Caring for Patients in Pain: Community Pharmacy's Role in OTC Multi-Modal Pain Solutions

In accordance with ACPE Criteria for Quality, please be advised that the authors in this CPE activity may include reference(s) to unlabeled, unapproved, or investigational uses of therapeutic agents or biomedical devices. The authors will inform the reader of when they discuss or reference an unapproved, unlabeled, or investigational use of therapeutic agent or biomedical device.

The content of this document is for pharmacist informational and training purposes only and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Pharmacists must always use sound professional judgment when recommending over-the-counter products to patients within the scope of the practice of pharmacy. Patients should always seek the advice of their physician or other qualified health provider with any questions they may have regarding a medical condition. Walgreens does not recommend or endorse any specific products that may be referenced in this training document.

Walgreens Boots Alliance

GLOBAL HEALTHY LIVING FOUNDATION

Walgreens
Trusted since 1901™

Member of Walgreens Boots Alliance

HIGHLY CONFIDENTIAL

WAGCN00291774

CCSF v. Purdue Pharma, et al. 3:18-CV-7591

WAG-MDL-03111

Admitted: 6/02/2022

Objectives

- Define and distinguish between types of pain
- Discuss the role of empathy and how to effectively communicate with patients in pain
- Identify how to personalize pain management approaches considering race, culture, and/or education
- Describe and demonstrate how to perform a pain assessment
- Describe the role of non-opioid analgesics in the management of mild to moderate pain
- Describe the role of non-pharmacological therapies used in pain management
- Create a multi-modal plan that includes pharmacological and non-pharmacological therapy
- Identify available pain management resources

Pain

Chronic pain:

- >100 million people in the U.S.
- 20% of outpatient visits
- 12% of all Rxs
- Costs $560 billion/year

Linked to:

- Restrictions in mobility & daily activities
- Dependence on opioids
- Anxiety & depression
- Poor perceived health
- Reduced QOL

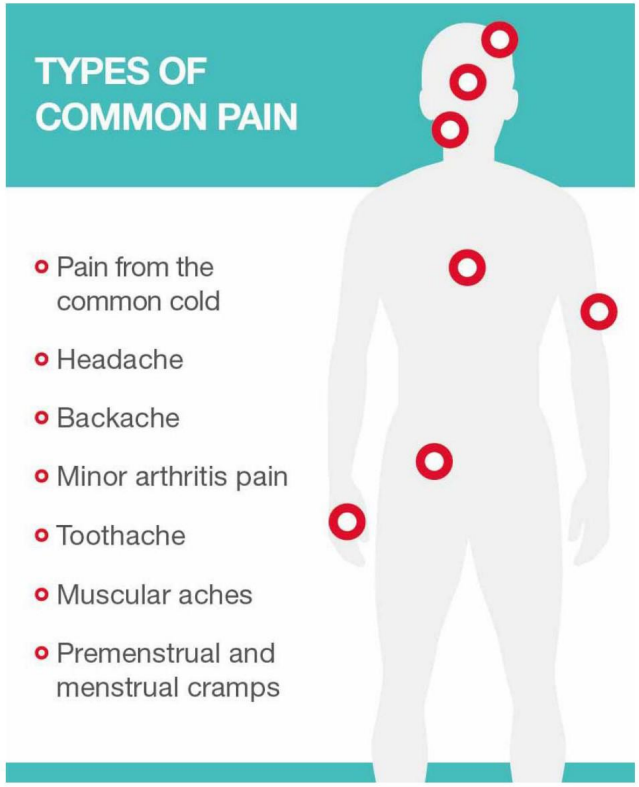
Higher prevalence:

- Women
- Older adults
- Unemployed
- Poverty
- Public health insurance
- Rural residents

References: UpToDate; CDC

Pain

- Subjective Experience
- Types
  - Acute (self-limiting)
    - Nociceptive pain
  - Chronic
    - Neuropathic pain
    - Musculoskeletal pain
    - Inflammatory pain
    - Mechanical/compressive pain



References: Am J Manag Care; UpToDate; Clinical Pharmacy and Therapeutics (2012): U of Wisc.

