Pain Management for Primary Care



DoD/VHA JOINT INCENTIVE FUND (JIF) PROJECT



Series: Three Clinical Assessment of Pain

> Module 3-1 Assessment of Pain





Module 3-1

Assessment of Pain

By the end of the module, you will be able to:

- · Identify comprehensive patient interview elements relating to persistent pain
- Describe how to use interviewing techniques when working with pain patients
- Identify basic musculoskeletal and neurologic exam elements relating to persistent pain
- Discuss judicious use of diagnostic imaging
- Guide patients in selecting SMART goals

We will review:

Topic One: Comprehensive Interview

Topic Two: Physical Exam

Topic Three: Diagnostic Imaging

Topic Four: Biopsychosocial Synthesis and SMART Goals

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Topic One

Impact of Pain on Society



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The good physician treats the disease; the great physician treats the patie

nt who has the diseas

Sir William Osler, circa 1900



Notes

Exciting cultural transformation in the philosophy of medical care – moving from clinician-centered model to patient-centered model.

Shift from biomedical model to biopsychosocial model.

An assessment of persistent pain that is solely focused on identifying the pain generator will likely lead to frustration for both the patient and the provider.

All pain has cognitive, sensory, and emotional influences and behavioral manifestations. Meaning/spirituality influences the pain experience. Assessment must focus on sensory, cognitive, emotional, behavioral and spiritual influences and effects.

The goal of the pain interview is to: build trust, gather information and facilitate change.

- Understand the patient's perspective
- Elicit pain specific history to aid in establishing pain diagnosis
- Identify patient specific coping strategies
- Identify patient specific pain interference with functioning
- Identify important comorbidities
- Synthesize the patient's story in a bio-psycho-social perspective

Notes

Myopic focus on a pain generator often ineffective when treating chronic pain. In the biomedical model, we either identify a pain generator that is considered legitimate to cause the degree of pain the patient is experiencing (leads to procedures or surgery) OR we do not find physical pathology consistent with the patient's expression of pain and assume that "it is all in our head."

In psychotherapy the quality of the therapeutic relationship is more predictive of improvement than specific technique used. (Michna, Ross, Hynes, et al. 2004)

The power of a therapeutic relationship is particularly important in the treatment of chronic pain. Fascinating research by Naomi Eisenberger demonstrates a shared neural circuitry between physical pain and social pain (social rejection or loss of relationship).

Look for "the secret" or "lynchpin"

Module 3-1 Training Guide The first step to build trust is to perform a Patient-centered, not Clinician-centered interview.

- Start with mindful listening using the RASA mnemonic (Receive Appreciate Summarize - Ask)
- Engage the patient and elicit a symptom story with personal and emotional context
- Respond to feelings and emotions expressed by using the patient's name
- Always be respectful, empathic and supportive

Notes

Bearing witness to suffering is challenging, chronic pain is complex, and because pain management has become synonymous with prescribing opioids, providers may avoid patient's complaints about pain. Willingness to engage with patients in this process can be a powerful way to build rapport. (Finan,Goodin,Smith.2013)

Mindful listening is often the first step of engaging with a patient with chronic pain.

Next in building trust is NEVER doubt a patient. Use the VEMA mnemonic:

- Validate the patient's pain experience.
 Communicate they have a legitimate medical problem and acknowledge their frustration with past medical care
- Educate them that living well, not eliminating pain is the ultimate goal and does not necessarily require prescribing opioids
- Motivate them by reassuring that you are committed to a long-term collaborative treatment relationship
- Activate patients by making meaningful activities, not pain, the central focus of daily life



Notes

Validation - Much of our struggle with patients relates to our communication of doubt. Communicate to your patient they have a legitimate medical problem, acknowledge their frustration with past medical care, and commit to a collaborative treatment relationship.

Education - The basis of effective, long-term care is a shared understanding of chronic pain. Patient education is a continuous and ongoing process. We teach patients something about chronic pain with every question we ask, treatment we offer or referral we make. Your actions as well as words should communicate that:

Complex pain is an overwhelming life experience not a symptom.

Medical solutions are not possible.

Long-term improvement in quality of life is achievable.

