MI-CCSI
Center for Clinical Systems Improvement

Pain and Symptom Management in Chronic and Serious Illness

Today's Presenter

Dr. Carol F. Robinson DNP, MS, BSN, RN, CHPN®

Dr. Robinson has had a varied nursing career in both clinical and administrative leadership positions. Her scholarly work has focused on communication skills for health professionals, including advance care planning (ACP) conversations.

MI-CCSI
Center for Clinical Systems Improvement

Disclosure

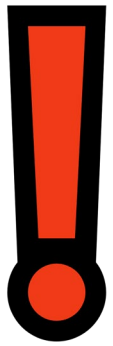
MI-CCSI, or the presenter, does not have any financial interest, relationships, or other potential conflicts, with respect to the material which will be covered in this presentation.

Learning Objectives

1. Identify various types of pain manifestation.
2. Utilize clinical knowledge and evidence-based tools to identify, assess, and treat symptom burden (as defined by scope of practice) commonly experienced by patients with serious illness (SI)
3. Identify patients at high risk of symptom escalation
4. Identify physical symptom escalation and need for enhanced treatment.
5. Define the indicators for referral to a specialty palliative care provider.

Throughout slides denotes “consider referral to palliative care specialist”

MI-CCSI
Center for Clinical Systems Improvement



Throughout slides denotes patient/condition at risk of symptom escalation

Pain Management

Definitions & Principles

Pain

Definition

"An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage."

- Pain is always a *personal* experience that is influenced to varying degrees by biological, psychological, and social factors.
- Pain and nociception are different phenomena. Pain cannot be inferred solely from activity in sensory neurons.
- Through their life experiences, individuals learn the *concept* of pain.
- A person's report of pain should be respected.
- Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being.
- Verbal description is only one of several behaviors to express pain; inability to communicate does not negate the possibility that a human or a nonhuman animal experiences pain.

Raja et al (2020)

Pain Position Statements

Nursing Profession

"Nurses have an ethical responsibility to provide clinically excellent care to address a patient's pain. Clinically excellent pain management considers clinical indications, mutual identification of goals for pain management, interprofessional collaboration, and awareness of professional standards for the assessment and management of different types of pain."

ANA center for ethics and human rights. (2018)

"Nurses and other healthcare providers must advocate for effective, efficient, and safe pain and symptom management to alleviate suffering for every patient receiving end-of-life care regardless of their age, diseases, history of substance misuse, or site of care. This position statement is directed to the special needs of those individuals with serious illness and a prognosis of days to months."

HPNA & ASPMN (2017)

MI-CCSI
Center for Clinical Systems Improvement

Pain Position Statements

Social Work

"Comprehensive integrative pain management (CIPM) includes biomedical, psychosocial, complementary health, and spiritual care. It is person-centered and focuses on maximizing function and wellness. Care plans are developed through a shared decision-making model that reflects the available evidence regarding optimal clinical practice and the person's goals and values."

NASW (2019) ,US DHHS (2019)

MI-CCSI
Center for Clinical Systems Improvement

Pain: Underlying Principles

Physicians

- ***A moral imperative.*** Effective pain management is a moral imperative, a professional responsibility, and the duty of people in the healing professions.
- ***Chronic pain*** can be a disease in itself. Chronic pain has a distinct pathology, causing changes throughout the nervous system that often worsen over time. It has significant psychological and cognitive correlates and can constitute a serious, separate disease entity.
- ***Value of comprehensive treatment.*** Pain results from a combination of biological, psychological, and social factors and often requires comprehensive approaches to prevention and management.
- ***Need for interdisciplinary approaches.*** Given chronic pain's diverse effects, interdisciplinary assessment and treatment may produce the best results for people with the most severe and persistent pain problems.
- ***Importance of prevention.*** Chronic pain has such severe impacts on all aspects of the lives of its sufferers that every effort should be made to achieve both primary prevention (e.g., in surgery for a broken hip) and secondary prevention (of the transition from the acute to the chronic state) through early intervention.
- ***Wider use of existing knowledge.*** While there is much more to be learned about pain and its treatment, even existing knowledge is not always used effectively, and thus substantial numbers of people suffer unnecessarily.
- ***The conundrum of opioids.*** The committee recognizes the serious problem of diversion and abuse of opioid drugs, as well as questions about their long-term usefulness. However, the committee believes that when opioids are used as prescribed and appropriately monitored, they can be safe and effective, especially for acute, postoperative, and procedural pain, as well as for patients near the end of life who desire more pain relief.
- ***Roles for patients and clinicians.*** The effectiveness of pain treatments depends greatly on the strength of the clinician–patient relationship; pain treatment is never about the clinician's intervention alone, but about the clinician and patient (and family) working together.
- ***Value of a public health- and community-based approach.*** Many features of the problem of pain lend themselves to public health approaches—concern about the large number of people affected, disparities in occurrence and treatment, and the goal of prevention cited above. Public health education can help counter the myths, misunderstandings, stereotypes, and stigma that hinder better care.

Goals of Pain Management

- Effectively manage pain and distressing symptoms
- Increase quality of life
- Decrease caregiver stress
- Provide an acceptable sense of control
- Improved relationships with provider, including trust, can improve when distressing symptoms are managed
- Improve function
- Enhance coping skills to deal with ongoing pain

ANA (2018), HPNA & ASPMN (2017), US DHHS (2019), Graves (2018)

MI-CCSI
Center for Clinical Systems Improvement

Types of Pain

Pain Types

Acute and Chronic

Acute Pain	Chronic Pain
▪ Caused by specific event ▪ Signals some type of injury/tissue damage ▪ dissipates as the issue heals ▪ Person “looks sick” ▪ Produces a change in vital signs; sweating, pallor, increased heart and respiratory rate	▪ pain persists beyond the “normal” healing period; 3-6 months ▪ Person doesn’t “look sick” ▪ No physical signs ▪ *premorbid psychosocial comorbidities are predictive of the development of chronic pain and perceived disability

MI-CCSI
Center for Clinical Systems Improvement

Graves (2018, p. 38)

Types of Pain

Nociceptive: Somatic (well-localized)

Description	Possible Causes (etiology)	Intervention
• Dull • Achy • Throbbing • Sore	• Arthritis • Bone fracture • Injury to deep musculoskeletal structures or superficial cutaneous tissues • Osteoporosis • Bone or spine metastases	• Non-steroidal anti-inflammatories (NSAIDs) • Steroids • Muscle relaxants • Bisphosphonates • Opioids and/or radiation therapy (bone mets)

Fink & Gates (2010)

Types of Pain

Nociceptive: Visceral (poorly localized)

Description	Possible Causes (etiology)	Intervention
• Squeezing • Cramping • Gnawing • Pressure • Distension • Deep • Stretching • Bloated feeling • Diffuse	• Post-abdominal or thoracic surgery • Venous occlusion • Ischemia • Bowel obstruction • Liver metastases • Pancreatitis	• Non-steroidal anti-inflammatories (NSAIDs) • Opioids (use with caution in bowel obstruction)

Fink & Gates (2010)

Types of Pain

Neuropathic (deafferentation)

Description	Possible Causes (etiology)	Intervention
• Burning • Numb • shooting sensation • Tingling • “pins and needles” • Short-lasting shooting • Electric or shock-like pains	• Postherpetic or trigeminal neuralgia • Diabetic neuropathies • HIV associated neuropathy (viral or antiretrovirals) • Chemotherapy-induced neuropathies • Post stroke pain • Post radiation plexopathies • Phantom pains	• Anticonvulsants • Local anesthetics • Antidepressants • Benzodiazepines • Steroids • Nerve blocks • Opioids

