MEASURING THE RIGHT THING
FOR THE RIGHT REASON

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What is the Value of Risk Assessment Tools in Clinical Practice?

• To assist clinicians in making quantitative or qualitative estimates of risk within a given situation
• To understand the magnitude of the potential loss and probability that loss will occur
• To provide meaningful interventions to minimize the risk of harm or a condition arising in a health care environment

The Process of Risk Assessment

• Establish a context by understanding the environment, definitions, operations
• Identify the risk hazards, internal and external, intrinsic and extrinsic to the individual
• Analyze the contributing factors and risk of exposure to the risk
• Evaluate and prioritize the characteristics of risk in order to determine which patient/resident needs to have interventions
• Tackle the risk by implementing interventions and assessing the effectiveness of those interventions
Barriers to Accurate Risk Assessments

- A lack of understanding the components of the risk assessment; a belief that assessments are “self-explanatory”
- An inability to use the risk assessment appropriate to the setting
- A missed opportunity to appreciate the risks in a given individual patient/resident
- A lack of support to use nursing judgment
- Chaotic work environments
- A focus on completion of tasks without understanding whether quality of assessment was achieved
- The identification of risk without appropriate support to provide meaningful interventions

The Braden Scale for Pressure Ulceration Risk

- NPUAP now calls pressure ulcers “pressure injuries”
- In the US, considered the principle risk assessment tool, replacing the Norton and Gosnell scales
- Used in hospitals, rehabilitation centers, skilled nursing facilities, LTACs and home health/hospice
- Uses 6 areas in which a nurse assesses an individual patient/resident and totals the score to determine high, moderate, low or no risk of pressure ulcer development
Sensory Perception

- The ability to respond meaningfully to pressure-related discomfort
  - 1. Completely Limited Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation OR limited ability to feel pain over most of body.
  - 2. Very Limited Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness OR has a sensory impairment which limits the ability to feel pain or discomfort over ½ of body.
  - 3. Slightly Limited Responds to verbal commands, but cannot always communicate discomfort or the need to be turned OR has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.
  - 4. No Impairment Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort.

Factors Impacting Sensory Perception

- Paralysis, paraplegia
- Moderate to advanced dementia
- Use of narcotics, major tranquilizers
- Delirium
- Hospice/terminal states
- Immediate post-op periods
- Time on the operating room table

Moisture

- The degree to which skin is exposed to moisture
  - 1. Constantly Moist Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.
  - 2. Very Moist Skin is often, but not always moist. Linen must be changed at least once a shift.
  - 3. Occasionally Moist Skin is occasionally moist, requiring an extra linen change approximately once a day.
  - 4. Rarely Moist Skin is usually dry, linen only requires changing at routine intervals.
Factors Impacting Moisture

- Urinary incontinence in a brief that does not require the linens to be changed more than just routinely
- Fecal incontinence that is more deleterious to the skin than urinary incontinence
- Perspiration for an obese/morbidly obese individual in skin folds
- The type of mattress used (plastic surface)
- The production and control of saliva

Activity

- The degree of physical activity
  - 1. Bedfast Confined to bed.
  - 2. Chairfast Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.
  - 3. Walks Occasionally Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.
  - 4. Walks Frequently Walks outside room at least twice a day and inside room at least once every two hours during waking hours.

Factors Impacting Activity

- Physician’s orders limiting out of bed activities
- Operating room and post-anesthesia conditions
- Chairfast may be more deleterious than bedfast regarding pressure over the posterior pelvis
- If a patient/resident is Hoyer lifted to the chair, are they bedfast or chairfast?
- Specific diagnoses that limit activity: stroke, fractured lower limbs, spinal cord injuries, VDRF, time on dialysis
Mobility

• The ability to change and control body position
  – 1. Completely Immobile Does not make even slight changes in body or extremity position without assistance.
  – 2. Very Limited Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.
  – 3. Slightly Limited Makes frequent though slight changes in body or extremity position independently
  – 4. No Limitation Makes major and frequent changes in position without assistance

Factors Impacting Mobility

• Can the patient/resident demonstrate being able to turn to both sides in bed?
• Once in the chair, can the patient/resident reposition or stand?
• Will the patient/resident turn and reposition without prompting?
• If the person turns in bed, what will s/he be looking at?

Nutrition

• Usual meal intake
  – 1. Very Poor Never eats a complete meal. Rarely eats more than ¼ of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement OR is NPO and/or maintained on clear liquids or IVs for more than 5 days.
  – 2. Probably Inadequate Rarely eats a complete meal and generally eats only about ½ of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement OR receives less than optimum amount of liquid diet or tube feeding.
  – 3. Adequate Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) per day. Occasionally will refuse a meal, but will usually take a supplement when offered OR is on a tube feeding or TPN regimen which probably meets most of nutritional needs.
Impact of Nutrition

- Patients/Residents with a weight loss within 6 weeks of admission are a target for nutritional-related pressure ulcers
- They may have no idea how much they weigh
- Ask if clothes are fitting loosely or tightly
- Differentiate between weight from edema versus muscle mass
- Institutional food may be less palatable

Impact of Nutrition

- The impact of disease may cause the individual to have difficulty accessing food (endurance issues of CHF)
- The individual may be eating full meals of poor quality foods - a diet history provides more information on what the person actually has been eating
- Overweight or obese patients/residents are often described as “well nourished”
- What is the serum albumin or prealbumin marker?

