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The Impact of Functional Interventions and Client Advocacy on Wound Healing

Neely Tolbert Sullivan MPT, CLT-LANA

Bio

- Neely Sullivan, PT, CLT-LANA, has worked with diverse client populations ranging from pediatric to geriatric in a variety of clinical settings. These experiences and multiple courses on the topic have allowed her to treat and develop client care programs for clients living with lymphedema and wounds. She has served in multiple levels of regional and corporate management positions. In these positions, Neely has developed policies and worked closely with interdisciplinary teams to ensure that clients living with lymphedema and/or wounds have the opportunity to attain their highest level of function and quality of life. She is a certified lymphedema therapist and has most recently been responsible for the identification, implementation, and evaluation of clinical programs in long-term care settings. Neely currently provides educational support to 13,000+ therapists nationwide as an Education Specialist for Select Rehabilitation. Neely has lectured nationally and at the state level on the topics of Lymphedema and Wound Care Management. She has authored publications focusing on edema and lymphedema management.

- Presenter Disclosure: Financial: Neely Sullivan has received an honorarium for presenting this course. Non-financial: Neely Sullivan has no relevant non-financial relationships to disclose.

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Learning Outcomes

After this course, participants will be able to:

- Identify at least three examples of the significance of client advocacy for individual's at risk for skin breakdown.
- Define at least three elements of a functionally based treatment POC that provides purpose and meaning.
- Identify at least two standardized tools available to predict the risk of skin breakdown and the need for skilled interventions.
- Describe at least four common interventions with components of advocacy to this population using case examples.

Client Advocacy- Implementing Strategies for Client Centered Care

What is Advocacy?

- **Advocacy** is….
  - Actively supporting and/or intervening on behalf of another
  - Promoting another's well-being
  - Looking out for another
  - Standing up for someone
  - Making something important known

Why Clients Need Advocates

- Many clients are no longer able to manage for themselves
- A client's ability to function independently may be reduced
- A client may not notice any change in their ability to function

Purpose of Advocacy in the LTC Rehab Setting

- To support a client at their highest level of function
- To recognize that a client's functional ability may decline and that interventions may be needed
- To assure that all team members assist all clients in maintaining their highest level of function

Advocacy for Clients with Wounds?

- 6.5 million people in the US are being treated for chronic wounds
- Chronic wounds cost to the nation's healthcare system $25 billion
- These numbers are expected to rise substantially in the coming years

Advocacy for Clients with Wounds?

- At risk for complications related to wounds
- Wounds create restrictions on daily activities
- Place significant burden on family and caregivers
- Associated with early mortality

Advocacy for Clients with Wounds?

- Plan of care developed without consideration of whole person
- Clients feel disengaged in decision making regarding wound care
- Client should be at the center of treatment

Case Study

- Mrs. Howard is an 82-year-old who resides in a LTC community. Over the past 3 years, she has become incontinent and experienced frequent episodes of malnutrition and dehydration. Mrs. Howard developed a stage IV pressure injury in the sacral area after a recent hospitalization for an exacerbation of COPD and a mild case of COVID-19. She continues to experience SOB and prefers to sit with the head of bed above 45 degrees in bed to assist breathing. Mrs. Howard gets agitated when she is repositioned, especially in a side-lying position.

Case Study

- During a family meeting, Mrs. Howard's children asked the following questions:
  - "If this is not something she likes, are we doing the right thing for her?"
  - "Is this quality of life?"

Quality of Life (QoL)

- The standard of health, comfort, and happiness experienced
- QoL is challenging to measure because everyone can define it differently

QoL Assessments * denotes free access

- Medical Outcomes Study Short Form (SF-36)*
- Research and Development 36-Item Form
- Sickness Impact Profile
- Quality of Life Ladder*
- Barthel Index*
- The Nottingham Health Profile
- EuroQol EQ-5D*

Quality of Life Ladder

Source: https://innobatics.com/cantril-ladder/ used with permission

The Cantril Self-Anchoring Scale

Assume that this ladder is a way of picturing your life.The top of the ladder represents the best possible life for you. The bottom rung of the ladder represents the worst possible life for you.

Indicate where on the ladder you feel you personally stand right now by marking the circle.

Source: Glatzer W, Gulyas J. Cantril self-anchoring striving scale. Encyclopedia of quality of life and well-being research. 2014:509-11.

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HRQoL Assessments Diabetic Foot Ulcers *denotes free access

- Cardiff Wound Impact Schedule Diabetes 39
- Norfolk QoL in Diabetes Peripheral Neuropathy Questionnaire
- Neuro-QoL*
- Manchester Oxford Foot Questionnaire
- Diabetic Foot Ulcer scale*

HRQoL Assessments Leg Ulcers

- Hyland Leg and Foot Ulcer Questionnaire*
- Charing Cross Venous Leg Ulcer Questionnaire
- Sheffield Preference-based Venous Leg Ulcer 5D

Issues related to QoL in People with Leg Ulcers (Briggs et. al, 2007)

- Physical effects including pain, odor, itch, leakage, and infection
- Understanding and learning to provide care for leg ulcers
- The benefits and disappointment in client professional relationship
- Social, physical, and financial cost of a leg ulcer
- Psychological impact and difficult emotions