If from central nervous system (CNS): change in vital signs, nausea & vomiting, change in Intracranial pressure (ICP)
If from spinal cord: constant, dull aching with neurological deficits

Can be difficult to treat, especially in chronic cases

MI-CCSI
Center for Clinical Systems Improvement

Types of Pain

Psychologic

Description	Possible Causes (etiology)	Intervention
• All-encompassing • "Everywhere"	• Psychologic disorders	• Psychosocial support • Psychiatric treatments • Complementary Alternative Therapies

Fink & Gates (2010)

MI-CCSI
Center for Clinical Systems Improvement

Pain Assessment

Pain

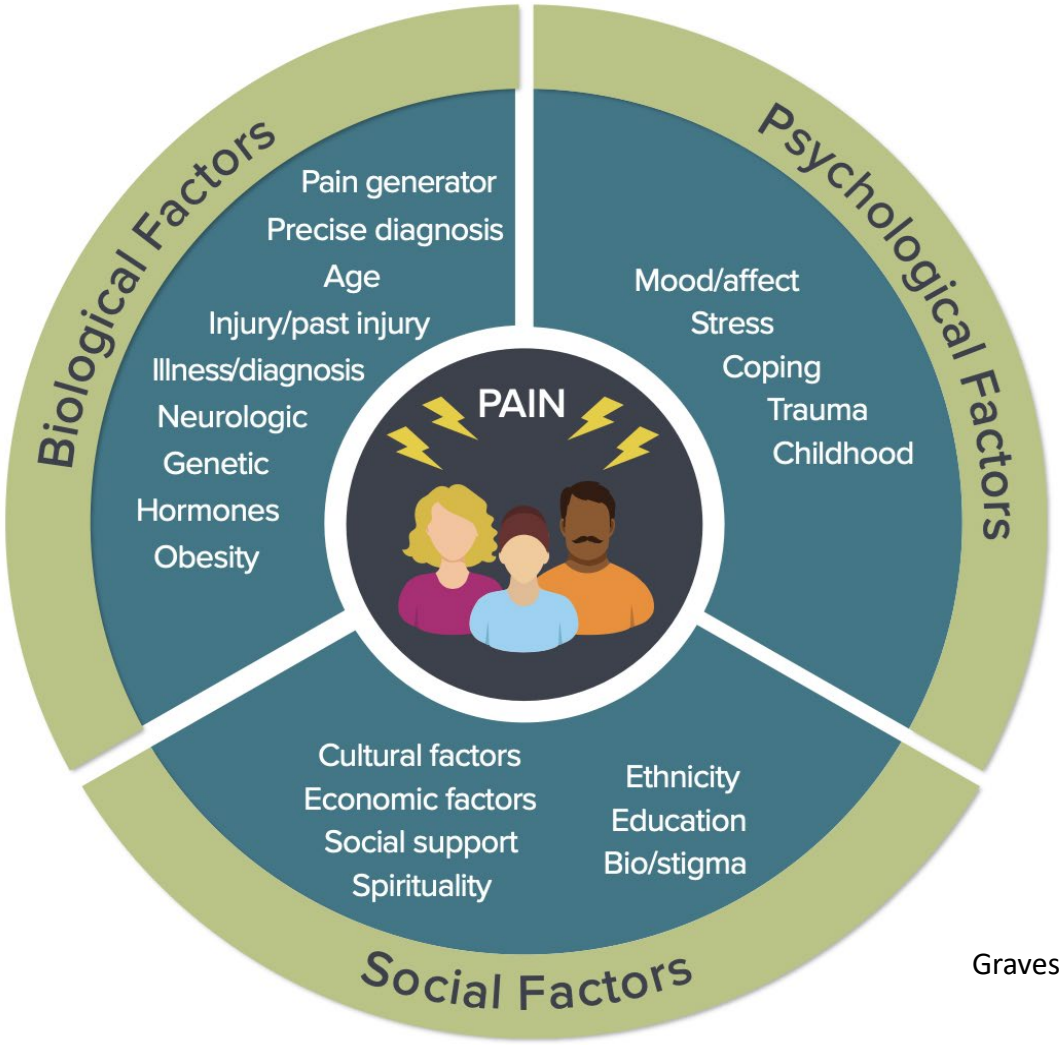
Assessment

- **Location(s), intensity, quality, timing**
  - sharp, dull, stabbing, tingling, burning
  - constant, intermittent, shooting, with activity, at rest
- **Aggravating/alleviating factors**
  - movement, rest, heat, cold, meditation
- **Meaning of pain**
  - getting better,/improving, getting worse
- **How pain impacts quality of life**
  - ability to enjoy activities, work, ADLs, recreation
- **Cultural considerations for pain**

MI-CCSI
Center for Clinical Systems Improvement

Pain

Biopsychosocial Model



Graves (2018), US DHHS (2019)

MI-CCSI
Center for Clinical Systems Improvement

Pain

Assessment: Cultural Aspects

- Preferred language
- Health literacy
- Fear of pain medications
- Concept of pain and suffering
- Correct labeling of pain: pain versus hurt (or discomfort)
- Access to health care
- Financial considerations (lack of insurance, discrimination, lack of PCP)

Cormack et al (2019); NCP (2018); US DHHS (2019)

MI-CCSI
Center for Clinical Systems Improvement

Pain

Assessment: Physical

- Patient's description of pain
- Language used
- Ache
- Hurt
- Discomfort
- Pain

Fink et al., (2019); Paice (2019)

MI-CCSI
Center for Clinical Systems Improvement

Pain

Multifactorial Pain Assessment

- **Physiologic/Sensory**
  - What is causing the pain?
  - How does the person describe their pain?
- **Affective**
  - How does the person's emotional state affect their report of pain?
  - How is pain affecting the person's mood?
- **Cognitive**
  - What is the meaning of the pain to the person?
  - What is the person's past experience with pain?
  - How does their knowledge, attitudes and beliefs affect their experience?