Lasting change depends more upon their efforts than our treatments.

Motivation - Patients vary in their willingness to engage in self-management. Current thinking in chronic pain management emphasizes "readiness to change." Use Motivational Interviewing techniques to facilitate engagement in self-management.

Activation - The primary clinical focus is on changing the way patients react to pain. Complex pain patients need help to develop realistic plans of action. They are stuck waiting for pain to be relieved so they can regain control of their lives. This "pain rut" is characterized by maladaptive coping efforts. Avoiding pain, reducing pain, or seeking pain treatment is the central focus of daily life. Physical deactivation is ubiquitous and contributes nociceptive input beyond the original injury. Social isolation, boredom, and negative moods amplify suffering and disability. Self-management strategies help them first take control of their lives and often result in a reduction of pain.

Module 3-1 Training Guide

Using a patient-centered interview, start to gather information using your clinician-centered interview skills.

- Use direct questions
- Rule out Red Flags
 - Bowel/bladder dysfunction
 - Saddle anesthesia
 - Bilateral leg weakness
 - Severe, sudden onset headache
 - Fever, weight loss, night sweats
 - Recent injury
 - History of cancer
- Identify patho-diagnostic patterns
- E.g. leg pain > back pain, worsened by walking and improved by sitting may be suggestive of lumbar spinal stenosis

Notes

Emphasize that a patient-centered interview is aimed to build a patients trust. Your Clinical-centered skills do not build trust, they are necessary to gather information.

Remember the OPQRSTU mnemonic:

- Use OPQRSTU
- Ask about previous consultations, diagnostic imaging, diagnostic procedures
- Ask about previous treatments and outcome details of:
 - Medications
 - Effects, side effects, dose, duration of use
 - Procedures
 - Degree and duration of benefit, side effects
 - Surgeries
 - Indication for surgery and results

Onset

Provocative/ Palliative Quality/ Character Region/ Radiation Severity Timing/ Treatment

U You/ Impact

Notes

The pain specific history should seek to understand the patient's pain story and begin to characterize the pain in patho-anatomic terms. This process is started with patient-centered interviewing processes and clarified using clinician centered interviewing processes.

Pain specific history

Goal is to understand patient's pain narrative

First, use patient-centered interviewing processes to elicit the patient's story including emotional significance and meaning

Then use clinician centered interviewing processes to identify pain characteristics (OPQRSTU) and for initial characterization of pain in patho-anatomic terms (location, mechanism, etiology or IASP taxonomy)

OPQRSTU

- Onset
- Provocative/Palliative
- Quality or Character
- Region/Radiation
- Severity
- Timing/Treatment
- U (You/Impact on Patient)

Patients with chronic pain will often have seen prior medical providers including subspecialists. It is important to ask about and document prior diagnostic tests that have been obtained as well as responses to prior treatment. Inquire about specifics of medication treatment failures as an adequate dose and duration of may not have been trialed in the past.

Look for medical comorbidities and perform a psychosocial assessment.

- Medical Comorbidities (lung and sleep disorders, obesity, heart, liver, kidney disease)
- Medication History (prescription drugs, over-the-counter medication, herbal supplements)
- Psychiatric Comorbidities like depression, anxiety, ADHD, substance use, PTSD which are common and are associated with greater pain intensity and pain related disability
- Coping Strategies like anxiety, catastrophizing, avoidance, internal locus of control
- Functional Assessment at home, work, and community, Kinesiophobia, support system, values

Notes

Please note that in your psychosocial assessment it is important to address coping strategies especially catastrophizing.

Catastrophizing - "Negative cascade of distressing thoughts and emotions about actual or anticipated pain"

- Amplification, helplessness, rumination "irrational thoughts in which we believe something is worse that it is" (either current situation or anticipate everything in the future that will likely go wrong)
- Catastrophizing associated with higher pain intensity, likelihood of developing chronic pain, and poor treatment response
- Pain Catastrophizing Scale Mark Sullivan

When I'm in pain ...