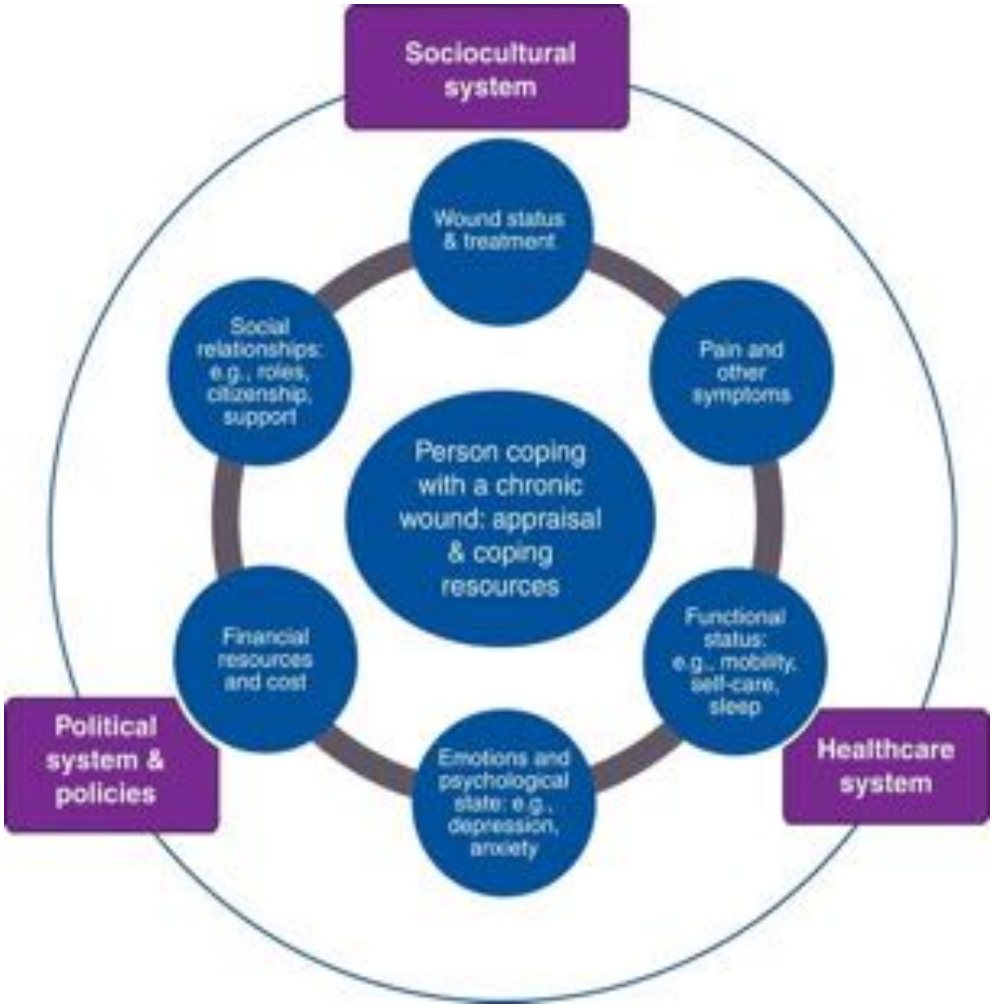
Issues related to QoL in People with Pressure Ulcers (Gorecki et. al, 2009)

- Physical restrictions resulting in lifestyle changes and the need for environmental adaptations
- Social isolation and restricted social life
- Negative emotions and psychological responses to changes in body image and self concept, and loss of independence
- Management of symptoms: pain, odor, exudate
- Health deterioration
- Burden on others

Issues related to QoL in People with Pressure Ulcers (Gorecki et. al, 2009)

- Financial hardship
- Wound dressings, treatments and other interventions
- Interaction with healthcare providers
- Perception of the cause
- Need for education about development, treatment, and prevention

CW- QoL Framework



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How do we Incorporate this Framework?

- Need client engagement
- Need to consider environmental factors
- Need to consider the individual's access to health resources

Treatment and QoL

- Some treatment options are not conducive to enhance a client's QoL
  - A client with foot ulcers who can't use a total contact cast because he needs to wear protective footwear at work and he can't maintain balance walking on a cast (Woo et al., 2016)
  - A client with venous leg ulcer who likes to take a shower every day to maintain personal hygiene but can't do so because she needs to wear compression bandages (Woo et al., 2016)

Addressing Client Concerns

- Quality of life?
- Will the treatment impede their ability to lead an independent life?
- What impact will the treatment have on their family/caregivers?

Treating the Wound, Not the Client

- Too often clinicians treat the wound rather than the client
- Most clients with wounds have comorbidities that interfere with healing
- Narrow focus fails to take into account that treatment affects other aspects life

Treating the Wound, Not the Client

- Treatment is centered around closing the wound rather than on the underlying medical problem
- Clinicians approach treatment from their own narrow focus
  - May impede their ability to treat the broader health issues

Treating the Wound, Not the Client

- Guidelines often limit what technology/treatment can be used
- There has not been a strong evidence-based approach to evaluating these treatment approaches

Audience Participation

- What are the Barriers You Face in Providing Person Centered Wound Care?