Pain

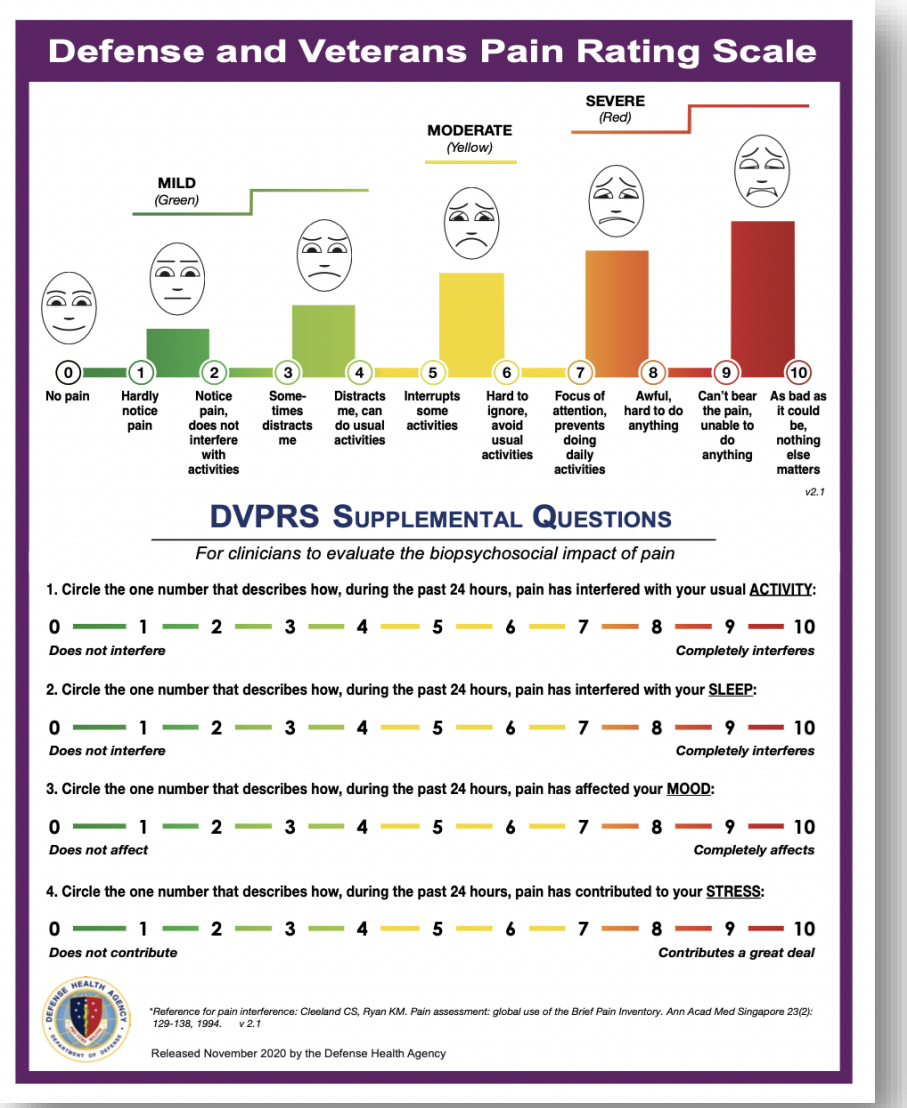
Multifactorial Pain Assessment

- **Behavioral**
  - Ask, "*How will I know you are in pain if you cannot use words to tell me?*"
  - What is the person doing to try to decrease their pain (guarding, not moving, holding breath, etc.)?
- **Sociocultural**
  - How is the person's coping and pain expression related to their sociocultural background (age, gender, ethnicity, spirituality, social support, etc.)?
- **Environmental**
  - How does the person's environment affect their pain experience or expression (e.g., peaceful vs. hectic environment, lighting, extreme noise, heat or cold, etc.)?

Biopsychosocial Pain Assessment

Defense and Veterans Pain Rating Scale

- measures intensity AND impact on daily function
- combines 0-10 scale with facial expressions and colors to express pain intensity
- adds supplementary question to determine effects of pain on a person's daily functions (sleep, mood, activity, stress)
- helps the person understand goals for therapy



Defense Health Agency (2020, November)

MI-CCSI
Center for Clinical Systems Improvement

Pain

Assessment - History

- Medication use history, including how med is taken
  - Current, including non-prescription medications (OTC, herbs, etc.)
  - Past
- Psychosocial history
- Substance use history ~ can frame as “self-medication”
  - *“How much alcohol/wine/marijuana do you use?”*
- Goals of care

MI-CCSI
Center for Clinical Systems Improvement

Barriers to Effective Pain Management

Dangers of Unresolved Pain

Undertreated pain may actually hasten death by:

- decreased mobility
- increased possibility of pneumonia or embolism
- increased physiological stress
- increased work of heart & lungs
- decreased immunity

Paice (2019)

Words Matter:

Avoiding stigma regarding opiate use

Terminology	Definition	Appropriate Language
Addiction	A chronic, relapsing disorder characterized by c*ompulsive (or difficult to control)* drug seeking and use despite harmful consequences, as well as long-lasting changes in the brain.	
Addict	In the past, people who used drugs were called "addicts"	people who use drugs and drug users
Dependence !	• A condition that can occur with the regular use of illicit or some prescription drugs, even if taken as prescribed • Characterized by withdrawal symptoms when drug use is stopped • *A person can be dependent on a substance without being addicted*, but dependence sometimes leads to addiction	Dependence
Drug Abuse	• older diagnostic term that defined use that is unsafe, use that leads a person to fail to fulfill responsibilities or gets them in legal trouble, or use that continues despite causing persistent interpersonal problems • This term is increasingly avoided by professionals because *it can perpetuate stigma*	• drug use (in the case of illicit substances) • drug misuse (in the case of problematic use of legal drugs or prescription medications) • addiction (in the case of substance use disorder).
Substance use disorder (SUD)	• A medical illness caused by disordered use of a substance or substances • SUDs are characterized by clinically significant impairments in health, social function, and impaired control over substance use and are diagnosed through assessing cognitive, behavioral, and psychological symptoms [Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)] • An SUD can range from mild to severe.	
Tolerance !	A condition in which higher doses of a drug are required to achieve the desired effect	
Withdrawal	Symptoms that can occur after long-term use of a drug is reduced or stopped; these symptoms occur if tolerance to a substance has occurred and vary according to substance. Withdrawal symptoms can include negative emotions such as stress, anxiety, or depression, as well as physical effects such as nausea, vomiting, muscle aches, and cramping, among others. Withdrawal symptoms often lead a person to use the substance again.	

MI-CCSI Center for Clinical Systems Improvement

NIDA (2020, August 31)

Barriers to Effective Pain Management

Patient & Family	• Denial: believe pain is a sign of deterioration • Fear: increasing pain means the disease is progressing • Pain cannot be relieved: it is a natural part of illness • Stoicism • Fear of "addiction" and abuse
Healthcare Provider	• Inadequate assessment of pain! Use an appropriate assessment scale • Pain has a "global" nature: lack of including psychosocial, social, cultural & spiritual aspects of pain assessment/management • Fear of doing harm, causing adverse effects • Fear of diversion, addiction, legal issues • Exclusion of nonpharmacological measures • "Prescriber hubris (pride)": provider doesn't ask for assistance from pain/palliative care specialists
Healthcare System	• Restrictive formularies, limited opioid access, prohibitive cost for appropriate therapy • Limited insurance coverage for non-pharmacological treatments (PT, OT, counseling) • Lack of available pain & palliative care specialists • Lack of support for adequate pain education/resources for challenging cases

MI-CCSI
Center for Clinical Systems Improvement

HPNA & ASPMN (2017); US DHHS (2019)

Pain

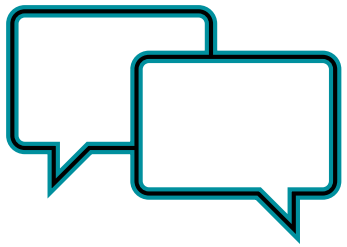
Healthcare Provider Communication

- Express your commitment to doing everything in your power to alleviate pain
- Tell patients what you are doing to help relieve the pain, and why
- For complex pain management patients, propose a referral to a pain management specialist for additional treatment suggestions

MI-CCSI
Center for Clinical Systems Improvement

Pain

Sample Key Messages



"Managing your pain is very important to us. We will ask you about your pain on a regular basis. We will ask you questions to measure your pain and how it affects your ability to function. Our goal is to reduce your pain to a comfortable and tolerable level."

"I understand you are in pain. Let me see if I can help by _____"
(tell the person what you are going to do to help them)

"We are going to try and make you more comfortable and reduce the pain you are experiencing."