- 1. I worry all the time about whether the pain will end.
- 2. I feel I can't go on.
- 3. It's terrible and I think it's never going to get any better.
- 4. It's awful and I feel that it overwhelms me.
- 5. I feel I can't stand it anymore.
- 6. I become afraid that the pain will get worse.
- 7. I keep thinking of other painful events.
- 8. I anxiously want the pain to go away.
- 9. I can't seem to keep it out of my mind.
- 10. I keep thinking about how much it hurts.
- 11. I keep thinking about how badly I want the pain to stop.
- 12. There's nothing I can do to reduce the intensity of the pain.
- 13. I wonder whether something serious may happen.

Start to facilitate change by strengthening you and your patient's commitment to change.



Notes

Motivational Interviewing - collaborative conversation for strengthening a person's own motivation and commitment to change.

• Patient-Centered counseling style for addressing the common problem of ambivalence about change by paying particular attention to the language of change.

Designed to strengthen an individual's motivation for and movement toward a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion.

OARS (open-ended questions, affirmations, reflections, summaries)

Module 3-1 Training Guide

Why are interviews often confrontational? In two words: doubt and frustration.

- Most patients come with a negative medical history and expect to be "fixed"
- Many providers use a biomedical approach to chronic pain and promise patients to be "fixed"
- Both parties are frustrated when the patient has not been "fixed"
- The patient doubts the competency of the clinician and wonders if the clinician cares because he or she has not provided a "fix"
- The clinician doubts the legitimacy of the patient's complaints and sometimes may doubt their own competency when they are unable to offer a "fix"

Notes

Read the slide out loud and emphasize the word "fix".

Moving forward requires you to:

- Realize that it may be normal for patients with chronic pain to be angry, frustrated, doubtful, or fearful
- Pay attention to any atypical emotions of guilt, wish to disengage, pity, revulsion, or any anti-social borderline behavior
- Redefine the problem at hand by deconstructing the painful experience to their biopsycho-social components
- Redefine possible solutions using a whole person, multimodal, team based approach, where the 'activated' patient is the center of the team

Notes

Patients with chronic pain are often fearful, anxious, frustrated, angry, and have poor ability to self-regulate their emotions.

Mindfulness (nonjudgmental awareness of the present moment) and self-awareness (awareness of our own emotions, thoughts, body) can facilitate focus on the function of the patient's words rather than the content of the patients words and can help the clinician stay in the therapeutic mindset despite intense emotional content. (Liebschutz, Saitz, Weiss, et al. 2011)

If confrontation is unavoidable, suggest a break and seek assistance from a team member.

- Be aware that interviewing patients with chronic pain sometimes can elicit an emotional response (countertransference)
- Countertransference is only partially conscious and always present
- Use these emotions to gain insight into the patient's situation, motivations, and overall management. Take care not to draw unfounded conclusions or judgments
- Stay in the mindset of "what is best for the patient" and assess the risk versus benefit before continuing the interview

Notes

In the majority of a clinician's encounters with patients he/she feels calm, confident, and a desire to help but with appropriate boundaries.

When a clinician has atypical emotions/inclinations such as anger, wish to disengage, inclination to help beyond appropriate boundaries, incompetent, etc it is important to tune into these feelings/emotions/bodily sensations and try to ascertain why these are present. (Liebschutz, Saitz, Weiss, et al. 2011)

Psychiatric conditions such as anxiety disorders, depression, disorders, and Post-Traumatic Stress (PTS) are associated with higher pain intensity and pain related disability.

Poor sleep is associated with onset and worsening of chronic pain.

Sleep disordered breathing may be caused by or worsened by opioid medication and may increase risk of respiratory depression and death.

History of substance use disorder including tobacco is associated with increased likelihood of prescription opioid misuse and abuse.

Knowledge Check

The acronym "VEMA" is important during the comprehensive interview when working with patients with pain and stands for ______, ____, ____, ____, and ______.

- a. Validate, Educate, Motivate, Activate
- b. Validate, Energize, Motivate, Activate
- c. Value, Educate, Manage, Activate
- d. Variance, Elect, Motivate, Action

Knowledge Check – Answer

The acronym "VEMA" is important during the comprehensive interview when working with patients with pain and stands for ______, ____, ____, ____, and ______.

