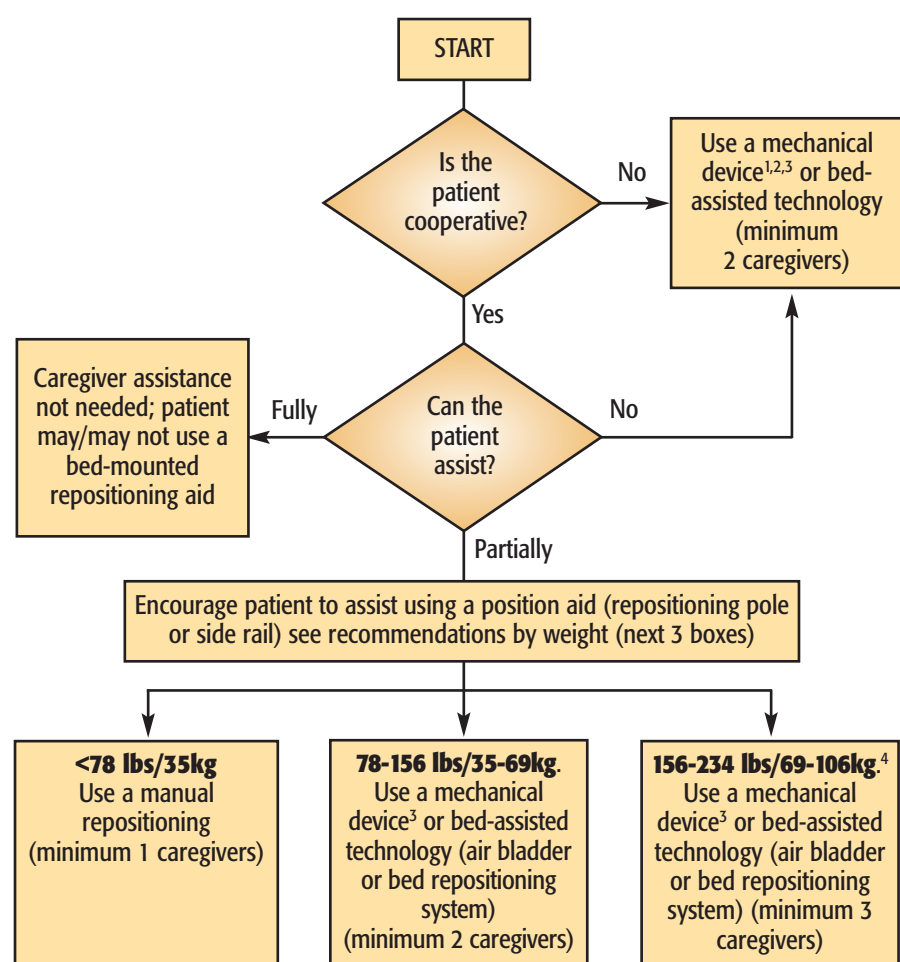
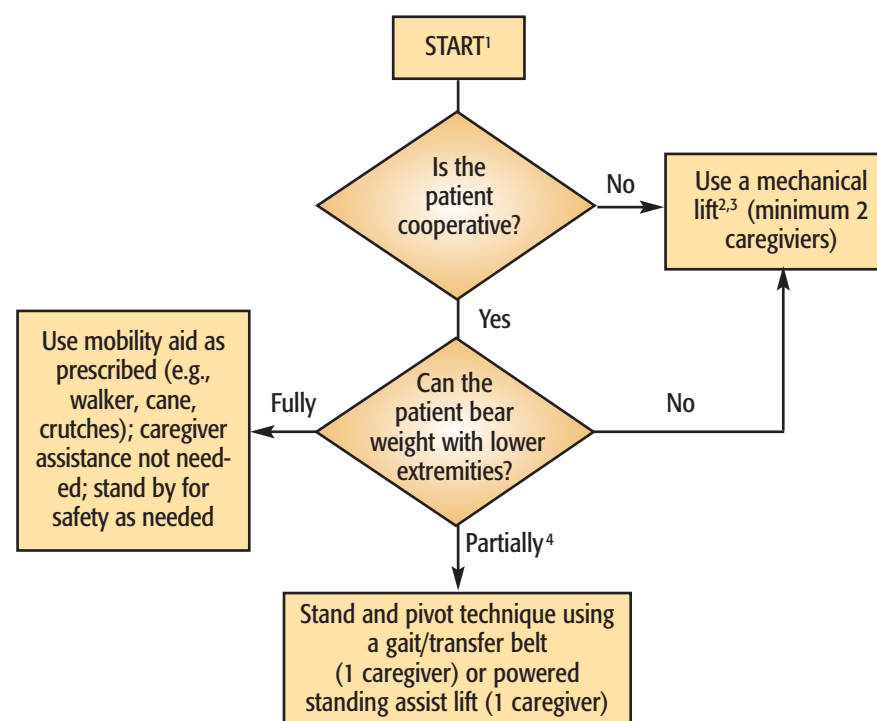


