PAIN: ASSESSMENT & MANAGEMENT

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MiOTA
Michigan Occupational Therapy Association, Inc.

therapists
training therapists

LEARNING OBJECTIVES

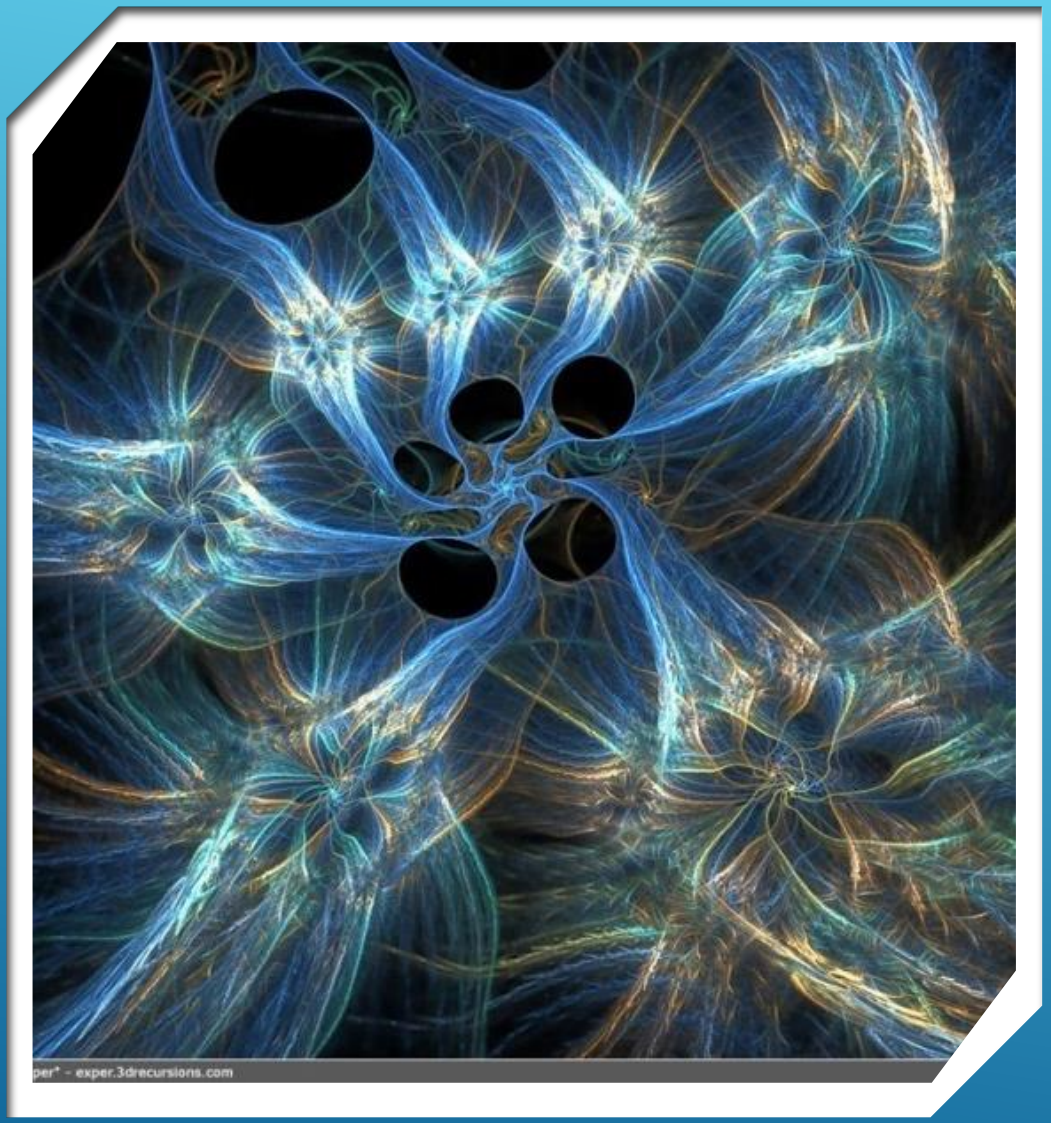
At the conclusion of this program attendees will:	Identify the components of pain assessment	Recognize the physical and psychosocial elements of pain treatment
Identify the distinct difference in pain identification across the lifespan	Identify effective approaches to reduce painful conditions	Identify effective education tools to provide skilled instruction and training to manage pain

DEFINITION OF PAIN

- What is pain?
- Components of pain
- What influences pain?
- How is pain communicated?

WHY STUDY PAIN?

- Joint Commission on Accreditation of Healthcare Organizations – Fifth vital sign
- Pain most misunderstood, under diagnosed and under treated medical problems in children



WHAT IS PAIN?

- Complex sensory, emotional and behavioral experience. It is an actual or perceived threat to tissue damage.
- Subjective

It is -- multi-dimensional

WHAT INFLUENCES PAIN?

- Genetics
- Sex, nerve density, # and type of opioid receptors
- Ethnic and cultural considerations
- Economics
- Environmental and social supports

HOW IS PAIN COMMUNICATED?

- Verbalizations
- Behaviors
  - Appetite changes
  - Sleep disturbances
  - Affect
- Body language
  - Posture
  - Facial expression

TELLTALE SIGNS OF PAIN IN CHILDREN

- Behaviors that alert you

- Favoring an arm or leg over the other
- A decrease in physical activity
- Changes in sleep
- Changes in activity
- Avoiding contact with others
- Crankiness, irritability or unruly behavior
- Gasping, wincing, frowning
- Crying, grunting, or breath-holding
- Dull eyes, flushed skin, rapid breathing or sweating

COMPONENTS OF PAIN

- Emotional: fear, anxiety, depression, anger
- Cognitive: arousal, alertness, executive function abilities
- Behavioral: coping style, problem solving, support seeking, isolation, avoidance, escape, spiritual seeking
- Physical: Actual physical sensory experience

PAIN CONSEQUENCES

- Multiple medication use
- Falls – deconditioning, strength changes, impaired sensation, ROM changes
- Dysfunction in occupational performance
- Dysfunction in school -work; student role
- Cognitive Impairment
  - Disorientation, ability/inability to perform executive functioning abilities
- Social withdrawal/depression/suicide
- Sleep/appetite disturbances
- Mobility changes
- Depression
- Fatigue
- Stress

COMMON MISCONCEPTIONS

- “Normal part of aging”
- "All pain medications are addictive"
- "If you don’t complain you don’t have pain"
- "No pain no gain"
- “I just have to live with it”
- Resulting in apprehension / Fear of the treatment

APPREHENSION: WHY?

- Poor previous outcomes
- Pain during treatment that was not managed
- Cost of treatment
- Fear of need for tests
- Fear of drug side effects
- Not recognized in children

ATTITUDES ABOUT PAIN

- Children do not remember pain
- Children experience less pain than adults
- Children don't report pain or deny pain as they fear disappointing caregivers or want to avoid noxious injection or having to take medications
- Children are often not viewed as a good judge of pain
- Expect a typical response to pain; without we may not recognize

Barriers to adequate pain management in children

Myths, barriers, & realities

PHYSIOLOGY OF PAIN

- Peripheral Nerves
  - Nociceptors -receptors that detect actual or potential tissue damage– mechanism for "feeling" pain
  - Dense in critical areas – tongue, fingertips, genitals, skin, muscles, tendons
- Neurotransmitters
  - Chemicals that transmit messages from one nerve to another
- Ascending and Descending Pathways
  - Ascending sensory pathways – transmitting sensory information up the spinal cord to the brain
  - Descending motor pathways – transmitting motor information down the spinal cord to the body

TYPES OF PAIN

Acute

Sub-acute

Chronic

ACUTE PAIN

AKA: Inflammatory Reaction Stage

Sudden insults w/ soft tissue damage

Classified as lasting 1-4 days

- Vascular changes
- Exudation of cells and chemicals
- Clot formation
- Phagocytosis – absorbing of necrotic cells

Clinical signs: inflammation (swelling, heat, redness) Pain before tissue resistance (guarding) Loss of function – mobility, strength, sensation

SUB-ACUTE PAIN

- Repair Healing Stage: can last up to 6 weeks – generally 4-14 day after insult
- Removal of noxious stimuli
- Growth of capillary beds into area
- Granulation of tissue
- Collagen formation
- Very tissue (immature connective tissue)