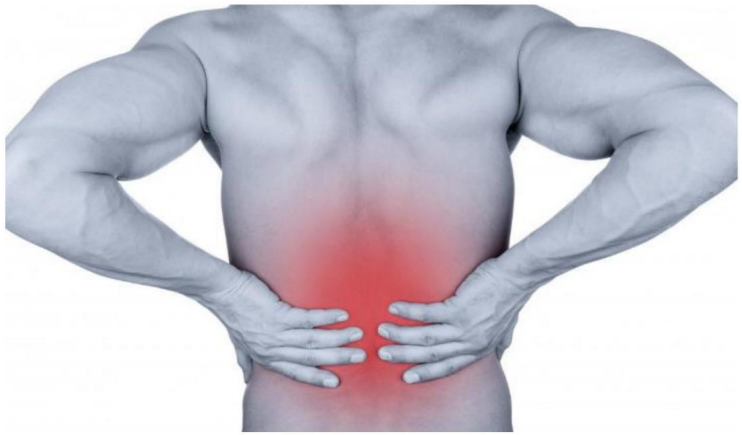
Types of Pain - Neuropathic

- Peripheral (e.g. post herpetic neuralgia, diabetic neuropathy, phantom limb pain)
- Central (e.g. post-stroke pain, multiple sclerosis-related pain, HIV myopathy)
- Symptoms include:
  - Shooting, burning or stabbing pain
  - Tingling and numbness, or a “pins and needles” feeling
  - Spontaneous pain or pain that occurs without a trigger

References: Am J Manag Care; UpToDate

Types of Pain - Musculoskeletal

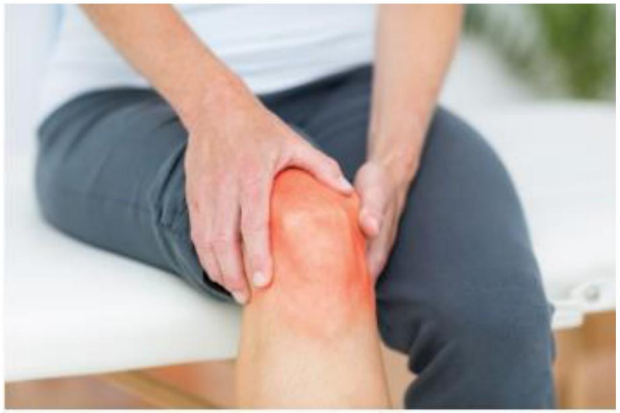
- Pain that affects the bones, muscles, ligaments, tendons and nerves
- Symptoms may include:
  - Pain that can worsen with movement
  - Fatigue
  - Twitching muscles
  - “Burning” sensation in your muscles
- Examples include:
  - Back pain
  - Myofascial pain syndrome
  - Ankle pain



References: UpToDate; Cleveland Clinic

Types of Pain - Inflammatory

- Symptoms include
  - Redness
  - Swelling that's warm to the touch
  - Joint pain
  - Joint stiffness
  - Loss of joint function

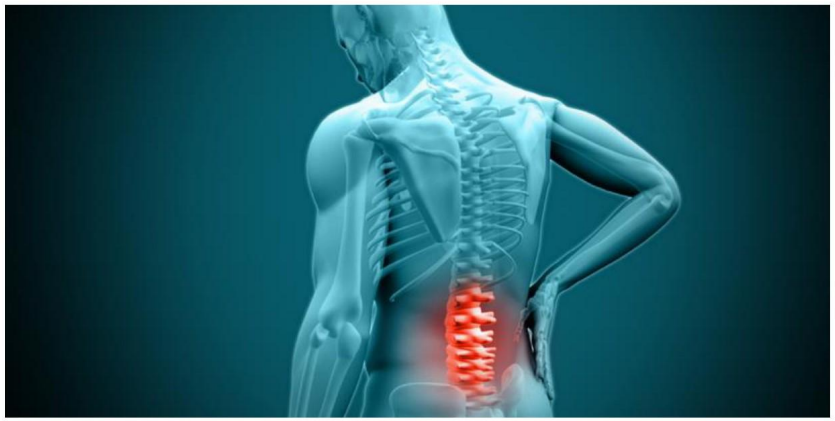


- Examples include:
  - Inflammatory arthritis (e.g. rheumatoid arthritis, psoriatic arthritis, and lupus)
  - Appendicitis
  - Herpes zoster

