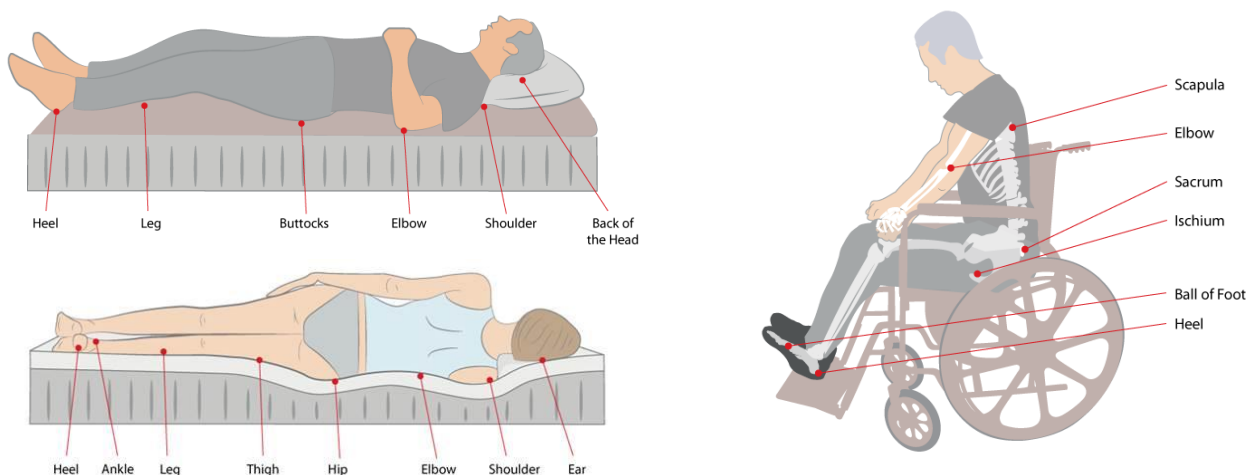


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| Applies to: | LPNs, NPs, OTs, PTs, RAs, RNs. |
| Purpose: | To support team members in applying positioning principles and strategies with clients and their families in the prevention of pressure injuries (PIs). |

Guiding Principles

- The forces of pressure, shear, friction and moisture on our skin increase susceptibility to pressure injuries.
- Identifying these forces and the areas of the skin at risk is vital when considering body positions in the prevention of pressure injuries.

High Risk Areas for Pressure Injury



The Role of Occupational Therapists and Physiotherapists

- Therapists assess, direct interventions and provide best practice education related to mobility and body positioning to prevent pressure injuries.
- Therapists assess for equipment needs and provide recommendations to assist clients to obtain and source funding.

General Positioning Strategies

Alternate Positions/Repositioning

How often should a client move or be moved into an alternate position?

- A schedule often begins with a full turn every 2 hours but may be tailored for specific client needs.
- When sitting in a chair or wheelchair, small weight shifts should be done every 15 minutes.

What factors influence the positioning schedule?

- Client's routine and performance in daily activities, including ability to reposition.
- Type of support surface.
- Severity and location of current pressure injury.
- Prior history of pressure injury.
- Co-morbid health and medical issues such as: digestion issues; respiratory issues; pain; medication; etc.
- Braden Scale Score, particularly the subset scale in Mobility.

Ways to Support Body Positions in Bed

When clients are lying supine (on back), or being repositioned to long sitting or sitting Semi-Fowlers, pressure and shear can be reduced:

When repositioning:

- Using a slider sheet system or lift device and sling.
- Boosting a client up on an electric bed to align hips 2 inches up from where the head “gatch” (bed bends) to minimize sacral-sitting (slumped posture) before the head of the bed is raised.
- Raising the bed knee “gatch” by 10-20 degrees before raising the head of the bed to prevent the client from “sliding down” the bed.

When positioned:

- Ensuring that the head of the bed is raised no more than 30 degrees, or using an appropriate bed wedge if the head of the bed cannot be raised.
- Avoid having clients sitting straight up when seated in bed.
- Positioning the head of the bed 45-70 degrees during meal times and one hour afterwards or as recommended by a health care team member.

Note: For breathing, swallowing or digestive issues the head of the bed may need to be higher than 30 degrees.

When clients are side-lying, pressure and shear can be reduced by:

- Tilting the client in partial side-lying position (lateral tilt 15-30 degrees) to offload pressure at the coccyx and hip.
- Using pillows or bed wedges to support client in side-lying position.
- Placing a pillow between the knees and the ankles to reduce risk of pressure injury.



Prevent pressure injuries to heels by:

- Elevating/offloading heels off the support surface with the use of positioning aids.
 - A pillow placed lengthwise under each leg or a 1.5” wedge, supporting the back of the knee and allow the heels to dangle without surface contact.
 - Positioning aids include: pillows or contoured cushions under calves, heel protector boots, etc.
- Reducing shear and friction from spasms or excessive movement by using a slippery surface or a second layer (e.g., specialty double layer socks).
- Supporting the knee with a bolster if the client has a knee contracture so that the heel is supported off the support surface.
- Protecting heels from dragging on the surface when boosting the client up the bed (e.g., bend client’s knees to position feet closer to buttocks, or use slider sheet system, or repositioning sling, etc.)

Ways to Support Body Position in Sitting

When a client is sitting in a chair or wheelchair:

- An ideal seated position is upright, with 90 degrees at hips, knees, and with head directly over pelvis.
- Ensure client’s feet are fully supported on a surface such as the floor or wheelchair footrests to help distribute pressure (i.e., feet support 18% of a person’s body weight).
- Maximize support surfaces that contact the client’s body to help redistribute pressure (e.g., seat cushion to contact client buttock and whole upper leg).
- If complex postures exist, refer to an Occupational Therapist or Physiotherapist.

Ways to Support Body Position in Sitting Continued

Alternate Positions in Sitting:

- Use small weight shifts every 15 minutes when sitting.
- Use tilt wheelchairs, recliner chairs or electric beds to help change angles and positions when at rest.
 - When tilting a wheelchair, the tilt must be 25 degree or greater to reduce pressure and optimize blood flow to tissues at the ischial tuberosities (buttock bones)/buttock area.
 - Use recline along with the tilt feature on a wheelchair, as per a clinician's recommendation, to obtain greater pressure relief at the ischial tuberosities than tilt alone – see references below for more information.

Positioning Aids:

- Use positioning aids in sitting to provide postural support and help redistribute pressure.
- Positioning aids in sitting can include cushions, backrests, calf pads on leg rests, arm troughs, headrests, etc.
- Avoid using donut-shaped cushions, pillows, towels or blankets as positioning aids.

Refer to an Occupational Therapist or Physiotherapist for specialized seating.

References

- BC Provincial Nursing Skin and Wound Committee (2014). *BC provincial guideline: prevention of skin breakdown due to pressure, friction/shear and moisture in adults & children*. Retrieved from <https://www.clwk.ca/buddydrive/file/guideline-prevention-skin-breakdown>
- Campbell, K.E., Woodbury, M.G. & Houghton, P.E. (2010). Implementation of best practice in the prevention of heel pressure ulcers in the acute orthopedic population. *International Wound Journal*, 7, 28-40.
- Rehabilitation Engineering and Assistive Technology Society of North America. *RESNA position paper on the application of tilt, recline, and elevating legrests for wheelchairs literature update (2015)*. Retrieved from <http://www.resna.org>