Clinical signs: decreasing inflammation and pain

CHRONIC PAIN

- Maturation and remodeling
- Can overlap with sub-acute stage
- Etiology can be long standing
- Maturation of connective tissue
- Contracture of scar tissue

EVALUATION

A detailed evaluation is critical to identifying the underlying cause of the pain and establishing the plan of care

Implies data collection, interpretation and synthesis of the information to create a treatment plan

COMPONENTS OF EVALUATION:

- Age consideration
- Occupational profile/ Medical History
- Areas of Occupational Performance/ Functional Decline
- Body Functions/Body Structures
- Onset/course of pain
- Reoccurring pain – previous treatment
- Constant, intermittent, occasional

ADDITIONAL CONSIDERATIONS FOR EVALUATION

- Scarring
- Swelling, redness
- Movement patterns
- Sleeping positions
- Stage of recovery
- Joint sounds
- Type of pain
- Stage of recovery
- Deformity
- Vital signs

TYPE OF PAIN:

Nerve	Nerve: manifests in sharp, burning, tingling – follows nerve distribution patterns
Bone	Bone: deep and localized
Diffuse	Vascular: diffuse, aching, poorly localized, referred to other parts of body (blood clot)
Muscle	Muscle pain: dull, aching, aggravated by injury

EVALUATION: CONTINUED

- Pain associated w/ rest or activity, postures and time of day
  - Pain w/ activity, decreased w/ rest
  - Mechanical obstruction with movement – adhesion?
  - Morning pain that decreases w/ activity
  - Congestion of the joint, edema?

COLLABORATE WITH THE CLIENT

Ask patient if they have pain

Note if they are reluctant to discuss pain – is that related to stigma, misconceptions?

Description of pain

- Nerve, Bone, Vascular, Muscle

RE-TRAIN YOUR BRAIN

- Pain is 100% in your brain
- Learn to calm nervous system
- Retrain your brain

HISTORY

- Helps determine underlying cause of pain
- Trauma
- Occult injury
- Need for diagnostic tests/referral
- Identify potential causes of pain that patient may not be aware of

PAINFUL CLINICAL CONDITIONS

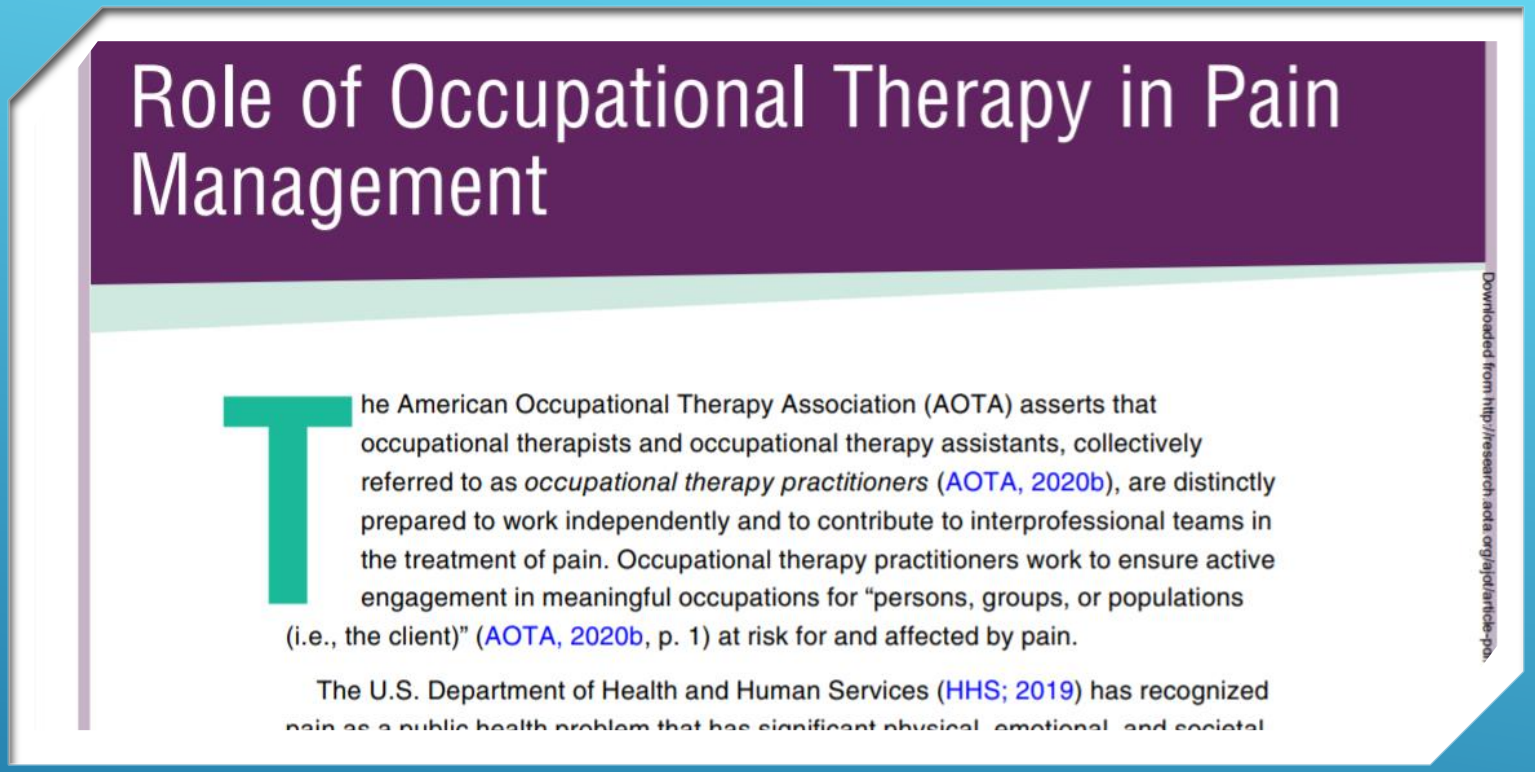
- Cancer
- Degenerative diseases: OA, Osteoporosis
- Fibromyalgia
- Inflammatory diseases: RA
- Peripheral Neuropathy
- Neurogenic Pain
- Central Pain Syndrome: TBI,CVA, MS
- Trigeminal Neuralgia
- Post surgical pain
- Back pain (acute and chronic)
- Healing fracture
- Injury

QUANTIFY AND DESCRIBE

- Quantify
  - Establish baseline for comparison
- Description
  - Help localize pain producing structure(s)
  - Intermittent or constant
  - Central or distal
  - Bilateral, 1 joint or multiple joints

DEVELOPMENTAL APPROACH TO PAIN ASSESSMENT

- Toddlers – quiet, inactive or become overactive; parents report not acting normal; can become acted out in aggressive outbursts
- School-age children – more accurate in communicating pain; by 8 years can reliably describe location of pain; Symptom scales and self-report tools appropriate; older than 8 can use the concept of Numerical Rating Sale; Also Pain diaries helpful at this age



Role of Occupational Therapy in Pain Management

The American Occupational Therapy Association (AOTA) asserts that occupational therapists and occupational therapy assistants, collectively referred to as *occupational therapy practitioners* (AOTA, 2020b), are distinctly prepared to work independently and to contribute to interprofessional teams in the treatment of pain. Occupational therapy practitioners work to ensure active engagement in meaningful occupations for "persons, groups, or populations (i.e., the client)" (AOTA, 2020b, p. 1) at risk for and affected by pain.