References: UpToDate; U of Wisc.; Arthritis Foundation

Types of Pain – Mechanical/Compressive

- Causes may include
  - Fractures
  - Disc degeneration
  - Compression of tissue of tumors, cysts or bony structures
- Examples include
  - Kidney stones
  - Osteoarthritis
  - Disc herniation
  - Spinal stenosis



References: UpToDate; Cleveland Clinic

Expressing Empathy When Communicating with Patients in Pain

Empathy: The Human Connection to Patient Care

Reference: Cleveland Clinic

WAGCN00291783

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00010

Empathy

- Pillar of "patient-centered" communication
  - Start with where your patient ***is***
  - Let them express how they feel
  - Validate their feelings
  - Be aware of non-verbal cues
- Helpful phrases
  - "I can only imagine how difficult this is for you…"
  - "That must be frustrating…"
  - "It sounds like you are worried about…"
  - "Sometimes it must be hard to know what to ask…"

Polite * Kind * Respectful

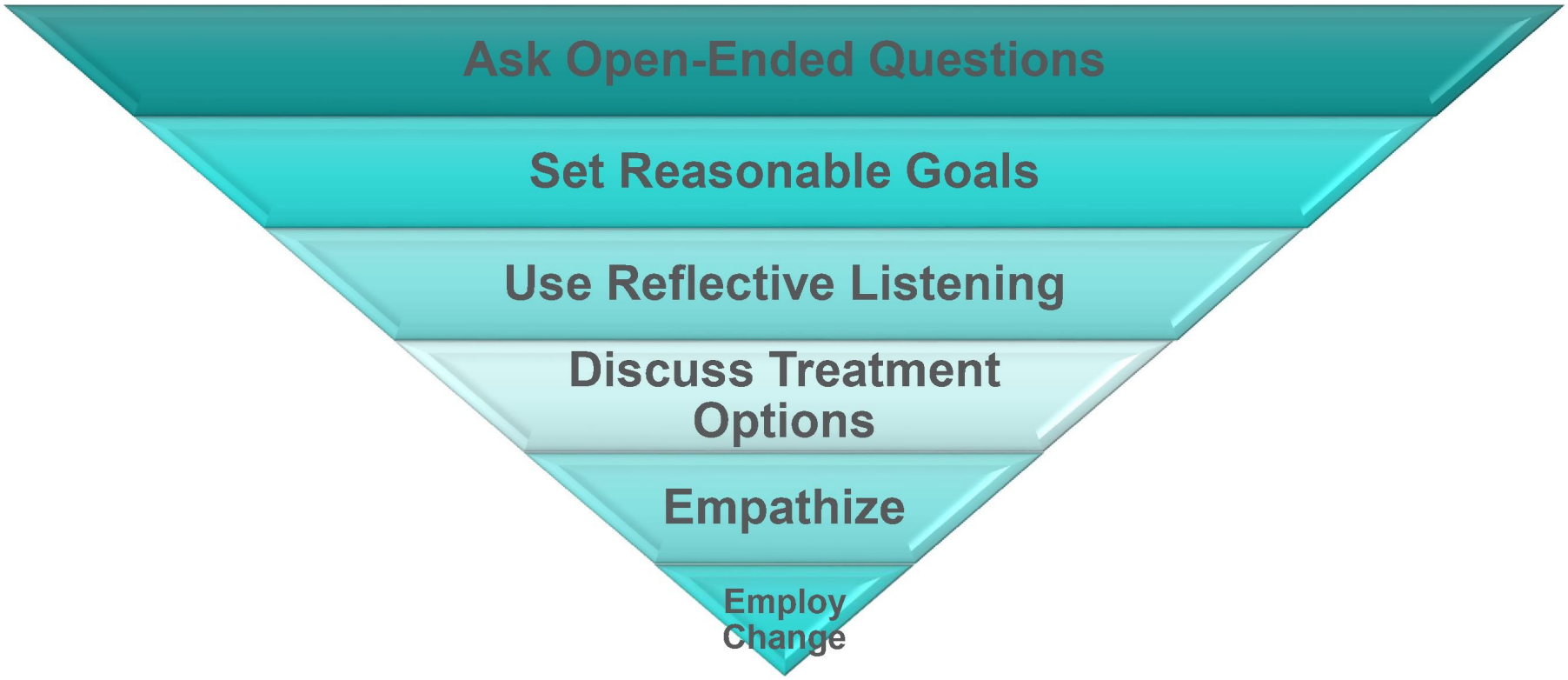
Reference: Pharmacist's Letter; The Pharmaceutical Journal