MI-CCSI
Center for Clinical Systems Improvement

Pain Management

Biopsychosocial, Integrative Approaches

Pain

Biopsychosocial Treatment Approach to pain management

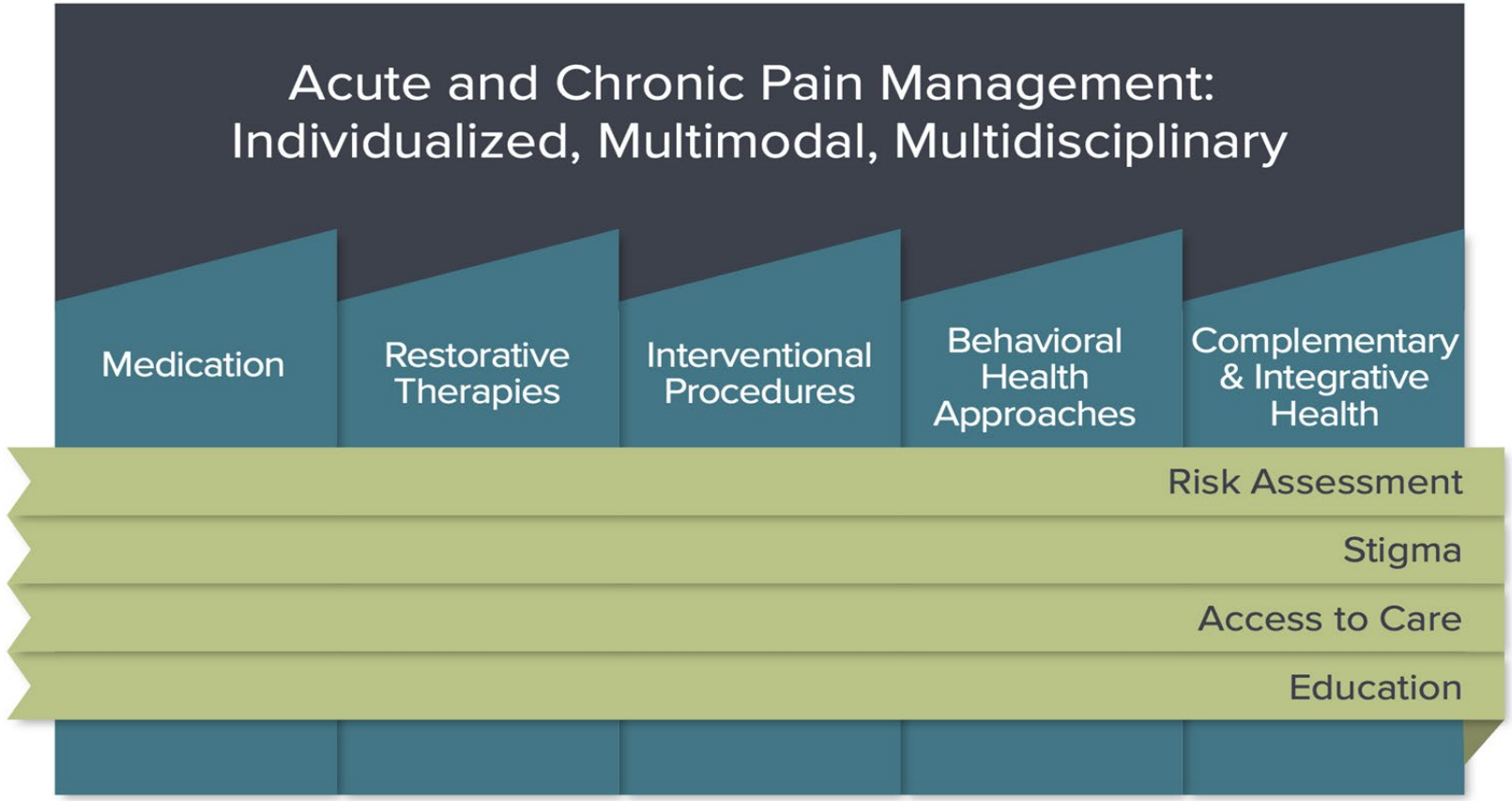


Figure 4: Acute and Chronic Pain Management Consists of Five Treatment Approaches Informed by Four Critical Topics

U.S. DHHS (2019)

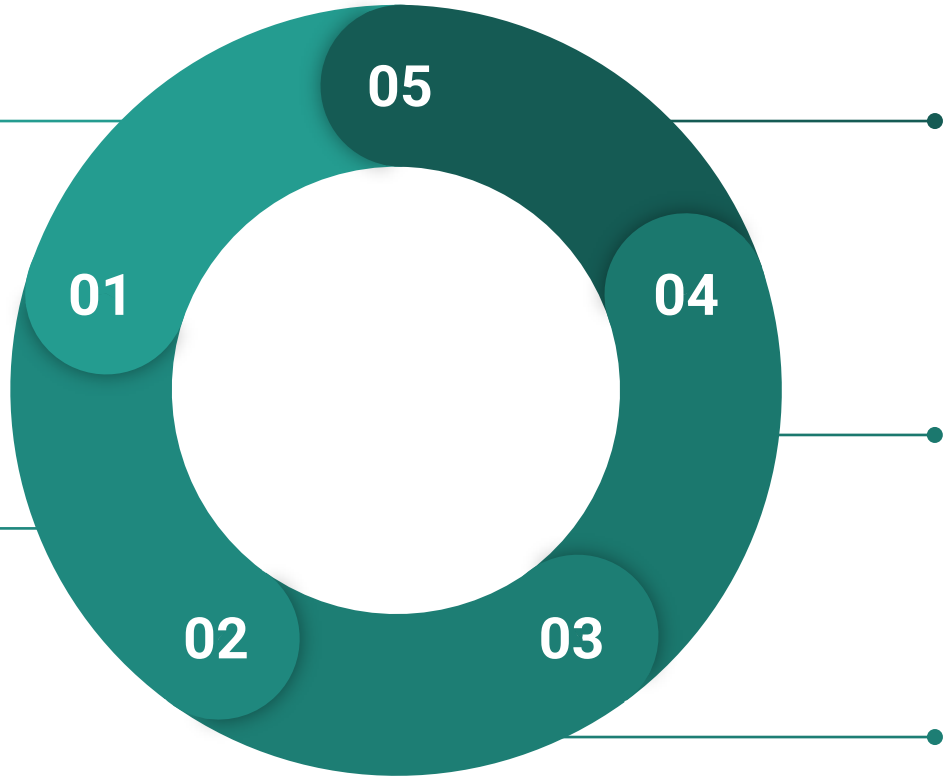
Pain

Integrative Treatment Plan

Medications
Opioid and Non-opioid

Restorative Therapies

Cold & heat, bracing, massage, TENS, traction, therapeutic exercise



Interventional Procedures
Epidural steroid injections, peripheral nerve injections, intrathecal medication pumps, radiofrequency ablation

Behavioral Health Approaches

cognitive behavioral therapy (CBT), mindfulness-based stress reduction (MBSR), emotional awareness & expression therapy, self-regulatory or psychophysiological approaches