The U.S. Department of Health and Human Services (HHS; 2019) has recognized pain as a public health problem that has significant physical, emotional, and societal

RESOURCE FROM AOTA

Table 2. Examples of Pain Assessments

Category	Examples
General pain assessments	Brief Pain Inventory (Keller et al., 2004; MD Anderson Center, 2021) Face, Legs, Activity, Cry, Consolability (FLACC) behavioral pain scale (Malviya et al., 2006; Merkel et al., 1997) McGill Pain Questionnaire (Kremer & Atkinson, 1981) Numeric Rating Scale (Ferreira-Valente et al., 2011) Pain, Enjoyment of Life and General Activity (PEG) scale (Krebs et al., 2009) Visual analog scale (Gift, 1989) Wong–Baker FACES Pain Rating Scale (Wong & Baker, 1988; Wong-Baker FACES Foundation, 2016)
Site-specific pain assessments	Disabilities of the Arm, Shoulder and Hand (Hudak et al., 1996) Oswestry Pain Disability Index (Fairbank & Pynsent, 2000)
Performance skills assessments	Central Sensitization Inventory (Mayer et al., 2012) Fear-Avoidance Beliefs Questionnaire (Waddell et al., 1993) Pain Catastrophizing Scale (Sullivan et al., 1995) Pain Coping Questionnaire (Reid et al., 1998) Pain Self-Efficacy Questionnaire (Nicholas, 2007) Self-Compassion Scale (Neff, 2003; Raes et al., 2011) Sensory Symptoms Checklist (Wild, 2010) Occupational Experience Profile (formerly the Daily Experiences of Pleasure, Productivity and Restoration Profile) (Atler, 2015; Atler et al., 2015)
Assessments validated for use with clients with pain	Canadian Occupational Performance Measure (Law, Baptiste, et al., 2019) Functional Disability Inventory (Kashikar-Zuck et al., 2011; Walker & Greene, 1991) Patient-Specific Functional Scale (Maugham & Lewis, 2010; Stratford et al., 1995)

ASSESSMENT TOOLS

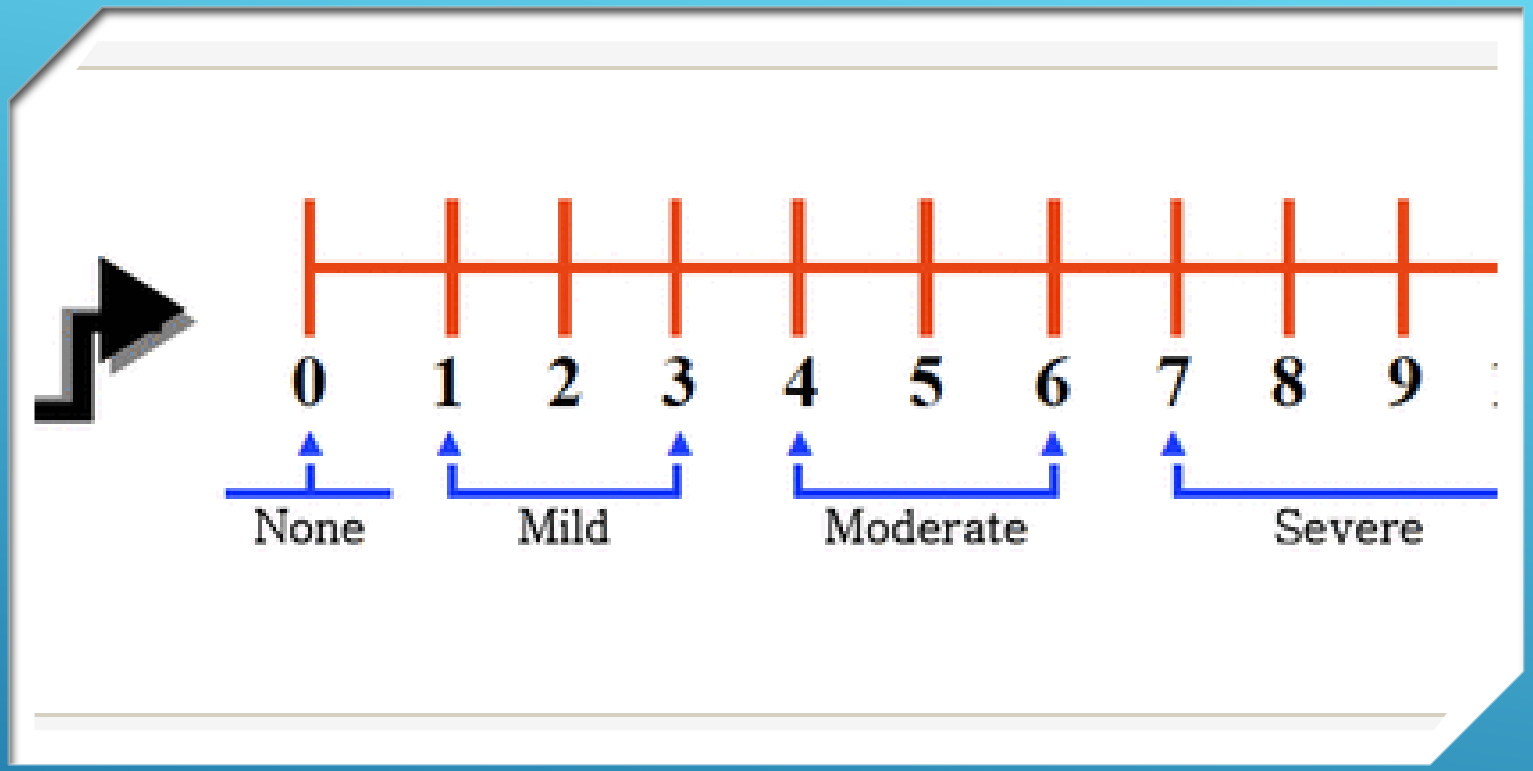
- Wong Baker FACES Pain Scale – Revised
- Numerical Rating Scale
- Verbal Descriptor Scale
- FLACC & r-FLACC
- Discomfort Scale – Dementia Alzheimer‘s Type
- PAINAD
- Comfort Scale for Pain Assessment

WONG BAKER FACES

Wong-Baker FACES Pain Rating Scale

0	2	4	6	8	10
NO HURT	HURTS LITTLE BIT	HURTS LITTLE MORE	HURTS EVEN MORE	HURTS WHOLE LOT	HURTS WORST

From Wong D.L., Hockenberry-Eaton M., Wilson D., Winkelstein M.L., Schwartz P.: Wong's Essentials of Pediatric Nursing, ed. 6, St. Louis, 2001, p. 1301. Copyrighted by Mosby, Inc. Reprinted by permission.



NUMERICAL RATING SCALE

VERBAL DESCRIPTOR SCALE

Instructions: Please place a check mark next to the phrase that best describes the current level of your pain.

_____No Pain

_____Mild Pain

_____Moderate Pain

_____Severe Pain

_____Very Severe, Horrible Pain

COMFORT SCALE

	3 - Anxious 4 - Very anxious 5 - Panicky						
RESPIRATORY DISTRESS	1 - No coughing and no spontaneous respiration 2 - Spontaneous respiration with little or no response to ventilation 3 - Occasional cough or resistance to ventilation 4 - Actively breathes against ventilator or coughs regularly 5 - Fights ventilator; coughing or choking						
CRYING	1 - Quiet breathing, no crying 2 - Sobbing or gasping 3 - Moaning 4 - Crying 5 - Screaming						
PHYSICAL MOVEMENT	1 - No movement 2 - Occasional, slight movement 3 - Frequent, slight movements 4 - Vigorous movement 5 - Vigorous movements including torso and head						
MUSCLE TONE	1 - Muscles totally relaxed; no muscle tone 2 - Reduced muscle tone 3 - Normal muscle tone 4 - Increased muscle tone and flexion of fingers and toes 5 - Extreme muscle rigidity and flexion of fingers and toes						
FACIAL TENSION	1 - Facial muscles totally relaxed 2 - Facial muscle tone normal; no facial muscle tension evident						

FLACC

DATE/TIME						
Face 0 - No particular expression or smile 1 - Occasional grimace or frown, withdrawn, disinterested 2 - Frequent to constant quivering chin, clenched jaw						
Legs 0 – Normal position or relaxed 1 – Uneasy, restless, tense 2 – Kicking, or legs drawn up						
Activity 0 – Lying quietly, normal position, moves easily 1 – Squirming, shifting back and forth, tense 2 – Arched, rigid or jerking						
Cry 0 – No cry (awake or asleep) 1 – Moans or whimpers; occasional complaint 2 - Crying steadily, screams or sobs, frequent complaints						
Consolability 0 – Content, relaxed 1 – Reassured by occasional touching, hugging or being talked to, distractible						

R-FLACC

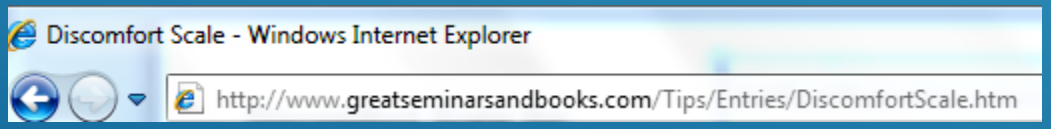
DISCOMFORT SCALE FOR DEMENTIA OF THE ALZHEIMER'S TYPE (DS-DAT)