Image by tillburmann from Pixabay

Barriers (The Angiogenesis Foundation, 2017)

- Inconsistent views among professionals about the need for interventions
- A fee-for-service model of reimbursement
- Limited knowledge of diagnostics
- Ignorance of the serious medical, psychological, social, and economic consequences of chronic wounds
- Disparate patient access to quality wound care
- Therapies that are presented to patients and clinicians with limited evidence about their effectiveness

Barriers (The Angiogenesis Foundation, 2017)

- The assumptions by clinicians that all wounds are the same
- The inability of some clinicians to see a patient as an individual
- Reluctance by some clinicians to listen to the goals of their patients
- The tendency of the health-care system to focus on sickness rather than on wellness
- The fragmentation of wound care
- Financial incentives to keep the patient a patient
- The social stigma associated with chronic wounds
- The medical community's focus on products as being the solution to chronic wounds

Barriers (The Angiogenesis Foundation, 2017)

- A limited understanding by clinicians that chronic wounds are not a single disease state
- Fear
- Limited access and funding for durable medical equipment and home services
- Little understanding of the disease pathophysiology of chronic wounds

Future of Client Centered Care

(The Angiogenesis Foundation, 2017)

- Clients with wounds would have an interdisciplinary (IDX) team of professionals caring for them
- The physical, emotional, social, and cultural needs of the client would be central creating a plan of care
- Each client would receive the right care, at the right time, by the right professional

Future of Client Centered Care

(The Angiogenesis Foundation, 2017)

- Clients and caregivers would be listened to and respected by clinicians
- Clients would not be blamed when their wound does not heal
- The interests of clients, caregivers, clinicians, payers, and society would be integrated
- Treatment for people with wounds would be proactive rather than reactive

The Multidisciplinary Team

- The client
- Family
- Physician
- Administrator
- DON/ADON
- RNs
- LPNs
- Rehab Staff
- Activities
- Social Services
- Dietary
- Housekeeping
- Maintenance
- Divisional & Corporate Teams

Role of the Multidisciplinary Team

- Identify appropriate candidates for skilled intervention
- Ensure clients are provided the opportunity to attain their highest level of independence
- Provide best practice guidelines for documentation
- Ensure continuum of care with emphasis on physician/staff/caregiver training

Improve Healing and Outcomes

(The Angiogenesis Foundation, 2017)

- Create a national network for chronic wound care, and direct clients to those centers when wounds fail to improve
- Develop a rapid care pathway for people with chronic wounds so that clients have timely access to treatment by a specialist
- Develop safety certification and accreditation for wound care
- Create better metrics and tracking tools for measuring outcomes
- Redefine the desired outcome of wound care

Functional Activity Based Interventions

Impairment Based Treatment

- It can easily become *routine* for therapists to solely focus on impairment-based interventions
- Some of these impairment-based treatment approaches are necessary

Examples of Impairment Based Interventions

- Impaired integumentary system→ treatment of wound tissue and appropriate dressings
- Decreased ROM and strength → arcs and weights
- Decreased activity tolerance → restorator
- Decreased ROM and balance → cones

Functional Limitations

- Clients with chronic wounds experience mobility problems, and their ability to perform activities of daily living is limited

Research: Impact of Wounds on Functional Activities

- Study consisting of 88 patients with chronic leg ulcers, 75% reported difficulty performing basic housework (Roe et al., 1995)
- Study consisting of 50 clients with leg ulcers, 50% had problems getting on and off a bus and 30% had trouble climbing steps (Hyland et al.,1994)

Research: Impact of Wounds on Mental Health (Upton et al., 2013)

- In a web based survey, Healthcare practitioners (n = 908), acknowledged that mental health issues are common in people with chronic wounds
- Over 60% of the survey respondents indicated that between 25% and 50% of people with chronic wounds experience mental disorders
- Among all the symptoms, anxiety was rated the most common (81.5%)

Functional Deficits

- Requesting assistance may be difficult and uncomfortable
- Access to transportation and changes to living arrangements impact the individual
- Individuals may avoid social contacts and activities
- Clients may incur additional out-of-pocket expenses

Impairment Based Treatment

- Therapist may discharge the client once the wound has closed
- This may be before the client is functionally ready

Functionally Based Treatment

- A functionally based treatment approach prepares the client for the specific activities and skill sets that they need to both successfully transition and remain in their discharge environment

Resident's Rights

- The long-term care (LTC) survey guidelines (Tag F248) mandate that a facility must provide a person-appropriate program of activities that "should match the skills, abilities, needs and preferences of each resident with the demands of the activity and the characteristics of the physical, social and cultural environments."
- Additionally, in Tag F242, Self-Determination and Participation, the LTC survey guidelines state "the resident has the right to:
  - Choose activities, schedules and health care consistent with his or her interests, assessments and plans of care
  - Interact with members of the community both inside and outside the facility
  - Make choices about aspects of his or her life in the facility that are significant to the resident."

Determining the Best Approach

- Questions to consider:
  - Do you enjoy the current activity schedule?
  - What do you like to do for fun/relaxation/leisure?
  - Would you like to participate in more/different activities/try something new?
  - Are you upset that you cannot complete tasks/activities like you used to?
  - Would you like to be able to do more for yourself?
  - How much time do you spend in your room?

Determining the Best Approach

- Use standardized tests and measures to assess leisure and living skills * denotes free access
  - KohlmanEvaluation of Living Skills (KELS)
  - Preferences for Everyday Living (PELI)*
  - Modified Interest Checklist*
  - Role Checklist*
  - Assessment of Living Skills and Resources (ALSAR)
  - Canadian Occupational Performance Measure (COPM)

Soliciting Preferences

- Preferences for Everyday Living (PELI)
  - Is the activity important?
  - What are your preferences?
  - Combination Likert Scale and open ended questions about routines, habits and preferences

Q45. How important is it to you to be a member of a club?