- a. Validate, Educate, Motivate, Activate
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Notes

Read question aloud

Module 3-1 Training Guide

Topic Two

Physical Exam



The components of the clinical exam include:

Inspection and General Appearance Vital Signs Palpation Neurological Examination Mental Status Posture and Gait Range of Motion (active and passive) Special Tests

Notes

Mental Status - Sedation, cognitive dysfunction, or affective dysregulation are important to identify and may affect treatment planning.

Inspection and General Appearance - Erythema and skin rash may indicate the presence of inflammatory or systemic pathology.

Vital Signs - May indicate the presence of systemic pathology, medication side effects, or opioid withdrawal.

Posture and Gait - Can aid in the diagnosis of neurologic disorders. Can identify exacerbating factors in musculoskeletal conditions (anterior head and shoulder, anterior pelvic tilt) and point to treatment targets.

Palpation - Can aid in the diagnosis of myofascial pain and identify treatment targets (trigger points).

Range of Motion - Reduction in ROM can aid in the diagnosis of specific conditions (ankylosing spondylitis, frozen shoulder). Symptom exacerbation during ROM can aid in the diagnosis of specific conditions (cervical radiculopathy, facet arthropathy). Can identify areas for treatment such as tight hamstrings, hip flexors, or iliotibial band.

Neurological Examination - Can identify neurologic deficits requiring further evaluation such as advanced imaging or nerve conduction study/electromyography.

Special Tests - Can help identify specific conditions.

Physical Exam Page 13 The goal of the physical exam is to exclude red flags, complement the psychosocial assessment and quantify impairment.

Complement the psychosocial assessment and quantify impairment

- Gait (antalgic, foot drop, Trendelenburg)
- Motor (0-5 motor grading, myotomes)
- Sensory (dermatomes, sclerotomes)
- Reflexes (0-4 reflex grading, clonus, Babinski)
- Pathological findings
 - Straight leg raise
 - Spurling
 - Tinel
 - Phalen

Notes

Important findings to identify include: inflammatory/infectious arthritis, neurological deficits, and evidence of systemic pathology.

Gait

- Trendelenburg Drop of pelvis when lifting leg opposite to weak G. medius
- Steppage or slap-foot (foot drop) Unilateral = common peroneal nerve palsy or L5 radiculopathy

Motor

 Motor Grading: 5 = normal, 4 = Full ROM against resistance, 3 = Full ROM against only gravity, 2 = Full ROM with gravity eliminated, 1 = Palpable/ observable contraction, 0 = No palpable contraction Myotomes – muscle groups innervated by specific spinal nerve

Sensory

• Light touch, propriopception, pin prick

Reflexes

- Muscle Stretch Reflexes ("Deep Tendon" reflexes) 0 = absent, 1 = diminished, 2 = normal, 3 = hyperactive, 4 = hyperactive with clonus
- Pathological Reflexes Babinski, Hoffman, clonus

Pathological findings

• Provocative findings (eg straight leg raise, Spurling's, tinel's, and phalen's tests)

Topic Three

Diagnostic Imaging

Choosing Wisely[®]

An initiative of the ABIM Foundation

Absence of red flag signs and normal physical exam, routine imaging reinforces sick behavior and worsens long-term outcome.

- Use diagnostic imaging only when red flag signs and a physical exam suggest a Red Flag condition.
- Advanced diagnostic imaging such as CT or MRI could be considered when referring for interventional or surgical procedure.
- Most 'abnormal findings' (like degeneration) on MRI are "age-appropriate" and are NOT sources of pain unless proven by a diagnostic block like a selective nerve root or medial branch block.
- Intervertebral endplate edema on T2 MRI sequence or a disc bulge with an annular tear might be the source of pain if a provocative discography replicated that pain.

Notes

A normal MRI is highly sensitive for excluding painful pathology.