- Requires no verbal response
- Observation assessment tool
- Assist therapists in defining progress and improvement
- Tool reviews observations as well as frequency of behavior in a 5 minute period, Duration of behavior and description of intensity (high or low)

- Observations include:
  - Noisy Breathing
  - Negative Vocalizations
  - Lack of Content of Facial Expressions
  - Sad Facial Expression
  - Frightened Facial Expression
  - Frown
  - Lack of Relaxed Body Language
  - Tense Body Language

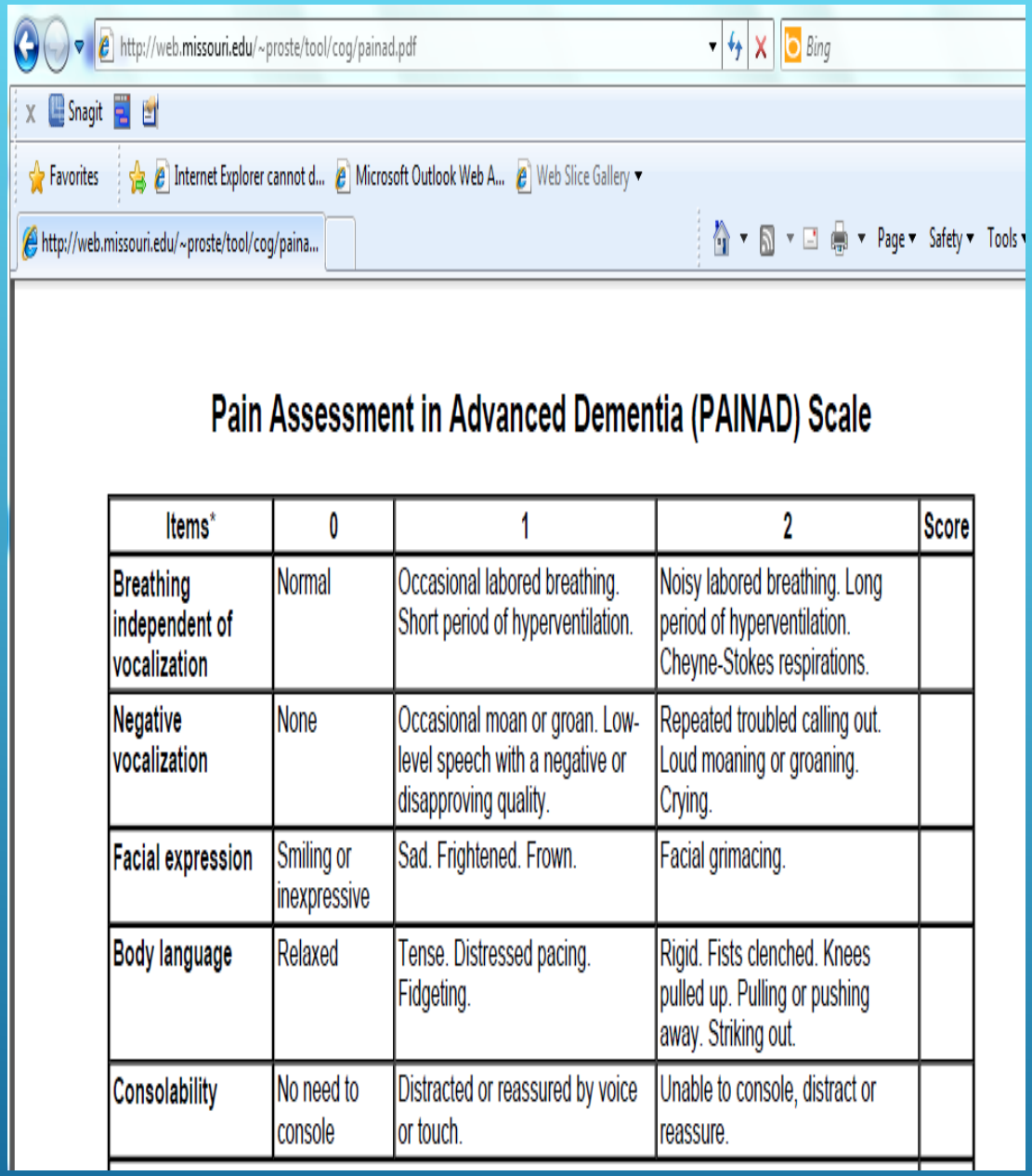
Sad Facial Expression: troubled look on face, looking hurt, worried, lost, or lonesome; distressed appearance, sunken, "hound dog" look with lackluster eyes; tears, crying.		
Frightened Facial Expression: scared, concerned looking face; looking bothered, fearful, or troubled; alarmed appearance with open eyes and pleading face.		
Frown: face looks strained; stern or scowling look, displeased expression with wrinkled brow and creases in the forehead; corners of the mouth turned down.		
Lack of Relaxed Body Language: easy open handed position; looking of being in a restful position and may be cuddled up or stretched out; muscles look of normal firmness and joints are without stress; look of idle, lazy, or "laid back"; appearance of "just killing the day"; casual.		
Tense Body Language: extremities show tension;		

	Freq.	Duration	Intensity
	(5 min)	<1 min	High
		≥ 1 min	Low



PAIN-AD SCALE

- 5 item observation scale
- Total score 0 -10
- Based on ordinal scale of 0 – 2
- Able to objectively describe pain based on observations of symptoms of pain
- Useful when patients cannot communicate pain levels reliably
- Warden, V., Hurley, A., Volicer, L., Development and psychometric evaluation of the pain assessment in advanced dementia (PAINAD) scale. J Am Dir Association. 2003; 4:9-15.



Pain Assessment in Advanced Dementia (PAINAD) Scale

Items*	0	1	2	Score
Breathing independent of vocalization	Normal	Occasional labored breathing. Short period of hyperventilation.	Noisy labored breathing. Long period of hyperventilation. Cheyne-Stokes respirations.	
Negative vocalization	None	Occasional moan or groan. Low-level speech with a negative or disapproving quality.	Repeated troubled calling out. Loud moaning or groaning. Crying.	
Facial expression	Smiling or inexpressive	Sad. Frightened. Frown.	Facial grimacing.	
Body language	Relaxed	Tense. Distressed pacing. Fidgeting.	Rigid. Fists clenched. Knees pulled up. Pulling or pushing away. Striking out.	
Consolability	No need to console	Distracted or reassured by voice or touch.	Unable to console, distract or reassure.	