WAGCN00291784

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00011

CDC: Patient Centered Approach



Reference: CDC

WAGCN00291785

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00012

Reference: RSA Shorts

WAGCN00291786

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00013

What does a patient in pain look like?






By The Numbers: The Invisible Impact of Pain

The risk of committing suicide is 2x higher in chronic pain patients

Pain disrupts 42 million American adults' sleep.

Prevalence of concurrent major depression is up to 85%

Patients with pain are 4x more likely to experience anxiety

References: US Pain Foundation, National Sleep Foundation

Pain Treatment Complications

- Pain can be a symptom of another condition or its own disease
- Offering pain relief can support:
  - General welfare of people
  - Fosters their autonomy
  - Forges trust in healthcare professionals
- Untreated acute and chronic pain has shown to affect the CNS
- Prevention and treatment of pain are often delayed, inaccessible, or inadequate.

Everyone deserves adequate treatment for pain

References: UpToDate; Stanford U.

Personalization in Pain Care: Cultural competency and other influences in pain

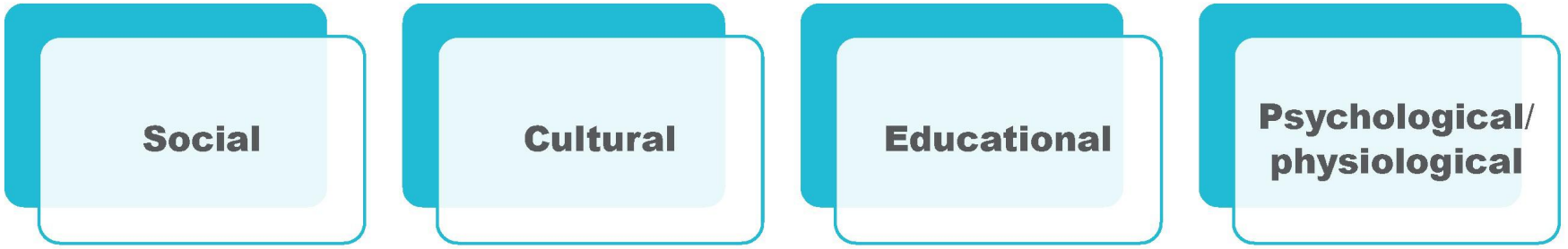
Common Pain Beliefs Held by Patients

1. “Pain must be a sign of serious physiological disease or injury.”
2. “Other people must understand how much I hurt.”
3. “Pain will negatively my future.”
4. “I can’t be happy as long as I have pain.”
5. “If my doctor is recommending nonmedical intervention for my chronic pain, it must mean she does not believe me or thinks I’m exaggerating my pain.”
6. “The ultimate goal of pain management is to be pain free.”

What do you believe?

References: Am Psych Ass; VA

Influencers in managing pain



References: Peacock 2008

Social

Occupation:

Nurses, Construction or Warehouse workers, Truck drivers, Landscapers

Income:

Inverse relationship between chronic pain prevalence and socioeconomic status.