Importance	Check all that Apply
☐ Very important (1) ☐ Somewhat important (2) ☐ Important, but can't do (5) ☐ Not very important (3) ☐ Not important at all (4) ☐ Non response (9)	*45a. Which kind of club(s) did you enjoy in the past?* ☐ Book club ☐ Glee club ☐ Crochet/knitting club ☐ Card club ☐ Computer club ☐ Outdoors club ☐ Church club ☐ Religious club ☐ Political club ☐ Elks ☐ VFW ☐ American Legion ☐ Red Hat Society ☐ Other: _____ *45b. What kind of clubs do you enjoy now?* ☐ Book club ☐ Glee club ☐ Crochet/knitting club ☐ Card club ☐ Computer club ☐ Outdoors club ☐ Church club ☐ Religious club ☐ Political club ☐ Elks ☐ VFW ☐ American Legion ☐ Red Hat Society ☐ Other: _____ Notes:

Q46. How important is it to be around children?

Importance	Check all that Apply

PELI by Dr. Kimberly Van Haitsma

Soliciting Preferences

- Modified Interest Checklist
  - Gathers information on a client's strength of interest and engagement in 68 activities in the past, currently, and in the future
  - Focus on leisure interests

Activity	What has been your level of interest						Do you currently participate in this activity?		Would you like to pursue this in the future?	
	In the past ten years			In the past year						
	Strong	Some	No	Strong	Some	No	Yes	No	Yes	No
Gardening Yardwork										
Sewing/needle work										
Playing card										
Foreign languages										
Church activities										
Radio										
Walking										
Car repair										
Writing										
Dancing										
Golf										
Football										
Listening to popular music										
Puzzles										
Holiday Activities										

Full version can be downloaded here for free once logged in. University of IL Board of Trustees

“Functional Resistance” in Rehab

- Are you “stuck” in tired treatment approaches?
- Are clients engaged during treatment sessions?
- Do you write impairment verses functionally oriented goals?
- Do you see a functional focus to the rehab interventions provided?

“Functional Resistance” in Rehab

- Do you collect assessment data but struggle with establishing functional goals?
- Do you recognize that you are not providing functionally focused interventions?
- Are you preparing clients for the skills required of them in the discharge environment?
- Has the FUN been lost from functional?

What does Functionally Based Treatment Look Like?

- Uses everyday materials and situations that provide opportunities to put therapy techniques into practice in fun and functional ways
- Can be used in any area within the center/facility, the therapy department, the client's room, the activities room, etc.
- A functionally based intervention can be made for just about any functional life activity

Purpose

- Ensure participants know the purpose of the functional activity
- Ask participants:
  - “What did we accomplish in therapy today?”
  - “How could you use these skills at home?”

Skilled Nature of Functionally Based Therapy

- Rehab goals are addressed during implementation of the functional activity
- Modifications are implemented to restore, compensate and/or adapt for functional deficits
- Skilled client and/or caregiver instruction should be included during functional activities

Considerations when Adapting Activities (Warchol et al., 2012)

- Attention span
- Environmental scanning
- Awareness of purpose/goal
- Communication ability
- Physical attributes
- Quality of work
- Problem solving

Considerations when Adapting Activities (Warchol et al., 2012)

- Sequencing
- Social factors
- Ability to initiate
- Ability to choose
- New learning ability
- Direction following
- Response time

Successful Activities

- Assess physical and cognitive function
- Learn about past habits and interests
- Choose activities based on past interests
- Adapt the activity to match physical and cognitive abilities
- Assess success of the activity

Research: Engagement and Support

(Nolan et al, 1995)

- Many residents are inactive/passive and the TV is a popular activity offering no socialization
- When nurses incorporated meaningful activity into their role and professional values, a hope-fostering environment develops
- Hope-fostering environment= where meaningful relationships involve active listening, and affirmation of the person's dignity and self-worth

Research: Impact of Community Intervention on Leg Ulcer (Edwards et al., 2009)

- Randomized controlled trial with 67 participants
- Participants were randomized to either the Lindsay Leg Club® model of care, emphasizing socialization and peer support; or the traditional community nursing model

Research: Impact of Community Intervention on Leg Ulcer (Edwards et al., 2009)

- Participants who received care under the Leg Club model demonstrated improved outcomes in QoL, morale, self-esteem, healing, pain and functional ability

Standardized Tests – Risk for Skin Breakdown

Standardized Tests

- Standardized tests are necessary in all areas of practice to record objective data that can be tracked uniformly.
- In most settings, the nurses are responsible for the initial assessment of risk for skin breakdown and the assessments that follow.
- The next slides will show samples of standardized risk for skin breakdown assessments, as well as discussion on how rehab can use the information on the tools to develop intervention.

Standardized Tests

- There are a variety of assessments to predict risk of skin breakdown. Regardless of what tool your facility uses they will all present us with key factors that we can address as therapists.
- The skin assessment tool should always be a part of our screening process.
- Standardized tests give us valuable information, but how we use that information is equally as valuable.