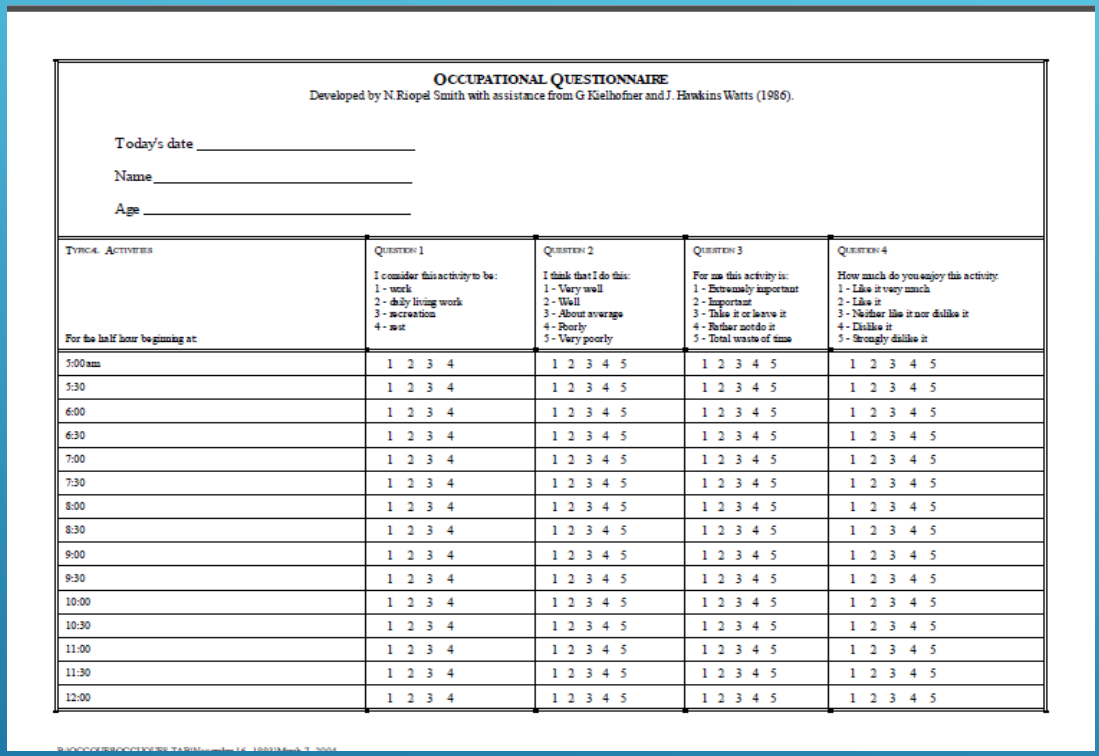
OTHER ASSESSMENTS

- Occupational Questionnaire (OQ)
- Role Checklist
- Activity Card Sort
- Patient Specific Functional Scale
- Canadian Occupational Performance Measure (COPM)

OCCUPATIONAL QUESTIONNAIRE (OQ) (1986)

- Questionnaire or interview format
- Elicits information related to patient's volition related to use of time
- Volition: values, interests, and personal causation
- Patient self report typical weekend and weekday routine for every 30 minutes of time during a day
- Instrument provides a configuration of activity time-- % of time in work, play, daily living etc. as well as % of time engaged in activities of value, interest and that establish a send of ability or competence
- Smith, N.R., Kielhofner, G., & Watts, J. (1986). The relationships between volition, activity pattern, and life satisfaction in the elderly. American Journal of Occupational Therapy, 40(4), 278-283.

http://www.uic.edu/depts/moho/images/Occupational%20%20Questionnaire.pdf



OCCUPATIONAL QUESTIONNAIRE

Developed by N.Riopel Smith with assistance from G Kielhofner and J. Hawkins Watts (1986).

Today's date _____

Name _____

Age _____

TYPICAL ACTIVITIES For the half hour beginning at:	QUESTION 1 I consider this activity to be: 1 - work 2 - daily living work 3 - recreation 4 - rest	QUESTION 2 I think that I do this: 1 - Very well 2 - Well 3 - About average 4 - Poorly 5 - Very poorly	QUESTION 3 For me this activity is: 1 - Extremely important 2 - Important 3 - Take it or leave it 4 - Rather not do it 5 - Total waste of time	QUESTION 4 How much do you enjoy this activity 1 - Like it very much 2 - Like it 3 - Neither like it nor dislike it 4 - Dislike it 5 - Strongly dislike it
5:00 am	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
6:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
6:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
9:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
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10:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
10:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
11:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
11:30	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
12:00	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Pediatric Pain Questionnaire

Understanding your pain

This questionnaire is to help us learn about your pain. We want to understand your past pain so we can diagnose and treat you.

This questionnaire and any information given in interviews will remain private. If you do not wish to answer a question, write, "do not wish to answer" in the space provided.

Please print or write clearly.

Today's date: _____

Your name: _____ Age: _____

What words would you use to describe your pain or hurt? _____

_____

_____

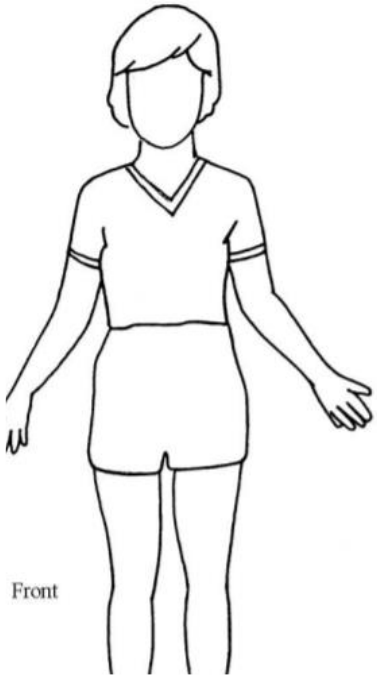
_____

Circle the words below that best describe your pain, or the way you feel when you are in pa

cutting	pounding	tingling	tiring	deep
squeezing	throbbing	horrible	stabbing	burnin
pulling	sickening	biting	screaming	scrapi
aching	uncomfortable	cold	miserable	stretch

colors that mean **no hurt**, **a little hurt**, **more hurt**, and **a lot of hurt** to you and color in the bo
using those colors, color in the body to show how you feel.

No pain No hurt	Mild pain A little hurt	Moderate pain More hurt	Severe pain A lot of hurt
☐	☐	☐	☐



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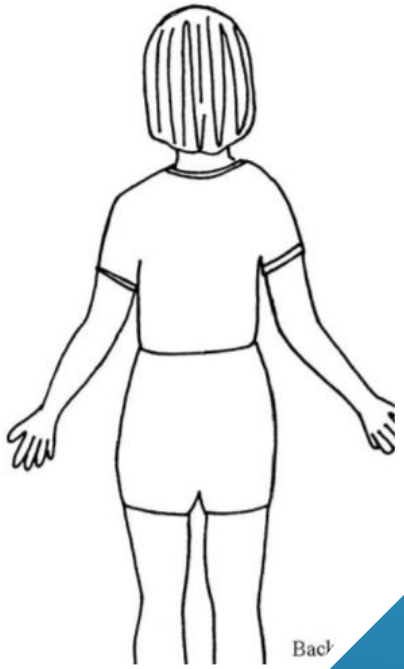
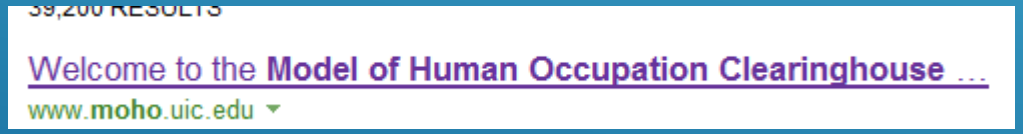


Back

ROLE CHECKLIST

- Fran Oakley, MS, OTRL
- Questionnaire
- Can be orally administered or self administered
- Addresses a wide range of populations
- 2 Part Assessment
  - Role Participation
  - Value attributed to role
- Assists clinician in understanding roles that are important to the patient
- foakley@nih.gov
- Dickerson, A. E., (1999). The Role Checklist. In B.J. Hemphill-Pearson (Ed.), Assessment in occupational therapy mental health (p. 175-191). Thorofare, NJ: Slack

- Email Fran Oakley – provide information in your email request – type of facility in which you work, type of clients served, City, State and County of Residence.
- Also – accessible version available on the



ACTIVITY CARD SORT

- 89 photographs of well seniors performing variety of activities
- Assists in determining what occupational histories for patients look like
- Assists in defining goals, assess activities that have been given up or lacking participation in
- Normative Data available for Cancer patients
- Baum, M.C., & Edwards, D.F. (2001). Activity Card Sort. San Antonio , TX: Harcourt Assessment.

CANADIAN OCCUPATIONAL PERFORMANCE MEASURE (COPM)

- Semi-structured interview
- Administered one on one
- Desired goal of the assessment tool is to determine a client's self perception of change in occupational performance – an outcome measure.
- This semi structured interview assists collaborative relationship to develop
- Commercially available tool
- Discussion centers around occupations categorized in three areas: self-care, productivity, and leisure. Patient describes active occupations as well as satisfaction with performance and areas that are problematic
- Outcome measure – so performance

- Therapist reviews with patient most important problem and documents on the COPM interview form
- Numerical measurement of performance and satisfaction graded
- Performance and Satisfaction score obtained

PATIENT SPECIFIC FUNCTIONAL SCALE

- Neck Dysfunction
- Low back pain
- Knee Dysfunction
- Multiple Sclerosis

- Used to assess the ability to complete specific tasks
- 11 point scale 0 -10 used to rate their ability to perform an activity
- "0" being unable to perform activity to "10" Able to perform activity at the same level as before the injury or problem
- Total score = sum of the activity scores / number of activities
- Minimum detectable change is 2 points for average score
- Minimum detectable change is 3 points for single activity score

Initial Assessment:

I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your _____ problem. Today, are there any activities that you are unable to do or having difficulty with because of your _____ problem? (Clinician: show scale to patient and have the patient rate each activity).