• 98 people from 20-80 y/o (mean age 42.3 y/o)

Only 36% had normal discs at all levels 52% had disc bulge at at least one level 27% had a protrusion 1% had extrusion (Goldberg, Pachas, Keith. 1999)

38% had an abnormality at > 1 level abnormalities increase with age Abnormal finding in 60-80 y/o 57%
 HNP in 36% of 60-80 y/o
 54% of pts < 60 had at least 1 bulging disc
 79% of pts > 60 had at least 1 bulging disc
 (Boden, Davis, Dina, Patronas, Wiesel. 1990)
 Degeneration or bulging disc in at least one lumbar level in 35%
 of 20-39 y/o and in all but one 60-80 y/o

Diagnostic Imaging Page 15 Imaging should be performed only in patients who have severe progressive neurological deficit, suggesting an underlying disease.

- Do not image acute low back pain within the first six weeks, unless red flags are present (Red flags include, but are not limited to, severe or progressive neurological deficits or when serious underlying conditions such as osteomyelitis are suspected)
- Do not image an uncomplicated headache unless
- Neurologic exam is abnormal
- Unable to diagnose by history and exam
- · Headache is sudden or explosive,
- Different from prior ones, especially over 50 y/o
- Progressively worsening
- Brought on by exertion
- Accompanied by fever, seizure, vomiting, a loss of coordination, vision/speech/ alertness changes
- The patient is immuno-compromised or with a known malignancy

Notes

- Diagnostic imaging studies should only be performed in patients who have severe or progressive neurologic deficits or with features suggesting a serious or specific underlying condition.
- Advanced imaging with MRI or CT should be reserved for patients with a suspected serious underlying condition or neurologic deficits or who are candidates for invasive interventions.

Choosing Wisely [®] (www.choosingwisely.org) is an initiative of the American Board of Internal Medicine partnered with organizations representing medical specialties and Consumer Reports.

Aims to promote conversations between providers and patients by helping patients choose care that is:

- Supported by evidence
- Not duplicative of other tests or procedures already received
- Free from harm
- Truly necessary

Headache: Imaging headache patients absent specific risk factors for structural disease is not likely to change management or improve outcome. Those patients with a significant likelihood of structural disease requiring immediate attention are detected by clinical screens that have been validated in many settings. Many studies and clinical practice guidelines concur. Also, incidental findings lead to additional medical procedures and expense that do not improve patient well-being.

Topic Four

Diagnosis, Synthesis, Goal Setting



A diagnosis of "chronic pain" is simply not enough.

- Try to establish a specific pain patho-anatomic diagnosis
- For example:
 - Acute, chronic, cancer/terminal pain
 - Location focal, regional, widespread
 - · Mechanism nociceptive, neuropathic, myofascial, mixed
 - Etiology Diabetes, Rheumatoid arthritis, herniated nucleus pulposus
- Seek to understand the unique history of each patient and communicate the individualized treatment recommendations that aim to reduce suffering and impaired functioning and promote a sense of health and well being

Notes

Each patient's pain story is unique (unique origin and unique impact).

Treatment planning needs to be individualized to account for unique patient characteristics.

Diagnosis, Synthesis, Goal Setting Page 17

Set SMART Goals.

- Elicit and understand what is important to the patient (values)
- Ascertain any discrepancy between what the patient is doing (current value guided activities) and what is important to do
- Identify SMART goals that will help the patient move towards these valuable activities
- Always focus on function, not pain relief, because pain is something we do, not feel



Notes

- Identify values
- Identify discrepancy between current activities and stated values
- Assist patient in development of their own SMART goals

Discussing values and functional goals (identify goals without using the word "pain") can help align patients and providers in moving towards improved health.

Knowledge Check

SMART goals are used to help patients move towards their _____ and should focus on

- a. values; exercise habits
- b. pain problems; function
- c. goals; pain history
- d. values; function
- e. goals; personal hygiene

Knowledge Check – Answer

SMART goals are used to help patients move towards their _____ and should focus on

- a. values; exercise habits
- b. pain problems; function
- c. goals; pain history
- d. values; function
- e. goals; personal hygiene

Notes

Read question aloud

Module 3-1 Training Guide



Recall that chronic pain is a multidimensional experience that requires a motivational interview (use VEMA), a focused physical exam, and rarely requires any additional diagnostic imaging.

Feel confident to synthesize a pain narrative using a biopsychosocial perspective, set SMART goals and strengthen your patient's commitment to a lifestyle change by making meaningful activities, not pain, the central focus of their daily life.

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