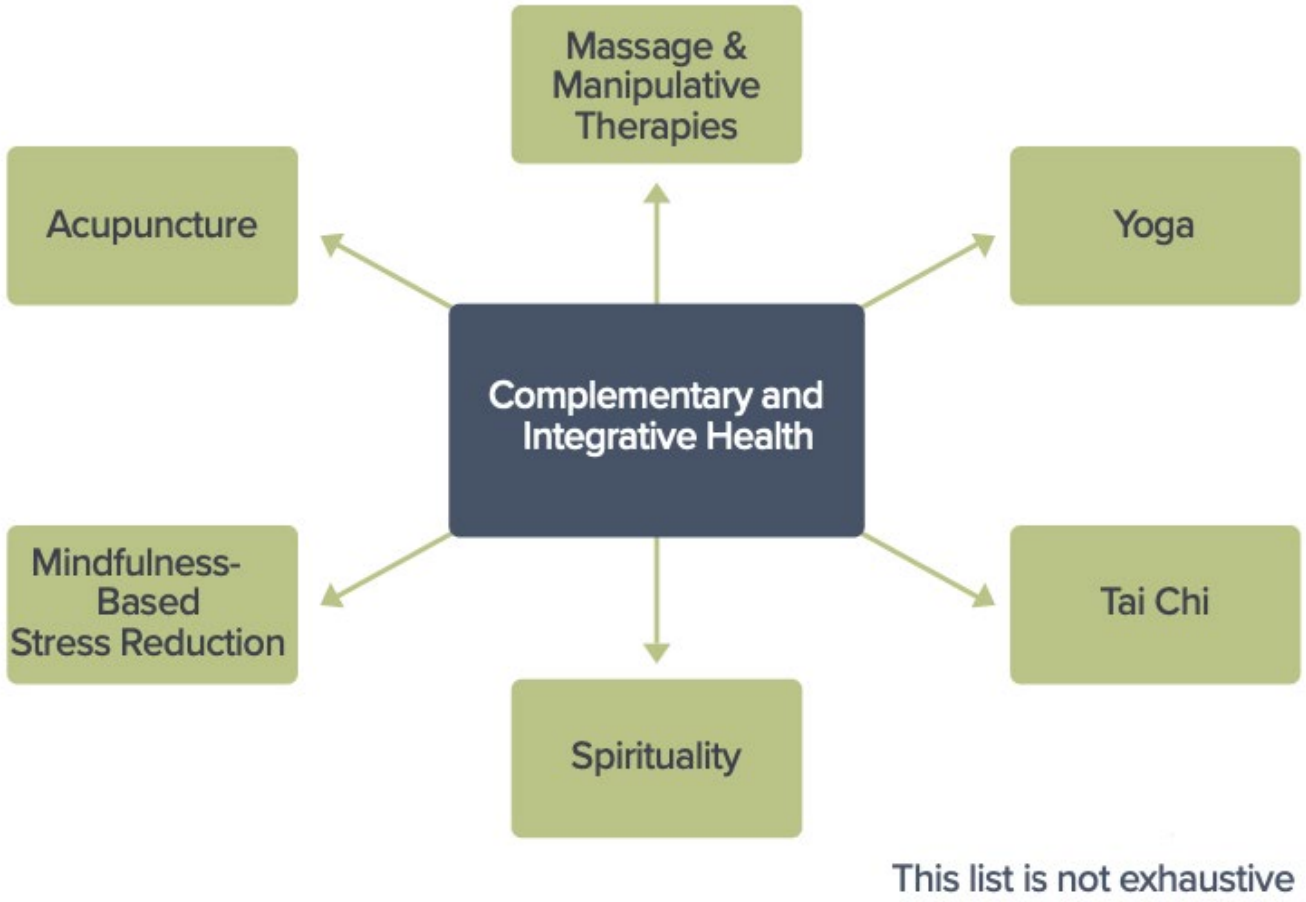
Complementary & Integrative Health
Acupuncture, massage, manipulative therapy, spirituality, yoga, tai chi, MBSR

MI-CCSI
Center for Clinical Systems Improvement

U.S. DHHS (2019)

Pain Management:

Complementary & Integrative Health Approaches



U.S. DHHS (2019)

LIVING WITH PAIN? RETRAIN YOUR BRAIN!

Pain affects more Americans than diabetes, heart disease and cancer combined. Chronic pain persists—often for months or even longer. Chronic pain is often due to increased sensitivity of the nerves. This means that we must retrain the brain's reaction to pain.

Reduce sensitivity to pain with increased physical activity

Change how the brain perceives pain with a healthy lifestyle

Reduce stress to soothe the nervous system

MHS Military Health System
health.mil

To learn more, visit:
www.health.mil/PainManagement

Pain Management: Medications

See Pain Medication Classes Handout

Medication Classes According to Pain Type

Acute and Chronic; high-level overview

Somatic & Visceral Pain (Nociceptive)

- analgesics
- spasmolytics
- Antidepressants
- NSAIDs
- Add opioids for moderate to severe pain

Muscle Pain

- short course NSAID
- skeletal muscle relaxant (except carisoprodol [Soma])

Nerve Pain (Neuropathic)

Adjuvants

- membrane-stabilizing meds
- tricyclic antidepressants
- topical local anesthetics

Chronic Pain

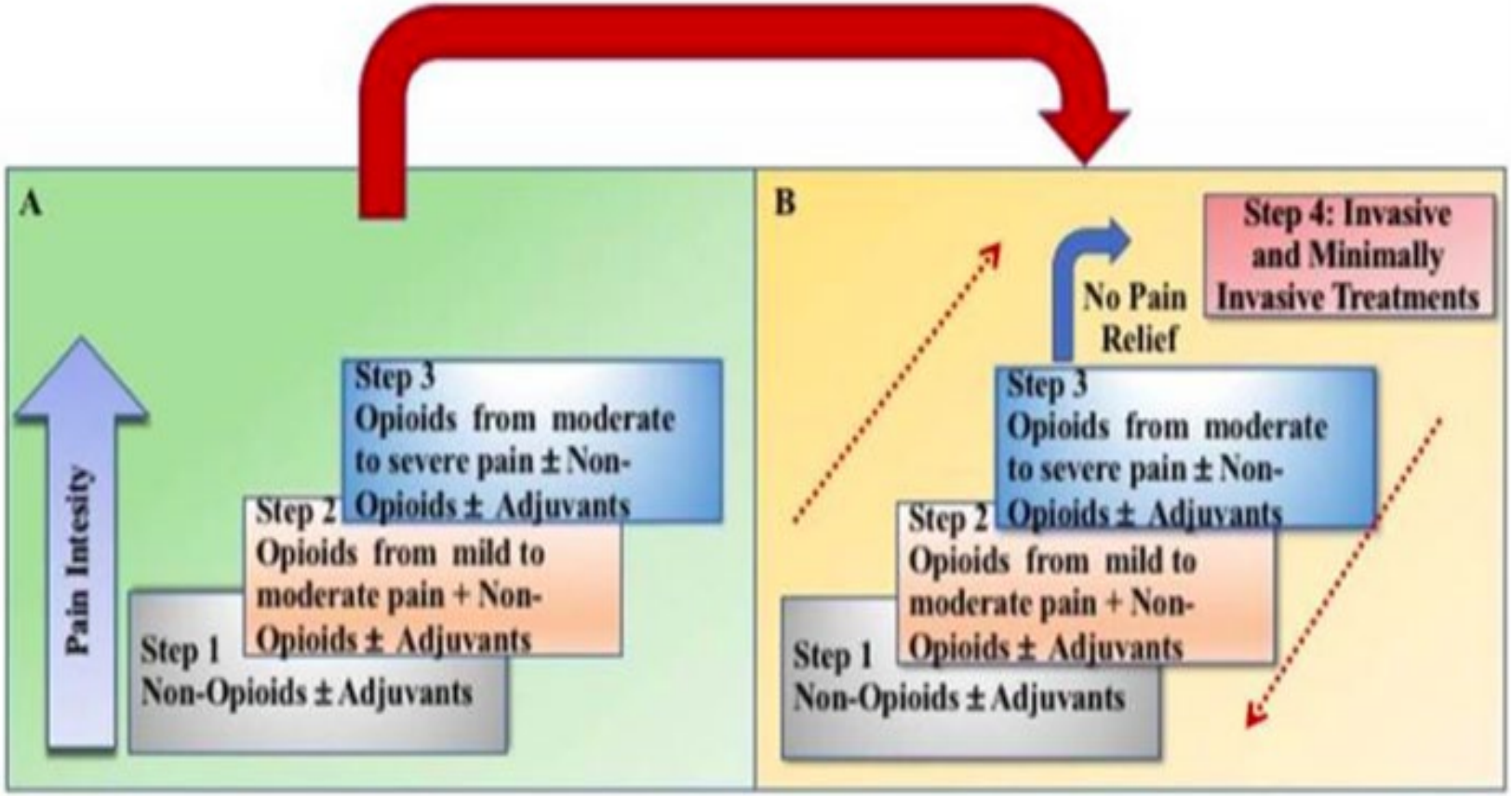
- include physical rehabilitation medicine and biopsychosocial treatments