Follow-up Assessments:

When I assessed you on (state previous assessment date), you told me that you had difficulty with (read all activities from list at a time). Today, do you still have difficulty with: (read and have patient score each item in the list)?

Patient-specific activity scoring scheme (Point to one number):

0 1 2 3 4 5 6 7 8 9 10

Unable to perform activity

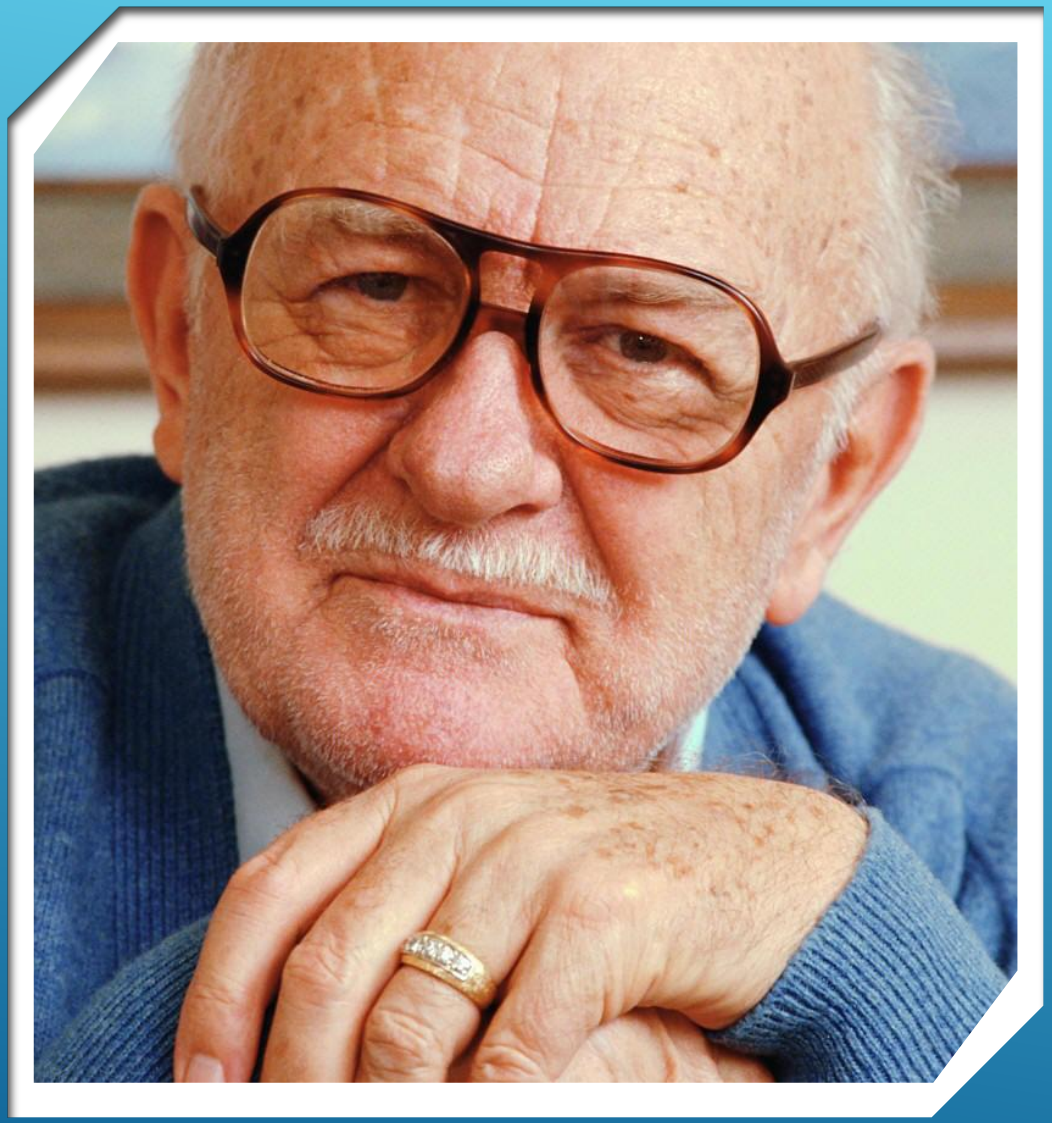
Able to perform activity at the same level as before

Westaway, M., Stratford, P., et al. (1998). "The patient-specific functional scale: validation of its use in persons with neck dysfunction." The Journal of orthopaedic and sports physical therapy 27(5): 331.
Find it on PubMed

Measure can be found on the Transport Accident Commision's website (external link)

WHAT ACTIVITIES EFFECT PAIN?

- What makes pain better or worse?
- Certain activities stress specific structures
- Are activities that effect pain consistent with history?
- Collaborate with the client



CASE STUDY RON

PUTTING IT ALL TOGETHER…

- Comprehensive evaluation
- Impact on life satisfaction
- Impact on functional abilities
- Objective evaluation data – ROM, Strength and other tests and measures
  - BORG RPE, 30 second Arm Curl Test, TUG, Functional Reach, Occupational Questionnaire with Numerical Pain Rating

STAGES OF HEALING

- Therapy clinicians can intervene at any of the stages, but the treatment approach is going to be different depending upon the stage of healing, the tissues involved and the patient's overall medical condition.

ACUTE, SUB-ACUTE OR CHRONIC?

- Treatment approach for same type of tissue may be completely different depending upon whether injury is acute, sub-acute vs. chronic

Control Effects of Inflammation

Reduce inflammation

- Modalities, immobilization, PROM, Kinesiotaping, soft-tissue mobilization, energy conservation, body mechanics training

Cautious Movement – active movement at the site of active pathological activity is contraindicated.

ACUTE PAIN CONSIDERATIONS . . .

SUB-ACUTE PAIN CONSIDERATIONS

- Prevent or Minimize Contracture and Adhesion Formation
- Gentle Active Movement
- "Starting to feel better" – avoid too much vigorous activity
- Continue strategies with the acute state however need to progress function and movement

CHRONIC PAIN CONSIDERATIONS

- Restore engagement in occupational roles and functional tasks
- Progressive Stretching, strengthening and functional exercises
- Re-engagement in functional roles
- Build routines
- Continue interventions to avoid scar restrictions
- Medication regime –PRN or Routine

COMMUNICATION -

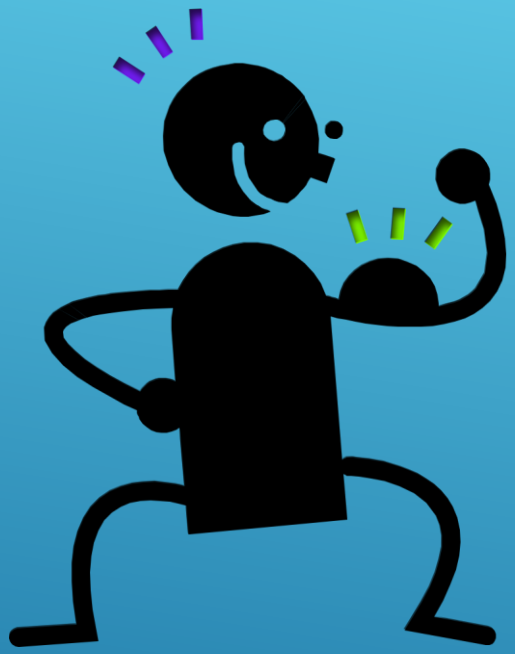
Does patient have severe or intense pain?

- Communicate with the patient and other health care providers. Patient may require pain medications before proceeding with evaluation and treatments.

- Systematically isolate and test structures

- Are the reports consistent with prior findings?
- Is the pain referred from some other structure? Example rotator cuff pain can produce pain in lateral deltoid, lung cancer pain can mimic sub acromial bursitis

WHAT TISSUES/STRUCTURES ARE INVOLVED?