Standardized Tests

- The tool most commonly known is the Braden Scale.
- The Braden Scale addresses six areas and uses a 1 – 4 score with 4 being no issues.
  - Sensory Perception
  - Activity
  - Moisture
  - Mobility
  - Nutrition
  - Friction and Shear

Braden Scale

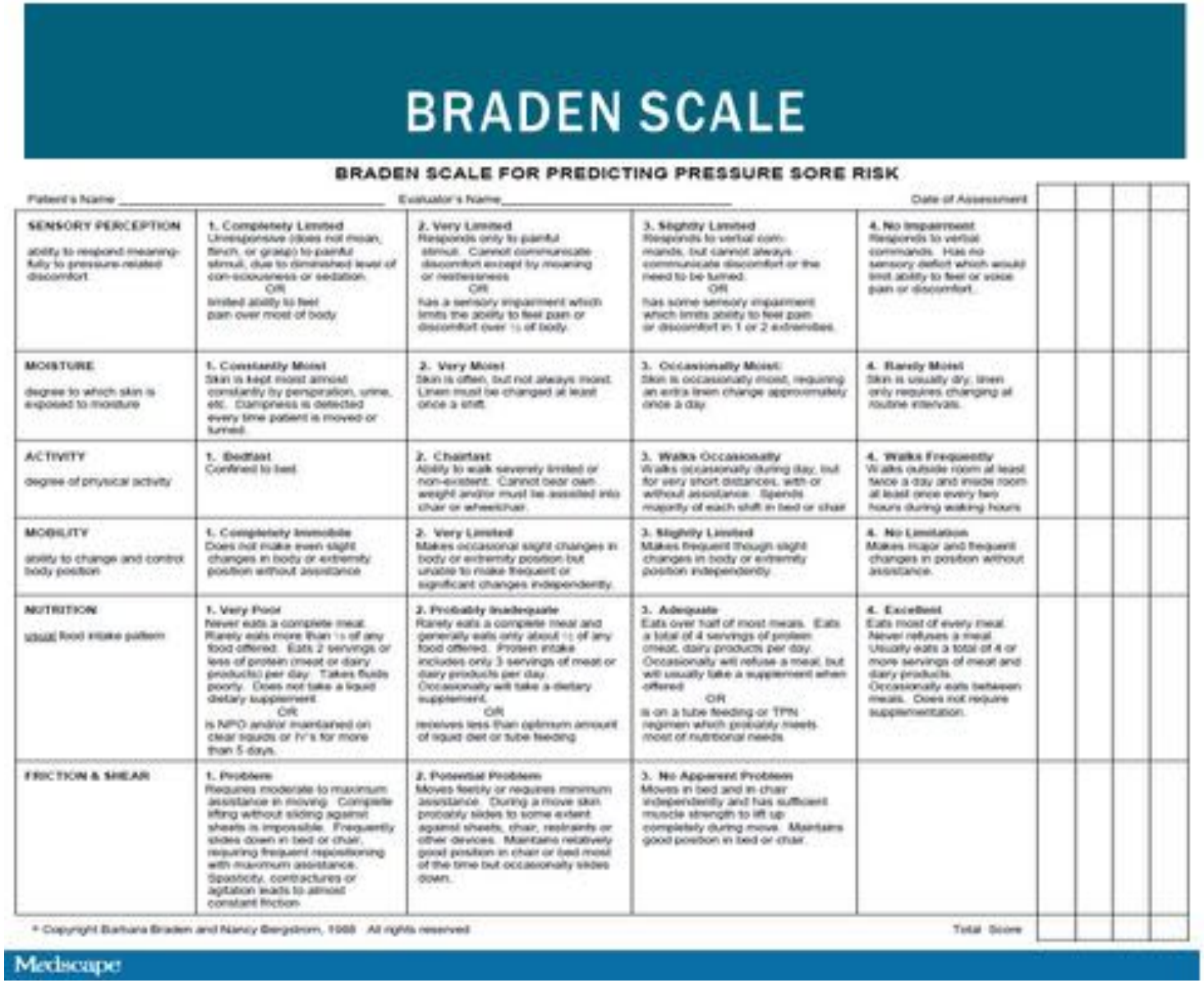
- Nursing has completed assessment, so what does that mean to Rehab?
- Technically we could address functional issues with all 6 areas but there are 3 that the rehab team could address with skilled interventions.
- Mobility – PT, OT can address this regardless of dependence level of client.

Braden Scale

- Nutrition – Dietary can have them on the best nutritional diet, however if they can not eat, they will not get the nutrition they need. Speech therapists are a definite part of the wound care team.
- Friction and Shear – Education on proper transfer techniques with caregivers, as well as improved mobility can be addressed.

Braden Scale

- Interpretation of the Braden Scale score.
  - Severe risk for skin break down < or = 9
  - High risk for skin break down 10-12
  - Moderate risk for skin break down 13-14
  - Mild risk for skin break down 15-18



BRADEN SCALE

BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK

Patient's Name _____ Evaluator's Name _____ Date of Assessment

SENSORY PERCEPTION 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.				
MOISTURE 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.				
ACTIVITY 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.				
MOBILITY 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.				
NUTRITION usual food intake pattern	**1. Very Poor** Never eats a complete meal. Rarely eats more than ⅓ 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 IV's 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.	**4. Excellent** Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.				
FRICTION & 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.					
					Total Score			

Medscape

Norton Scale

- The Norton Scale addresses 5 areas, and just like the Braden Scale has components that rehab should address.
- It is scored on a 1 – 4 scale with 4 being no issues.
  - Physical Condition
  - Mental Condition
  - Activity
  - Mobility
  - Incontinence

Norton Scale

- Mental Condition – Speech can assess cognition.
- Activity – addresses ambulation – PT can address.
- Mobility – PT and OT can address.
- Incontinence – OT can address depending on physical ability.
- Physical Condition – relates to medical condition.