Friction and Shear

- 1. Problem Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures or agitation leads to almost constant friction.
- 2. Potential Problem Moves feebly or requires minimum assistance. During a move skin probably slides to some extent against sheets, chair, restraints or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.
- 3. No Apparent Problem Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. Maintains good position in bed or chair.
Issues Impacting Friction and Shear

• VAP (ventilator associated pneumonia) precautions
• Enteral feeding protocols requiring the head of the bed to be elevated 30-45 degrees during feedings and one hour after to minimize the risk of aspiration
• Beds/chairs that may allow the individual to slide
• Contractures that prevent appropriate positioning

Mr. P. is an 83 year old male admitted to the hospital from his dialysis unit for a clogged Permacath. He has a history of CVA with left hemiplegia, coronary artery and carotid artery stents, and is fed exclusively by enteral feedings via continuous drip. He has a Stage 2 pressure injury of the sacrum. What is his Braden Score?
Very High Risk: Total Score 9 or less
High Risk: Total Score 10-12
Moderate Risk: Total Score 13-14
Mild Risk: Total Score 15-18
No Risk: Total Score 19-23

How Accurate is Your Score of Mr. P?

• How does dialysis impact his risk?
• How does his hemiplegia impact his risk?
• How is his actual Stage 2 pressure injury included in the Braden Scale?

— IF YOUR FACILITY’S POLICIES FOR PRESSURE ULCER INTERVENTIONS ARE DEPENDENT UPON THE BRADEN SCALE SCORE, WHAT HAPPENS IF THE SCORE IS INCORRECT?

The Waterlow Scale

• Considers BMI
• Condition of skin
• Age and gender of individual
• Recent weigh gain/loss
• Appetite
• Urinary, fecal incontinence
• Mobility
• Special risks: terminal cachexia, multiple organ failure, single organ failure, PVD, anemia, smoking, neurological deficits from diabetes, MS and stroke, motor-sensory issues, paraplegia, time on the OR table and the use of cytotoxic, high dose steroids and anti-inflammatory medications
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Interventions to Improve Pressure Ulcer Risk Assessment

- Orientation must include specific support for staff regarding the question being asked and concrete examples of individuals at high risk
- Encouragement of staff to exercise their nursing judgment
- Reviewing the charts of individuals who developed wounds despite being at low risk
- Using these charts as teaching moments
- Having a second review performed within 24 hours by a supervisor/manager at bedside
- Revisit the policies for wound prevention—do the facility cut points for high, moderate and low risk make sense?
Fall Risk Assessments

- Morse Fall Scale –
  - Used widely in acute care and less extensively in long-term care settings
- Johns Hopkins Fall Assessments
  - Home Care
  - Acute care
- Briggs used primarily in long-term care settings

Morse Fall Scale (MFS)

- Components:
  - History of falling immediately or within 3 months
  - Secondary diagnosis if the individual has more than one diagnosis
  - Ambulatory Aid
    - This is scored as zero even if assistance from a nurse is needed, if the person uses a wheelchair or is at bedrest
  - IV/Heparin lock
  - Gait/Transferring ability
  - Mental Status

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Morse Fall Scale Scoring
No Risk: 0-24
Low Risk: 25-50
High Risk: 51+

Ms. S is a 68 year old woman who was admitted to the hospital with a fractured hip. She has no other diagnoses. She will be going to the OR today. She has an IV. It is assumed her gait is abnormal as she will be undergoing and ORIF. She is receiving narcotic analgesics and is a little “loopy”
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Johns Hopkins Fall Risk

- **Age**
  - 60-69 (1 point); 70-79 (2 points); over 80 (3 points)
- **Fall History**
  - One fall within 6 months of admission (5 points)
- **Elimination**
  - Incontinent (2 points); urgency/frequency (2 points); urgency/frequency and incontinence (4 points)
- **Medications - PCA/opiates, anticonvulsants, antihypertensives, diuretics, hypnotics**
  - 1 high risk drug (1 point); 2 high risk drugs (2 points); 3 or more high risk drugs (3 points)
- **Patient Care Equipment (IV, chest tube, catheter)**
  - 1 present (1 point); 2 present (2 points); 3 or more (3 points)
- **Mobility**
  - Requires assistance/supervision with mobility/transfer/ambulation (2 points); unsteady gait (2 points); visual/auditory impairment affecting mobility (2 points)
- **Cognition**
  - Altered awareness or immediate physical environment (1 point); impulsive (2 points), lack of understanding of limitations (4 points)

Johns Hopkins Fall Scoring

6-13 points: Moderate risk
More than 13: High risk

Johns Hopkins Fall Scale

- Can it be used in settings other than a hospital?
- If the individual is younger than 60 but has a sudden mental status change leading to hospitalization, what would be the score?
- If it is used for home care, does it provide an accurate assessment?
Briggs Fall Scale

- Assessment of mental status
- Fall history
- Ambulation/elimination
- Gait, orthostatic hypotension
- Medications
- Diagnoses

Fall Risk Assessment Interventions

- Is the tool being used appropriate for the individual in an appropriate setting
- Is the nurse expected to use nursing judgment in completing the fall assessment
- How often should the individual be reassessed?
- If “Falling Leaf” or “Falling Stars” are used, who is responsible for removing the symbol when the individual is discharged?