## Orthopaedic Algorithm 1 Turning patient in bed (side-to-side)



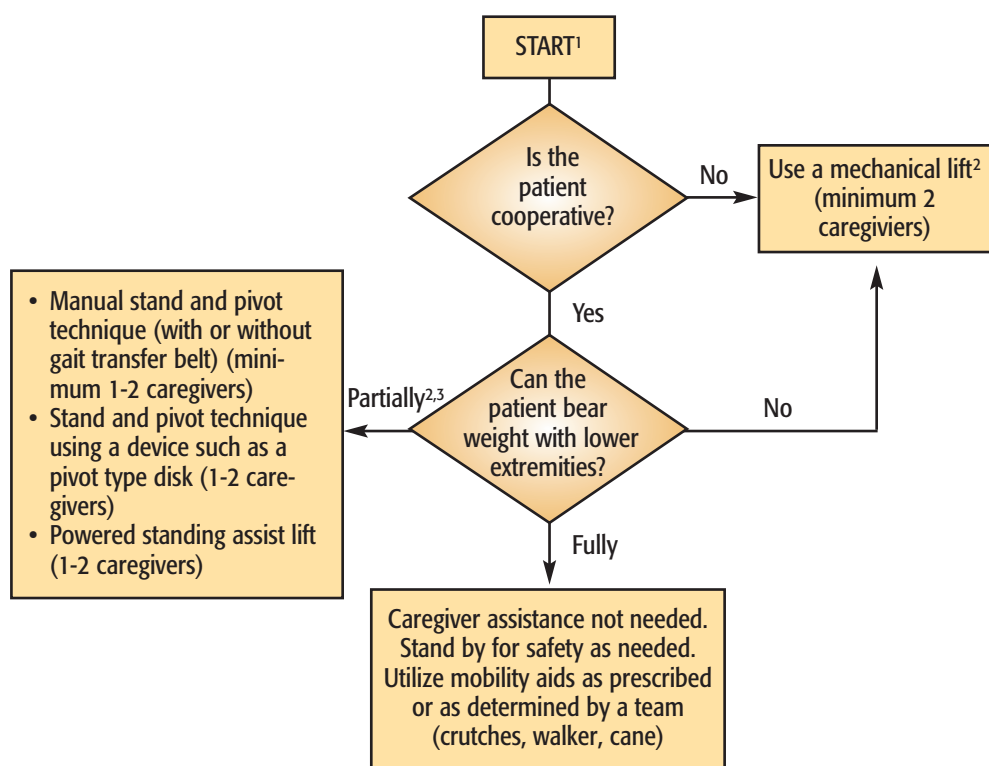
1. Maintain orthopaedic precautions as prescribed while performing this activity such as total hip, knee, shoulder, or spine precautions.
2. Select sling to meet and maintain the patient's pre-op or post-op positioning guideline/precautions for the affected limb/body part(s). For more information on sling section, see Appendix A.
3. Examples of repositioning mechanical devices are: Turning clips: these simple slips attach to a bed sheet and can be used with a floor-based lift or ceiling-based lift to facilitate turning a patient. Turning straps/slings one end of these straps or slings is connected to the bed and the other end is attached to either a ceiling or floor based lift to facilitate turning the patient. Powered mechanical devices: a ceiling lift is a powered overhead lift that can be used with a repositioning sling to turn a patient in bed. Friction reducing devices: either tubular in design, or two separate pieces of material are placed under the patient to assist in turning the patient in bed or moving the patient to the head of the bed. Pulley systems: these devices work by use of a pulley system and an overhead frame. The user turns a crank, which engages the pulley system to retract straps that are connected to a rod and bed sheet, thus turning the patient on the side.
4. If the patient weighs more than 234 lbs. mechanical assistive devices should be used to assist. Use your best clinical judgment for the number of caregivers required to assist.

## Orthopaedic Algorithm 2 Vertical transfer of a post-operative total hip replacement patient (bed to chair, chair to toilet, chair to chair, or car to chair)