Norton Scale

- Interpretation of the Norton Scale score
  - Over 18 – low risk for skin break down
  - Between 18 & 14 – medium risk for skin break down
  - Between 14 & 18 – high risk for skin break down
  - < 10 – very high risk of skin break down

PHYSICAL STATE	MENTAL STATE	ACTIVITY	MOBILITY	INCONTINENCE
GOOD 4	ALERT 4	TRAVELING 4	TOTAL 4	NONE 4
MEDIUM 3	APATIC 3	WALKING WITH HELP 3	DIMINISHED 3	OCCASIONAL 3
REGULAR 2	CONFUSED 2	SITTING 2	VERY LIMITED 2	URINARY OR FECAL 2
VERY BAD 1	STUPOR/COMA 1	BEDRIDDEN 1	IMMOVABLE 1	URINARY AND FECAL 1

Image: Diaz-Caro, I and Gomez-Heras, S https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0227052 ***NORTON Modified by INSALUD (Norton-MI) is a modified version of the scale developed by Norton et al. (1962) and was adapted by INSALUD in 1996 (National Institute for Health, 1996**

Waterlow Scale

- The Waterlow Scale takes more things in to consideration and each area varies in scoring. The areas considered are:
  - Body Mass Index
  - Skin Type in Risk Areas
  - Continence
  - Mobility
  - Age

  - *can be downloaded on http://www.judy-waterlow.co.uk/waterlow-disclaimer.htm

Waterlow Scale

- Nutrition
  - Weight loss
  - Amount of weight loss
- Special Risk Considerations
  - Tissue Malnutrition
  - Neurological Deficits
  - Major Surgical or Trauma

Waterlow Scale

- Interpretation of Waterlow Scale Score
  - 10+ - at risk for skin break down
  - 15+ - high risk of skin break down
  - 20+ - very high risk of skin breakdown

Skilled Intervention

- Long Term Care resident has a qualifying hospital stay. Prior to the hospital she was maximal assist for all aspects of care. She did not ambulate and was wheelchair dependent.
- Client returns to community, Braden scale puts the client at high risk for skin breakdown.
- Therapy does an interdisciplinary screen and determines she is at her baseline and no services are indicated.

What Can Rehab Do?

- Address ROM limitations of upper and lower extremities
- Address sitting balance and sitting tolerance
- Address transfer status currently and is it safe
- Is a positioning schedule in place?
- What does client sit in when out of bed?
- Is client on an altered diet? Is it appropriate? What % of meal is being consumed?
- What is client's goal? What activities did they like? Hobbies?

Client Centered Approach to Wound Management

Client Centered Care

- Nursing has their care plans done. Rehab has treatment plan and goals done.
- MDS is complete and everyone knows their role.
- BUT……
- What are client's goals? Is closure of the wound one of them?
- Wound has achieved closure now, so ask yourself as a clinician
  - SO WHAT??
  - Functionally what does that mean for that client and is it meaningful?

Skilled Rehab Intervention

- This presentation will not address modality interventions that are utilized to promote wound healing, but focus on improved functional status with focus on quality of life factors.
- In the long term care population, therapists need to focus on small steps that can improve function vs. big functional gains that are not achievable.
- Too often goals are set that are not attainable and the client is discharged due to no progress being made.

Skilled Rehab Intervention

- A better approach would be to start with the client.
- What is important to the client? What would improve quality of life and be meaningful to the client ?

Skilled Rehab Intervention

- Mrs. Smith is an 80 year old female, who has a Stage 4 Pressure Injury that has been present for 6 months. She sees the nurse practitioner/wound nurse weekly and is making slow progress with Standard of Care.
- Client spends most of her time in her room including meals.
- Client spends a lot of time in bed for pressure reduction.

Skilled Rehab Intervention

- PT and OT has had client on caseload to address improving ROM and nursing education for positioning.
- Client has met established goal to increase ROM by 20 degrees in bilateral hips and knees.
- Goal has been met for nursing to demonstrate proper positioning and transfer techniques with 100% consistently.
- What have we improved for this patient?

Skilled Rehab Intervention

- Important facts from Mrs. Smith's history.
  - She loves music.
  - She was active in social clubs in her community.
- Why is that important? Why does therapy need to know that? Isn't that more of an activity thing?
- Think back to achieved goals and ask yourself……SO WHAT?
- What does that mean for the patient? Have you improved function? Have you improved Quality of Life?

Skilled Rehab Intervention

- Example of a functional goal for this client.
  - Client will tolerate sitting in a wheelchair with good positioning with appropriate pressure relief cushion for one hour increments to allow her to attend one daily activity in the community including weekly entertainment.
- Is this functional?
- Is it a quality of life improvement?

Skilled Rehab Intervention

- The best way to turn an impairment based goal into a functional goal is at the end of the goal, ask……SO WHAT?
- Wound is closed……SO WHAT?
  - Client can eat one meal a day in the dining room decreasing social isolation.

Skilled Rehab Intervention

- Sitting tolerance has increased to 3 hour increments……SO WHAT?
  - Client can attend the next outing to see a play with other clients.
- This method can be applied to all aspects of therapy intervention to ensure improved function and overall improved quality of life.

Case Study

- Patient admitted to skilled nursing facility 10/24/20.
- Patient is a 54 year old male admitted following exostectomy of right foot with external fixator applied.
- Extensive medical history: obesity, inflammatory polyneuropathy, HTN, syncope and collapse, Type 2 diabetes mellitus with other diabetic kidney complications, renal dialysis, acute osteomyelitis right foot and ankle, hypkalemia, hyperlipidemia, end stage renal disease.