Geography:

Barriers to access of care

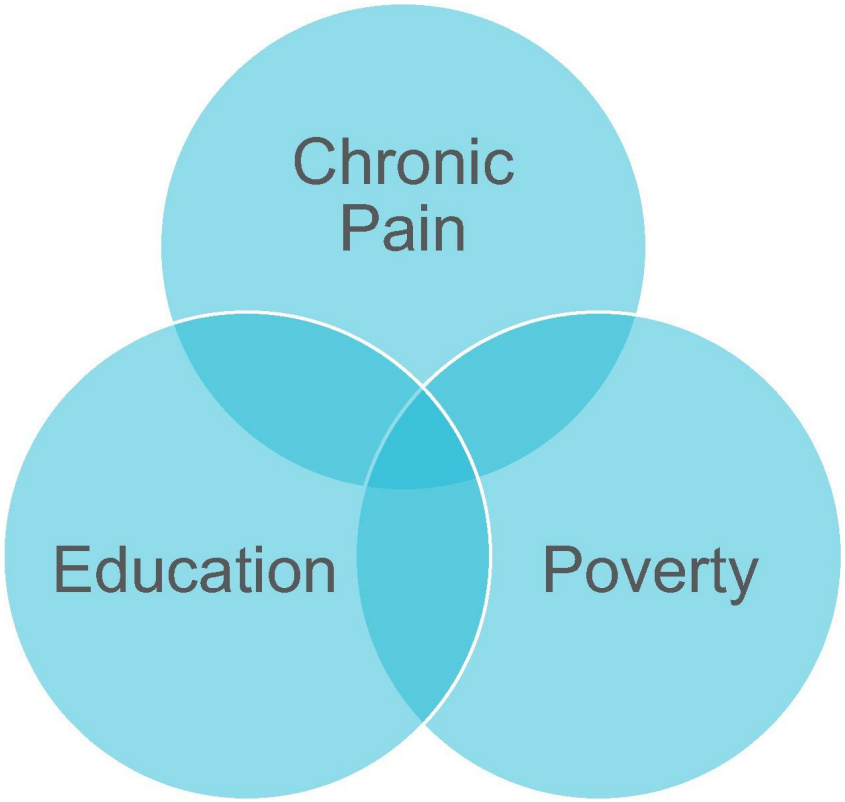
References: Pain Spine Specialists; Eur J Pain; Pain Manag Nurs

Cultural

- Cultural competency is a key driver to influence belief on pain
- Pain perceptions and treatment approach may be defined by ethnic/cultural stereotypes
- May include religious and spiritual needs
- U.S. even more challenging with broad cultural diversity

References: Pharmacist's Letter; Mayo Clinic; J Anesthe Clinic Res

Educational



- People with less education are 80% more likely to have chronic pain

- Patients who didn't complete high school are 370% more likely to suffer from a severe type of chronic pain than people who possess graduate degrees

Reference: Grol-Prokopczyk 2017

Psychological and Physiological

Psychological

- Patients with psychological disorder rank their pain higher than those without
- Patients reported worse QOL
- Detrimental effects on family, friends, and responsibilities

Physiological

- Genetics can influence the pain experience
- Genes can impact response to pain therapy E.g. CYP2D6 opioids
- Females have higher prevalence of chronic pain