- Muscle
- Tendon
- Nerve
- Ligament
- Joint Capsule

STRUCTURES/SOURCES OF PAIN

STRUCTURES/SOURCES OF PAIN

- Bursa
- Cartilage
- Meniscus
- Scar Tissue
- Bone
- Referred

MUSCLE

Isolate and apply resistance

Apply resistance in varying points of the ROM to reproduce pain

TENDON

- Same manner as muscular pain
- Palpate over the tendon of the muscle belly

NERVE

- Patient's description of pain
  - Sharp
  - Shooting
  - Lancing
  - Pins and needles

LIGAMENTS

Ligaments can be localized, isolated, and stressed

Often patients will describe ligament pain in terms of joint buckling or instability

An inflamed burse imitates muscular or tendon pain.

However,….an irritated bursa is responsive to simple compression

BURSA

- Listen to the patient's symptoms
  - Worse in the morning?
  - Decreases during the day?
  - Fatigue?
  - Dull, aching?
  - Crepitus?

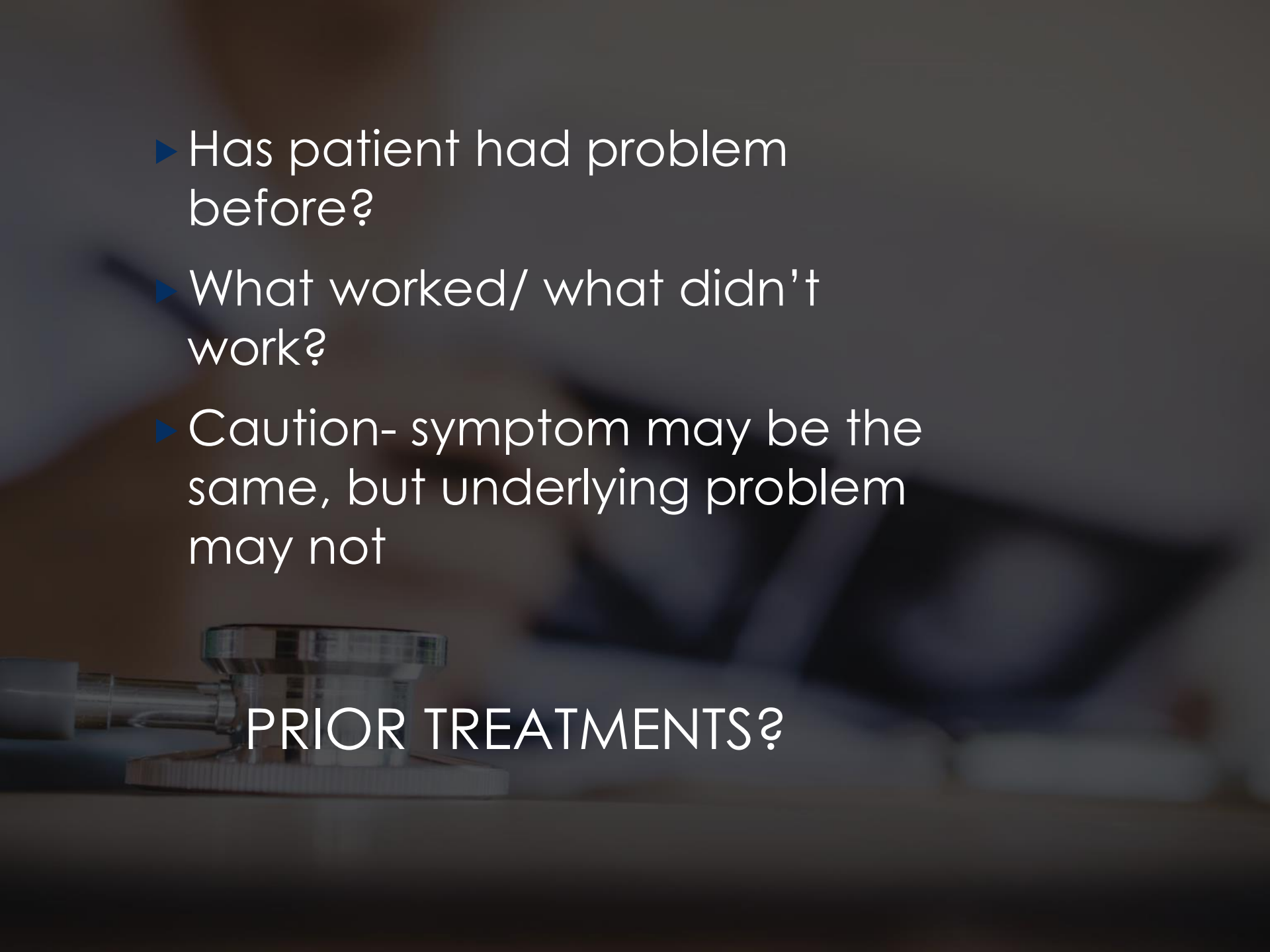
CARTILAGE

Locking	Joint locking
Buckling	Limb buckling

MENISCUS

BONE PAIN

- Deep and aching



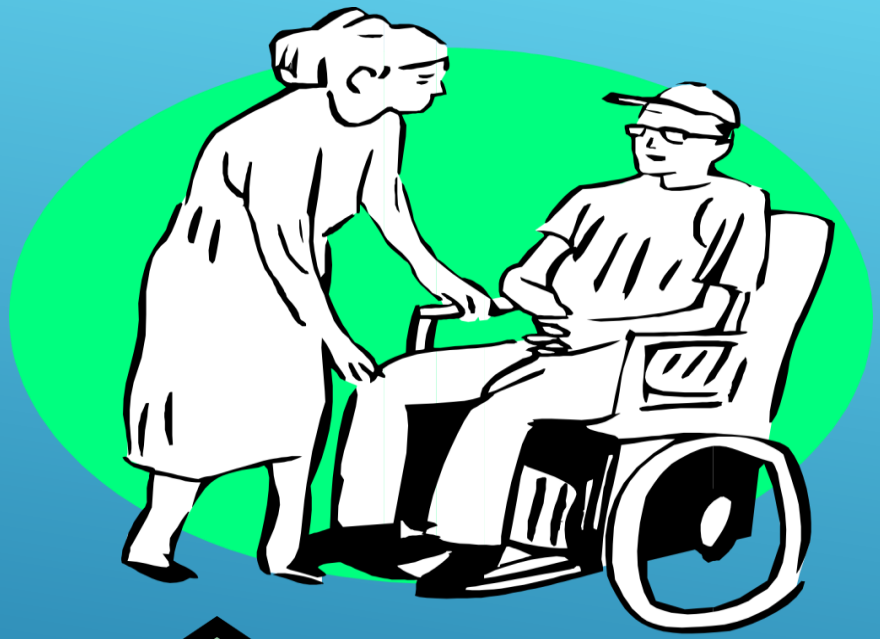
- Has patient had problem before?
- What worked/ what didn't work?
- Caution- symptom may be the same, but underlying problem may not

PRIOR TREATMENTS?

INTERVENTION PLAN DEVELOPMENT

- What structures are involved?
- Client factors
- Mobility and occupational demands
- Assessment tool results
- Type of pain
  - Acute
  - Sub-acute
  - Chronic

Back to Basics



Routine Meds
Alternative Therapies
Rehabilitation

- Look for signs of distress
- Exit seeking
- Agitation/crying
- Aggressive behavior
- Withdrawal
- Catastrophic reactions
- Sleep changes
- Appetite and/or weight loss
- Changes in bowel and bladder habits

PATIENTS WITH COMMUNICATION ISSUES

SEATING & POSITIONING

- Does wheelchair fit patient?
- Consider other seating surfaces
- Does it provide adequate support?
- What can you do to make the wheelchair more comfortable for the patient?

PAIN MEDICATIONS

- Is patient on pain medications?
- Is dosage, frequency or type appropriate?
- Would routine meds be appropriate?
- Should you adjust schedule of therapy around pain medication schedule?