Case Study

- Open wound right foot, Wegener's granulomatosis with renal involvement, muscle weakness, difficulty walking.
- Prior functional level: Lived in a private residence alone, Independent for all aspects of ADL's, transfers and ambulation including within the community without an assistive device.

Let's Talk About It

- Favorable for good outcomes:
  - Age
  - Prior Functional Level
  - Motivation to return home

Let's Talk About IT

- Barriers to Positive Outcome
- Significant medical history
- Current medical condition
- Acute Osteomyelitis with discussion of amputation.
- Significant deconditioning after long hospitalization leaving patient with syncope during therapy sessions when attempting to stand

Case Study

- Current functional status: Patient with CROW boot
- Static standing balance with UE support Fair
- Dynamic standing balance with UE support Fair-
- Transfers contact guard, however upon standing episodes of positional syncope
- Gait with a wheeled walker for 60 ft with CG with decreased accuracy of movement and significant compensatory movement

Case Study

- Focus of intervention: Standard of Care was met and client was being treated with modalities to promote wound healing.
- Client also being seen for strengthening of BLE's, transfer training, balance activities, gait training, and safety instruction.
- Functional activities to simulate activities to be performed upon returning home

Case Study

- Outcome: Client was discharged to home on 12/4/20.
- Infection was resolved in right foot and wound closed.
- Independent transfers, independent gait without assistive device for > 350 ft. Good static and dynamic balance. Supervision for gait on stairs.
- Patient walked out the door to return home

Case Study

- What if we felt his medical condition was too complex?
- What if when he started to faint in therapy, we discharged him until medical condition improved?
- What if we discharged him from rehab until infection in foot and ankle was resolved?

Different Outcome

- Client at risk for depression and lack of initiative to improve.
- Limited improvement in function, which could also lead to a slowing of wound healing
- Significant decrease in quality of life.

Client Advocacy and Importance of Staff Education

Current State

- Developments have occurred in wound healing over the last few decades
- Sophisticated products and techniques require proper wound care and wound bed preparation in order to function optimally
- The knowledge of a wound team increases the healing of problem wounds

Systematic Approach

- Staff should be knowledgeable regarding:
  - General plan of care
  - Wound assessment
  - Intervention
  - Documentation

Engaging Staff

- Reinforce basics of proper wound care with new and experienced staff
- Wound care education should be easy and accessible
- Mentoring
- Encourage a multidisciplinary approach
- Use appropriate and effective wound care products

Principles Adult Learners

- Internally motivated
- Self-directed
- Bring life experiences and knowledge to learning
- Goal- and relevancy-oriented
- Practical
- Like to be respected

Source: Knowles, M. S., Holton, E., & Swanson, R. (2005). The adult learner: the definitive classic in adult education and human resource development (6th). *Burlington, MA: Elsevier*.

Education Made fun

- Staff Education should be:
  - Simple
  - Fun
  - Interactive
- Example: Pressure Injury Crossword Puzzle

Staff Education Idea #1

- Rules:
  - You will have 1 minute to place all six apples of different stages on place cards.
  - Pick up the apples one at a time.
  - Carry the apples to the place card that correctly matches the stage of the apple.
  - If you drop the apple or put the apple on the wrong place card, you will have to start over with that apple.

Staff Education Idea #2: Hands-On Education Fair

- Barrier cream
- Documentation
- Nutrition and supplements
- Shear station where we discussed friction vs. shear
- Skin tears

Source: Hovan, H. (2017, April). Improving Outcomes through Wound Care Staff Education. *Wound Care Advisor.* Retrieved from https://www.woundsource.com/blog/improving-outcomes-through-wound-care-staff-education Used with permission

Staff Education Idea #3: Wound Care Carnival

- Station #1 PENNY THE PEAR
  - Stage I pressure injury is a pear that is a bit too ripe. Non-blanchable erythema.
  - Stage II pressure injury is without the pear skin, along with a serous filled blister.
  - Stage III pressure injury is when you take a bite out of the pear.
  - Stage IV pressure injury is when you eat the pear to the core.
  - Unstageable pressure injury is a caramel covered pear. Once the caramel is gone, you can stage it.
  - Suspected Deep Tissue Injury is when you drop your pear. Think of a bruise color or blood filled blister.
- Station #2 RUMPLE WRINKLE-SKIN
  To demonstrate friction and shear, you can use a sheet of tissue paper. Have the staff participants rub the piece of tissue paper while leaning against the wall pushing back and forth. The tissue paper will crinkle. Discuss how to prevent this from happening.

Wound Care Carnival

- Station #3 GABBY GRAPEFRUIT
  Use grapefruits cut in half to demonstrate wound measuring, and application of negative pressure wound therapy.
- Station #4 WILLY WATERMELON
  Wound assessment can be done with a watermelon. The seeds are necrotic tissue. You can make tunnels to measure as well.
- Station #5 BETTY BOOP BARRIER
  Use a punch bowl and add red food coloring. Have staff apply a thin layer of barrier cream, to the top of their hands. Have participates put both hands in the punch bowl for 2 minutes. This demonstration will show the importance of using moisture barriers for incontinence care.

Wound Care Carnival

- **Station #6 PABLO PRESSURE**
  Have staff participants sit on a pillow with a firm ball underneath. Tell the participant they are not to change or shift their positions for 10 minutes.
- **Station #7 PETER PLUM**
  Pulling off silk tape from an over-ripe plum will pull the plum's skin off demonstrating how easy skin can tear.