MI-CCSI Center for Clinical Systems Improvement

U.S. DHHS (2019)

Pain

The revised WHO analgesic ladder



Transition from the original WHO three-step analgesic ladder (**A**) to the revised WHO fourth-step form (**B**). The additional step 4 is an "interventional" step and includes invasive and minimally invasive techniques. This updated WHO ladder provides a bidirectional approach.

MI-CCSI Center for Clinical Systems Improvement

Anekar & Cascella (2021), WRHA (nd)

Pain

When standard treatment doesn't work

❗ Who is at high risk for symptom escalation?

- Pure, persistent neuropathic pain (diabetes, HIV, shingles)
- Chronic relapsing pain conditions (e.g., degenerative, inflammatory, immune-mediated, rheumatologic, and neurologic conditions such as MS, trigeminal neuralgia, Parkinson's disease, CRPS, porphyria, systemic lupus erythematosus, lumbar radicular pain, migraines, and cluster headaches)

When to consider referral to Specialty Palliative Care?

- Complex cancer diagnoses
- Mixed pain disorders (neck pain, back pain)
- Previous/current history of substance abuse disorder
- Acute on chronic pain
- Chronic pain with mental health comorbidities

MI-CCSI
Center for Clinical Systems Improvement

Symptom Management

Gastrointestinal Symptoms

“The goal of symptom management is to improve physical well-being, functionality, and quality of life to a level acceptable to the patient, or to the health care surrogate if the patient is unable to report distress.”

National Consensus Project for Quality Palliative Care (2018), Guideline 2.1.1

Gastrointestinal Symptoms

Nausea/Vomiting: Definitions

Nausea: “an unpleasant sensation in the region of the stomach, usually associated with an aversion to food, which may or may not be followed by vomiting.”

Vomiting (emesis): “sudden forceful peroral expulsion of the contents of the stomach, often, but not always, preceded by nausea.”

Regurgitation/eructation: may be volitional or result from an incompetent lower esophageal sphincter.

Retching/Dry heaves: different from vomiting, as stomach and respiratory muscles contract with both; retching occurs without expulsion of gastric contents.

MI-CCSI Center for Clinical Systems Improvement

HPNA (nd); MacDougall & Sharma (2002)

Nausea & Vomiting

Vomiting process: Brain trigger areas and associated causes of nausea & vomiting (N&V)

Trigger Area	Causes
Cerebral Cortex	<u>Sensory input</u> • smell (including strong odors), taste, sight <u>Emotional input</u> • anticipatory N&V: sensory-mediated, person who was previously exposed to noxious stimulus that resulted in severe N&V symptoms; exposure to something reminded them of the previous experience can cause N&V in the absence of the actual stimulus (e.g., hearing music like what was playing when person received chemotherapy) • Anxiety (e.g., major speech, final exams)
Vestibular Apparatus	Motion sickness Vertigo
Chemoreceptor Trigger Zone (CTZ)	Medications: opioids, NSAIDs, antibiotics, Chemotherapeutic agents, Theophylline, Digoxin Metabolic: Hypercalcemia, Uuremia
Gastrointestinal Tract Irritation	Vagal nerve stimulation Constipation Bowel obstruction Gastric outlet obstruction Gastroparesis
Direct effect on vomiting center	Increased intracranial pressure

MI-CCSI Center for Clinical Systems Improvement

HPNA (nd); McKinnis (2002); MacDougall & Sharma (2020)

Nausea & Vomiting

Assessment

- **Nausea:** patient self-report whenever possible
- **Vomiting:** objective as it can be observed and measured
  - ❗ bright red blood (active gastric bleeding)
  - ❗ coffee-ground emesis (lower GI bleeding)
  - ❗ fecal matter (partial bowel obstruction)
- **How is N&V affecting the person's ability to function, quality of life, and burden on the caregiver?**
  - Is the sensation anticipatory, acute, or delayed?
  - Any feelings of increased salivation, dizziness, lightheadedness, trouble swallowing, increased heart rate, sweating or indigestion?
  - Any signs of dehydration (sunken eyes, rapid breathing) or dry lips, sore mouth/throat?
  - Any expression of fear, pain or anxiety?

Nausea & Vomiting

Treatment: Pharmacologic and Non-Pharmacologic/CAM

General Principles

- Remove and/or avoid the cause, when possible
- Implement measures to reduce immediate suffering
- Review goals of care with patient & family, including medically administered nutrition and hydration and other possible interventions related to the nature of the disease
- In advanced illness, as culturally appropriate, discuss shifting goals of care to reduce symptom burden and improve person's ability to cope
  - Discuss benefits/burdens of treatment to reduce the frequency and intensity of N/V

MI-CCSI Center for Clinical Systems Improvement

HPNA (nd); McKinnis (2002); MacDougall & Sharma (2020)

N & V

Treatment: Pharmacologic and Nonpharmacologic/CAM

Nonpharmacologic Measures	Pharmacologic Measures	Complementary Alternative Measures (CAM)

• Remove and/or avoid noxious stimuli
• modify environment (temp, fragrances, aftershave/perfumes)
• Assess for and treat constipation
  • ❗Decisions regarding surgical correction of bowel obstruction or metabolic abnormalities should be based on the person's clinical condition and treatment preferences for goals of care in life-limited situations
• Avoid oral route when pt is actively vomiting
	• Discontinue unnecessary emetogenic medications
	• Reduce medications at toxic levels, or D/C if unnecessary
	• Pharmacologic therapy should be used for irreversible causes and when emetogenic meds (e.g., opioids) must be continued
	  • Initial med is chosen on potency and primary site triggering the nausea (e.g., CTZ, vagal stim.); optimize dose and route before adding 2nd med
	  • Optimize current regimen of medication treatments
	  • What has worked in the past?
	  • Align with person's and family's goals of care
	  • 📞 Referral to PC Specialist if additional medications needed
		<u>Self-Management techniques:</u>
		• modify diet
		  • clear or ice-cold fluids
		  • small amounts sweetened clear fluids (no acidic juices)
		  • light, bland foods
		  • avoid greasy foods
		  • small meals throughout day
		• psychological strategies
		• effective communication between patient, family & healthcare team
		
		• <u>Integrative Therapies (combines evidence-based and practice-based medicine):</u>
		• Biological: herbs/teas (e.g., ginger, honey/lemon & chamomile, peppermint, fennel, licorice) Link (2019)
		• Nonbiological: acupuncture, acupressure ("Sea Bands!")
		• Behavioral
		  • rest after eating, elevate head
		• *Cultural que: Ask person/family about any traditional home remedies!