TREATMENT APPROACHES

- Restore Proper Alignment/Biomechanics
- Protected Movement
- Edema Reduction
- Strengthening
- Stretching
- Modalities
- Energy Conservation
- Desensitization
- Soft tissue mobilization
- Joint mobilization
- ADL retraining
- Cognitive/psychosocial interventions
- Behavioral interventions
- Patient and Family Education

MODALITIES

- Therapeutic Exercise
- Manual Therapy
- Compression
- TENS
- Heat
- Cold
- Electrical Stimulation
- Diathermy

- Traction
- Ultrasound
- Soft tissue mobilization
- Splints/braces
- Orthopedic shoes/inserts
- Taping
- Iontophoresis
- Infrared

RELAXATION

Pain medicines only reduce pain by 30% on average

Pain is stressful

Relaxation – a bath, funny movie or listening to music

FORMAL RELAXATION TECHNIQUES

- **Deep breathing** – at least two minutes
- One hand on belly other on chest
- Deep breath through nose so belly expands – breathe out and let belly flatten
- **Progressive Muscle Relaxation** – tensing and relaxing major muscles in the body one at a time – common progression is to start at the top – head, face, neck, shoulder, arms, hands, back stomach, buttocks, legs, and feet
- **Guided imagery** – focus on pleasant images to replace negative or stressful feelings- try to include all senses

MINDFULNESS

- Act of intentionally focusing on the present moment
- Remember – pain is unpleasant physical pain AND how one reacts to it
- Separate yourself from your negative thoughts, feelings, and sensations
- **Formal mindfulness meditation** - setting aside time to focus on one thing – breathing or a sensory experience
- Start with 5 minutes – add a minute per day
- **Informal practice** – focusing on the present moment during daily activities – example while eating – notice the taste, texture and smell of the food; spending time with loved ones, bring your full attention to the conversation or activity

CHILDREN & MULTI-MODAL TREATMENTS

Medication & non-pharmacological modalities such as biofeedback, massage, aromatherapy, bubble blowing

Cognitive behavioral techniques

INTERPROFESSIONAL APPROACH

- Pain and its related psychological, family, quality of life, and socioeconomic issues present ideal opportunity for interprofessional collaboration.

- Interplay between biological, medical, social, religious/spiritual, psychological, and cognitive/behavioral

Pain Self-Management Plan

_____ Date _____

e: All Clear

level is _____
pain and 10=worst pain you ever had

do basic activities and rest comfortably
e any new pain
opioid pain medication, your bowels are
least every 2–3 days

What this could mean:

- ✓ You are managing your pain at an acceptable level for you
- ✓ Continue to take your medications as ordered
- ✓ Continue _____ (ice, heat, therapy, relaxation, along with your medicines
- ✓ Keep all physician appointments
- ✓ Continue regular exercise as prescribed

e: Caution

y of the following:
not at your comfort level with your
ments
able to do basic activities or rest comfortably
ou have never had before
aking opioid medication, your bowels have
in 2–3 days
eping more than usual
k to your stomach
take your medicine
ning signs: Mental, emotional, or physical fatigue

What this could mean:

- ✓ Your pain control plan may need to be changed

Call your home health nurse or primary care doctor

Home Health Nurse: _____
Phone Number: _____
Doctor: _____
Phone Number: _____

If you notice a Yellow Zone Caution, work closely with your healthcare team

Medical Alert! Stop and Think

any relief from your usual treatments
severe pain
opioid medication, and your bowels
oved for more than 3 days
ely sleepy
ng up
ed

What this could mean:

- ✓ ***You need to be evaluated by a healthcare profes immediately***
- ✓ ***Call your healthcare provider's office or home he***
- ✓ ***Have someone take you to the nearest emergenc***

Call 9-1-1

y the West Virginia Medical Institute, updated by TMF Quality Innovation Network and Lake Superior Quality Innovation Network, and adapted by Health Medicare Quality Innovation Network-Quality Improvement Organization for Arizona, California, Florida, Ohio, and the U.S. Virgin Islands, under contract with edicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy.
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Quality Improvement Organizations

PAIN ZONE TOOL HEALTH SERVICES ADVISORY GROUP (SPANISH AND ENGLISH)

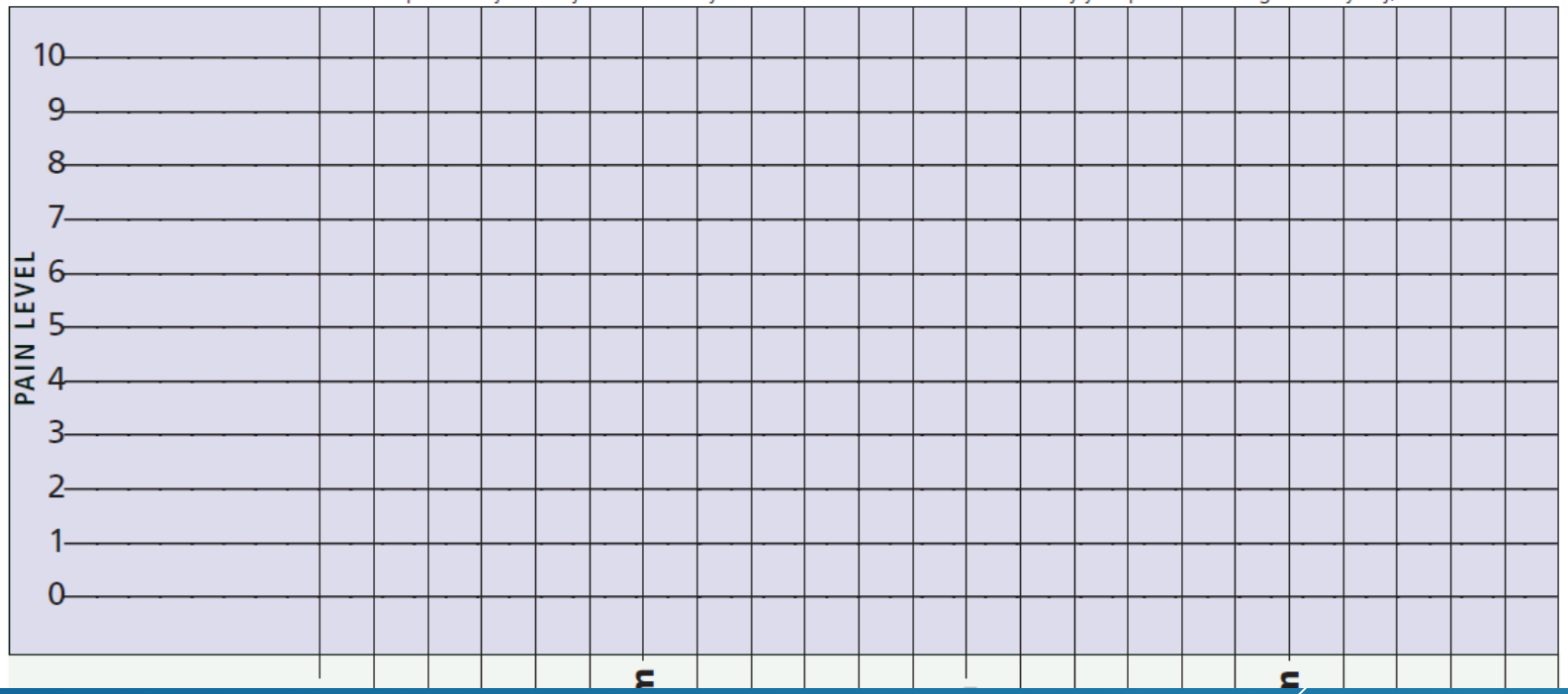
Name _____

Day _____

Date _____

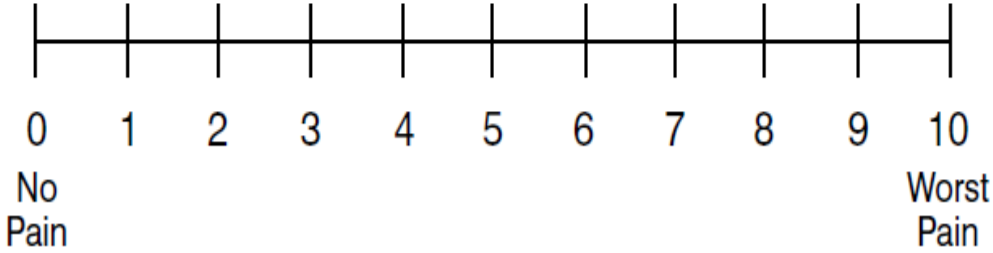
1 DAILY PAIN CHART

Connect the points on your Daily Pain Chart so your medical team can see when and why your pain level changed. Every day, start a new chart.



Pain Management Log

Please use this pain assessment scale to fill out your pain control log.



Date	Time	How severe is the pain?	Medicine or non-drug pain control method	How severe is the pain after one hour?	Activity at time of pain

QUESTIONS