Source: Carver, C. (2015, February). How to Make Staff Education Fun with a Wound Care Carnival. *Wound Care Advisor.* Retrieved from https://www.woundsource.com/blog/how-make-staff-education-fun-wound-care-carnival Used with permission

Keys to Success

- Support from management and leadership
- Consistency
- Follow up
- Teamwork
- Ongoing wound education
- Fun

Putting it All Together

- What should be included in education?
  - General care
  - Role of the multidisciplinary team
  - Documentation
  - Reimbursement
  - Prevention
  - Assessment
  - Treatment

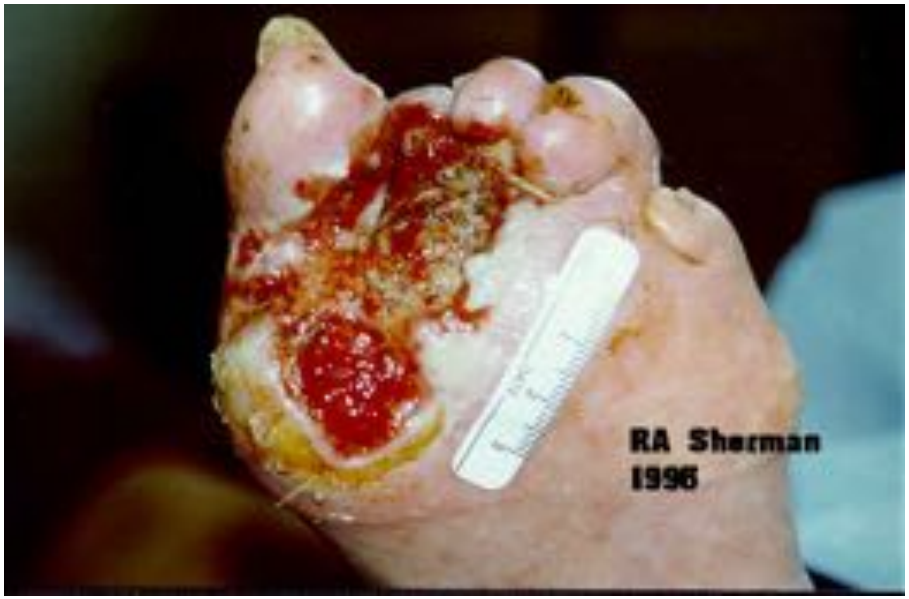
Case Study

- Ms. Smith admitted to skilled nursing facility 1/25/20.
- Ms. Smith is a 74 year old female admitted following fall and diabetic ulcer of right foot.
- Medical history: obesity, polyneuropathy, HTN, syncope and collapse, Type 2 diabetes mellitus.
- Findings: Open wound right foot, muscle weakness, balance deficits, difficulty walking.
- Prior functional level: Lived in a private residence alone, Independent for all aspects of ADL's, transfers and ambulation including within the community without an assistive device. Ms. Smith is a master gardener and cares for foster dogs on the weekends.

Case Study

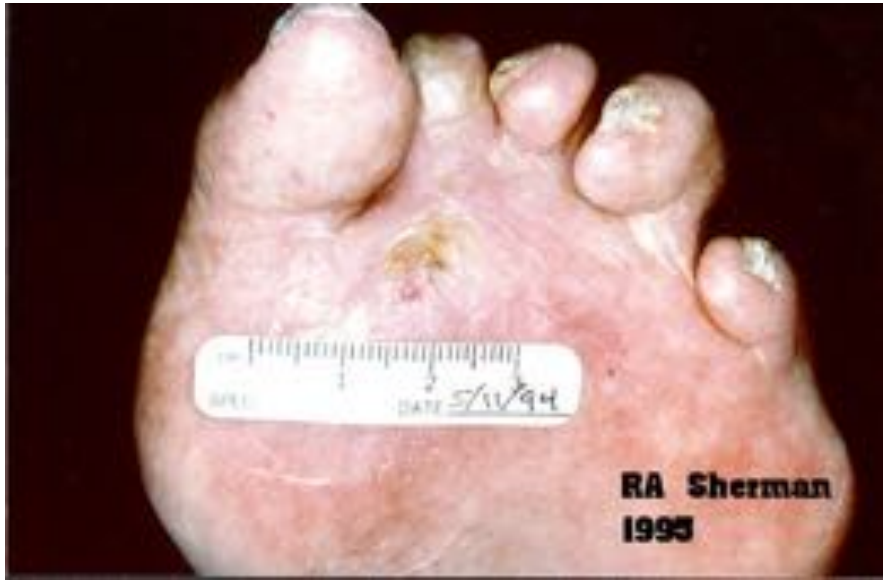
- Focus of intervention: Standard of Care was met and Ms. Smith was being treated with debridement, offloading with contact casting
- Ms. Smith was also being seen for strengthening of BLE's, transfer training using rolling walker, balance activities, gait training, and safety instruction.
- Functional activities to simulate activities to be performed upon returning home (gardening and walking dog)

Case Study



- What type of staff education should occur?
- Who should receive this education?

Progression



- What kind of ongoing education should be occurring as the client progresses?

Wrap Up

- The numbers of people living with wounds are expected to rise the U.S. population
- Multidisciplinary collaborations and staff are key components in optimizing wound treatment for your clients
- Engaging staff in ongoing wound care education makes us better clinicians and allows us to provide client center care for our clients living with wounds

Take Away

- A pessimist sees the difficulty in every opportunity
- An optimist sees the opportunity in every difficulty- Winston Churchill
- Let's be optimists and provide our clients with the best opportunity to improve quality of life.

Thank You

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