MI-CCSI Center for Clinical Systems Improvement

Cleveland Clinic (2019); HPNA (nd); McKinnis (2002); MacDougall & Sharma (2020)

N & V

Treatment: Pharmacologic and Nonpharmacologic/CAM

Medication	Site of Action	Use & Cautions
Anticholinergics • Scopolamine • Diphenhydramine (Benadryl) • Meclizine (Antivert)	 VA, VC VA, VC VA, VC	drowsiness, avoid other sedatives (incl. alcohol, sleep aids, tranquilizers) use with caution in patients with glaucoma, lung disease and enlarged prostate
Phenothiazines • Promethazine (Phenergan) • Prochlorperazine (Compazine)	 VC, CTZ VC, CTZ	More commonly used with chemotherapy-induced N & V Drowsy, dizzy, double-vision, ringing in ears
5-HT3 receptor antagonist • Ondansetron (Zofran)	 CTZ, GI	Used with chemotherapy and post-operative N&V Tired, drowsy, diarrhea, headache
Benzodiazepines • Lorazepam (Ativan)	 CC	 Used for olfactory & visual stimuli nausea
Corticosteroids • Dexamethasone (Decadron)	 CC, GI	 Increased intracranial pressure or partial bowel obstruction with bowel wall edema
Prokinetics • Metoclopramide (Reglan)	 GI, CTZ	 Used for delayed gastric emptying without gastric outlet obstruction

VC = Vomit Center, CC = cerebral cortex, CTZ = chemoreceptor trigger zone, GI = Gastrointestinal, VA = vestibular apparatus

MI-CCSI
Center for Clinical Systems Improvement

Constipation

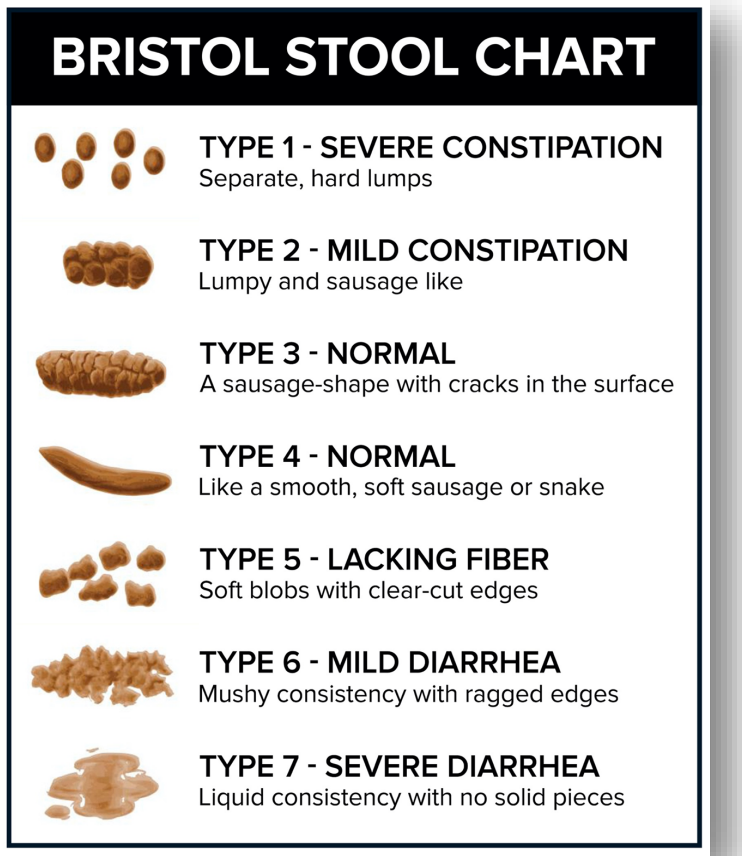
Definition & Assessment

Definition

- Slow movement of stool through the large intestine
- Person may have to push harder, or experience fewer than normal bowel movements (BM)
- Less than 3 bowel movements per week

Assessment

- When did they last defecate?
- What is their usual pattern/frequency?
- Usual characteristics (see chart)
- Any blood or mucus?
- Are their bowels physically difficult to move? If yes, is that new for them?
- Any abdominal bloating or pressure?
- Any pain with BM?
- Oozing any liquid stool?
- Does the BM volume seem small to them?
- Any unexplained nausea?



MI-CCSI
Center for Clinical Systems Improvement

Economou (2010); Lewis & Heaton (1997); PDQ® (2020, Nov 24)

Constipation

Causes

The longer stool is in the intestine, the more fluid it loses, resulting in smaller, harder and drier stools

Primary
- Reduced fluid and fiber intake
- Decreased activity
- Lack of privacy (bedside commode, bedpan)/stress
- Advanced age

Secondary
- Structural: tumor, partial intestinal obstruction, hemorrhoid pain
- Metabolic: hypercalcemia, hypothyroidism, hypokalemia, hyperglycemia
- Neurologic: spinal cord compression at cauda equina or sacral plexus level, sacral nerve infiltration, cerebral tumors

Iatrogenic
- Pharmacological interventions: ***opioids are the primary cause***.
  - Anticholinergics, Vinca alkaloid chemotherapies, antiemetics (5-HT_3 antagonists), tricyclic antidepressants, neuroleptics, antispasmodics, anticonvulsants, muscle relaxants, aluminum antacids, iron, diuretics, antiparkinsonian agents

MI-CCSI Center for Clinical Systems Improvement

Economou, D.C. (2010)

Constipation

Management

Prevention is critical! *Constipation can lead to pain, vomiting, restlessness and delirium*

Non-Pharmacological	Pharmacological

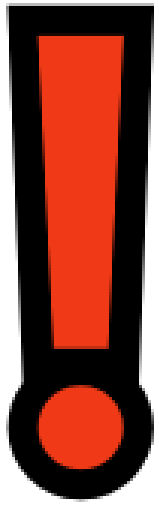
▪ Adequate fluid intake
▪ High fiber diet (e.g., fruits, vegetables, nuts, seeds, legumes)
▪ Physical activity
▪ Privacy for toileting habits
▪ Topical witch hazel & chamomile (hemorrhoids)
▪ Position to allow for gravity to assist with MM
	▪ Optimize any disease-specific medications
	▪ Stool softeners (e.g., docusate [Colace])
	▪ Osmotics:
	  ▪ polyethylene glycol (MiraLAX)
	  ▪ magnesium hydroxide
	▪ Herbal preparations:
	  ▪ bloating: mint tea
	  ▪ laxatives: cascara, psyllium, slippery elm
	▪ Stimulants
	  ▪ Bisacodyl (PO or PR)
	  ▪ Sennosides
	  ▪ Lactulose
	▪ mu-opioid receptor antagonist (Methylnaltrexone): patients on chronic opioid therapy not responsive to above interventions

MI-CCSI Center for Clinical Systems Improvement

Albert (2017); Economou (2010); McDermott & Wilson (2017); Wolf (2019)

Constipation

Patients at risk of symptom escalation



- **Advancing neurologic disorders (Parkinson's Disease, Multiple Sclerosis)**
  - Cerebral infarction (stroke)
  - Spinal cord compression
- **Bowel obstruction**
  - malignancies
  - adhesions from previous abdominal surgeries
  - EOL:
    - hypercalcemia, hypokalemia, hypothyroidism
    - dehydration, decreased fiber
- **Autonomic neuropathy**
  - advanced diabetes mellitus (decreased peristalsis)

MI-CCSI Center for Clinical Systems Improvement

Albert (2017); Economou (2010); McDermott & Wilson (2017); Wolf (2019)

Case Study

- You are caring for Mr. C Mac., a 77-year-old widower. His daughter lives close by and sees him frequently. He enjoys carving wood ducks by hand, but his daughter has noticed that recently he has not been working on his ducks. When asked about this by his daughter, he says he is "fine" and that she is making a mountain out of a molehill.
- Three years ago, Mr. Mac had complaints of lower back pain that went down his R leg, but refused to go to the doctor, stating "It's because I have a fat wallet in my back pocket, and I am always sitting on it." When the pain didn't go away after removing his wallet, he finally relented and saw his PCP 18 months ago, where it was determined Mr. Mac had advanced prostate cancer with multiple bone metastases.
- While Mr. Mac says he is "fine", his daughter believes he has severe pain. She noticed he has more pain medicine at home than he should if he were taking his doses regularly. He has mentioned to her several times that he does not want to be "addicted" to pain medications and die an addict. His daughter has told him she doesn't believe he will be an addict; he is just effectively managing his pain so he can enjoy his life and hobbies.