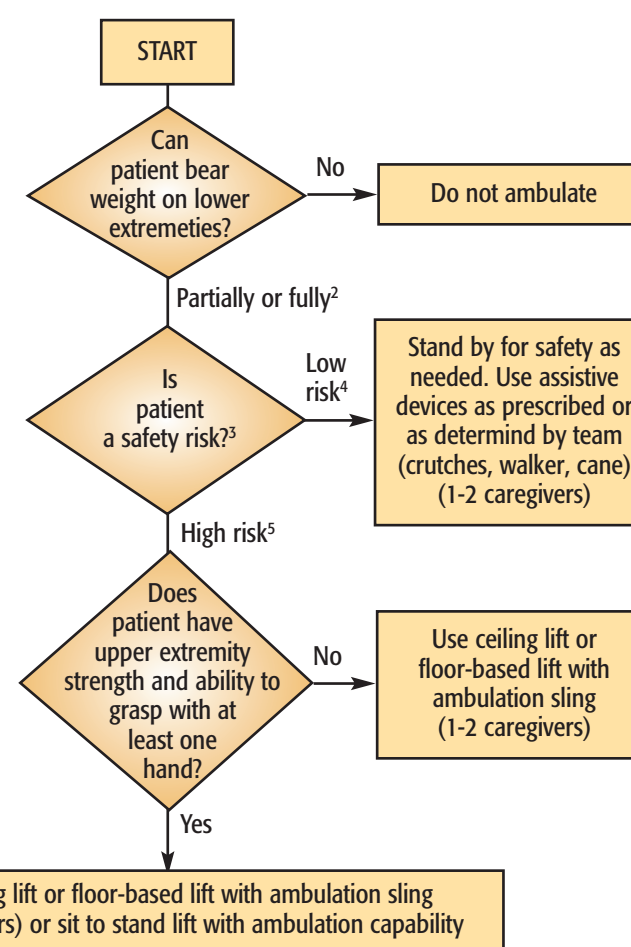
1. See 1a, 1b, 1c, 1d below for techniques to position patient at side of bed.
  - 1a. Moving from supine head of bed elevated to sitting at edge of bed requires: Patient's ability to shift their seated weight in a sitting position. Typically accomplished by unweighting one buttock and moving it toward the edge of the bed; repeating this in alternating fashion until patient is sitting at edge of bed.
  - 1b. With an impaired upper or lower extremity, caregiver might need to support the limb while patient attempts #1A.
  - 1c. If patient is unable to accomplish #1A with #1B and the amount of assistance from caregiver will exceed 35lbs., then a mechanical lift device should be used to achieve sitting position at the edge of the bed.
  - 1d. Anti-friction sheets and seated discs might be useful when the amount of caregiver assistance is close to recommended limits; be aware of skin shearing risks. Shearing forces are caused when there are two forces moving in opposite directions adjacent to each other (like scissors).
2. Maintain orthopaedic precautions as prescribed while performing this activity such as total hip, knee, shoulder, or spine precautions.
3. Select sling to meet and maintain the patient's pre-op or post-op positioning guideline/precautions for the affected limb/body part(s). For more information on sling section, see Appendix A.
4. This will include situations where the patient may be allowed: a) Limited weight bearing on one lower extremity and full weight bearing on the other extremity; b) Partial weight bearing through both lower extremities.

## Orthopaedic Algorithm 3 Vertical transfer of a patient with an extremity cast/splint



1. Moving from supine head of bed elevated to sitting at edge of bed requires a patient's ability to shift their seated weight in a sitting position:
  - a. When assistance is not required, this is typically accomplished by unweighting one buttock and moving it toward the edge of the bed; repeating this in alternating fashion, until patient is sitting at the edge of the bed.
  - b. With an impaired upper or lower extremity:
    - if the amount of assistance from caregiver does not exceed 35 lbs., caregiver may provide limb support while patient moves unassisted to side of bed (see 1a. above)
    - if the amount of assistance from caregiver may exceed 35 lbs., then a limb support strap/sling with a mechanical lift will provide limb support while patient moves unassisted to side of bed (see 1a. above)
  - c. If patient is unable to accomplish a. and / or b. then utilize one of the following options:
    - mechanical lift device with a seated sling to lift patient to side of bed
    - friction-reducing device to assist staff in pulling patient to side of bed
  - d. Friction-reducing devices and seated discs may be useful when the amount of caregiver assistance is close to recommended limits, but be aware of skin shearing risks. Shearing is caused when there are two forces moving in opposite directions adjacent to each other (like scissors).
2. Select sling to meet and maintain the patient's pre-op or post-op positioning guideline/precautions for the affected limb/body part(s). For more information on sling selection, see Appendix A.
3. Patient can bear weight on one leg only (e.g., weight bearing on unaffected limb or limited weight bearing on affected limb).

## Orthopaedic Algorithm 4 Ambulation



1. Non-weight bearing: Patient is unable to bear weight through both lower extremities or weight-bearing through both lower extremities is contraindicated.
2. Partial weight bearing: This will include situations where the patient may be allowed: a) Limited weight bearing on one lower extremity and full weight bearing on the other extremity; b) Partial weight bearing through both lower extremities.
3. Safety risks may include: decreased cognition; decreased ability to cooperate/ combativeness; medical stability.
4. Factors that contribute to low safety risk: a) Lack of combativeness; b) Ability to follow commands; c) Medical stability; d) Experience with the assistive device.
5. Factors that contribute to high safety risk: a) Combative; b) Lack of ability to follow commands; c) Medical instability; d) Lack of experience with the assistive device, e) neurologic deficits.