Instructions

1. *Refer to the AAFP/AFM tool* to document the Patient-Centric Plan
2. *Consider the following questions when completing Mr. Mac's Plan of care*
   a) What additional data do you need to collect to get a complete picture of Mr. Mac's situation?
   b) How should you approach Mr. Mac and his daughter about his pain and the use of opioids for pain control?
   c) What information or resources can you provide to address addiction concerns?
   d) Are there additional medications or therapies that may help Mr. Mac to treat his pain?
   e) What other actions or interventions are appropriate in this situation? Which interprofessional colleagues may be a good resource for Mr. Mac and his daughter?

Document the Person-Centric Plan

Case Study

PATIENT-CENTERED CARE PLAN

Patient name: _____ Date: _____

Provider name: _____

Complete the next four sections prior to your visit:

Top concerns and barriers

The main things I would like to fix or improve about my health are:

- _____
- _____
- _____

The main things preventing me from improving my health are:

- _____
- _____
- _____

Symptom management

The main symptoms I wish to reduce or eliminate are:

- _____
- _____
- _____
- _____

To treat these, your provider will help you complete the "Summary of things I need to do," next page, at your appointment.

Health care providers

List any other providers you see regularly for health care (for example, ophthalmologist, cardiologist, therapist):

- _____
- _____
- _____
- _____

Resources and supports

Besides your health care team, who could you turn to for help for health-related problems (for example, family members, friends, a spiritual leader)?

- _____
- _____

Complete the remaining sections with your provider at your appointment:

My medications*

- _____
- _____
- _____
- _____

☐ I agree to do the following:

- Discuss concerns I have about taking any of my medications with my primary care provider (PCP) and/or pharmacist,
- Advise my PCP if I choose to stop my medication(s), including my reasons for stopping, and discuss potential alternatives,
- Advise my PCP of bothersome side effects from my medication(s),
- Inform my PCP if new medications are added by other providers.

☐ I have reviewed the current medication list (see above) and confirm that it is accurate.

My allergies*

- _____
- _____

My conditions*

- _____
- _____
- _____

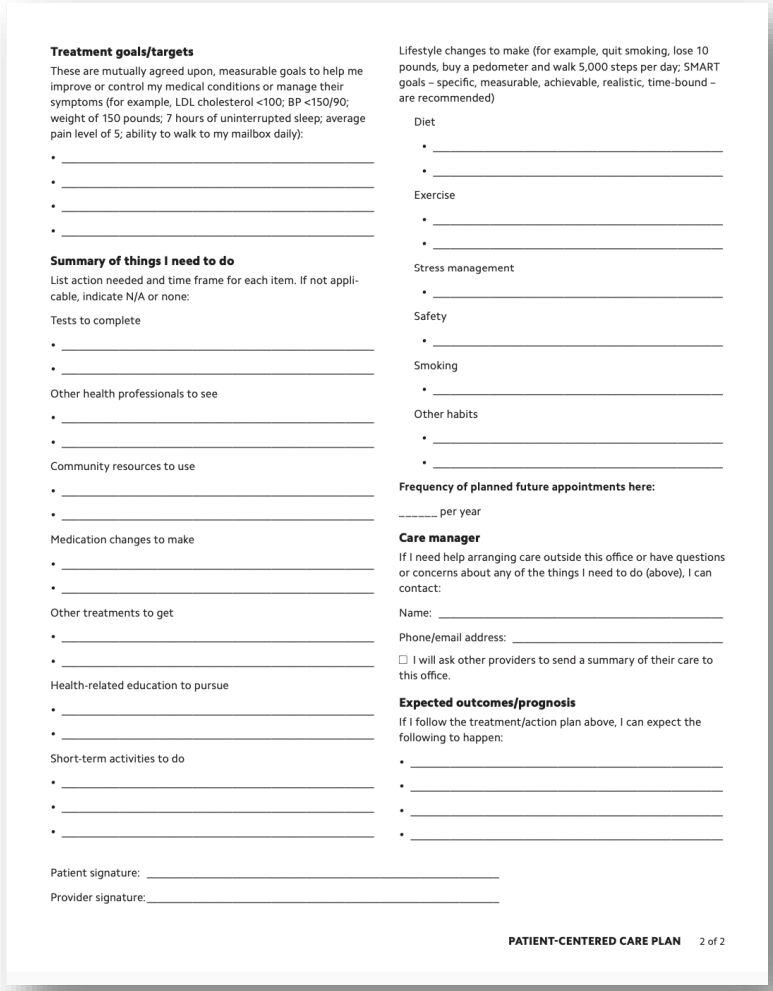
☐ I have reviewed my list of conditions.

* Data for these sections may be imported from the patient record when this form is used as the basis for an electronic health record template. The following elements should also be incorporated: date created, patient name and identifiers, and provider name.

continued ➤

AAFP FPM

FPM **Toolbox** To find more practice resources, visit https://www.aafp.org/fpm/toolbox.



Treatment goals/targets

These are mutually agreed upon, measurable goals to help me improve or control my medical conditions or manage their symptoms (for example, LDL cholesterol <100; BP <150/90; weight of 150 pounds; 7 hours of uninterrupted sleep; average pain level of 5; ability to walk to my mailbox daily):

- _____
- _____
- _____
- _____

Summary of things I need to do

List action needed and time frame for each item. If not applicable, indicate N/A or none:

Tests to complete

- _____
- _____

Other health professionals to see

- _____
- _____

Community resources to use

- _____
- _____

Medication changes to make

- _____
- _____

Other treatments to get

- _____
- _____

Health-related education to pursue

- _____
- _____

Short-term activities to do

- _____
- _____
- _____

Lifestyle changes to make (for example, quit smoking, lose 10 pounds, buy a pedometer and walk 5,000 steps per day; SMART goals – specific, measurable, achievable, realistic, time-bound – are recommended)

Diet

- _____
- _____

Exercise

- _____
- _____

Stress management

- _____

Safety

- _____

Smoking

- _____

Other habits

- _____
- _____

Frequency of planned future appointments here:

_____ per year

Care manager

If I need help arranging care outside this office or have questions or concerns about any of the things I need to do (above), I can contact:

Name: _____

Phone/email address: _____

☐ I will ask other providers to send a summary of their care to this office.

Expected outcomes/prognosis

If I follow the treatment/action plan above, I can expect the following to happen:

- _____
- _____
- _____
- _____

Patient signature: _____

Provider signature: _____

https://www.aafp.org/fpm/2015/0100/fpm20150100p7-rt1.pdf

MI-CCSI Center for Clinical Systems Improvement

MI-CCSI
Center for Clinical Systems Improvement

Thank you