References: AHDB; AMA J of Ethics; Cleveland Clinic, Harvard

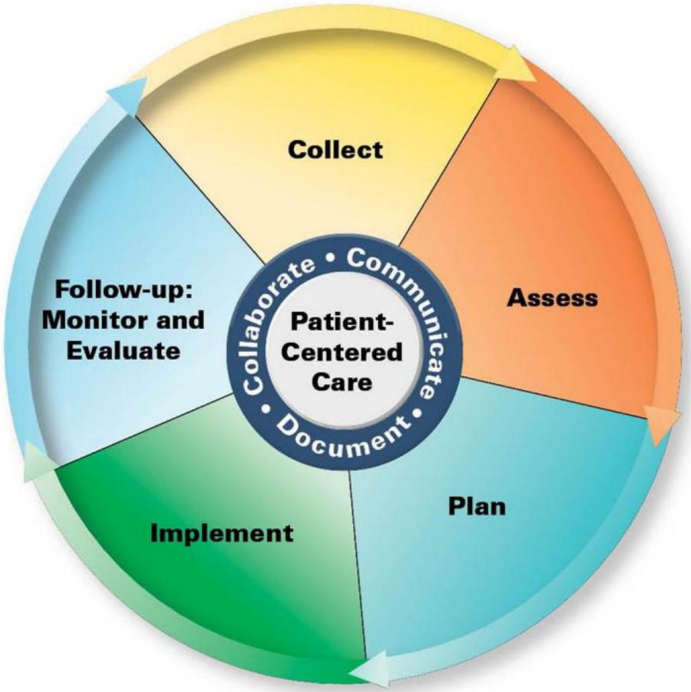
Overcoming Personal Bias in Pain Care

References: The Conversation; Scientific America; APhA

WAGCN00291797

Pain Assessment

The Patient-Centered Approach to Pain



- The Pharmacist's Patient Care Process can be applied to help patients self manage their pain.
- This process provides consistency during the delivery of care.
- To conduct a pain assessment, the pharmacist will utilize the first three steps of Collect, Assess, and Plan.
- The level of time spent in each step will be dependent upon the complexity of the care provided.

Ref: JCPP

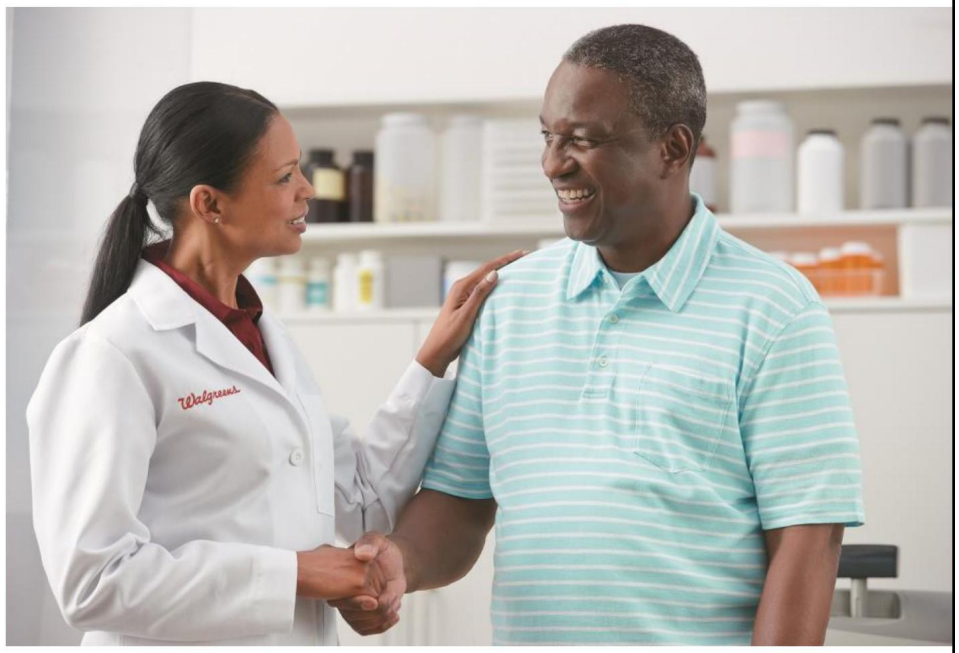
WAGCN00291799

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00026

Step 1: Collect Information

- Understand the patient's medical and medication history
- Pain is subjective so everyone's pain is different
- Take time to listen
- Empathize and show compassion
- Ask questions to understand the patients needs and challenges with treating their pain.



Ref: JCPP; CDC

WAGCN00291800

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00027

Step 1: Collect Information- Pain History

Patient

- Health conditions
- Allergies
- Medication history
- Social history

Pain Characteristics

- Location
- Duration/Onset
- Constant / Intermittent
- Severity
- Quality
- Remitting factors
- Aggravating factors
- Function

Management Strategies

- Medications
- Non-pharmacologic
- Coping strategies

Ref: CDC; NPC

WAGCN00291801

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00028

Step 1: Collect Information- General Health

Patient

- Health conditions
- Allergies
- Medication history
- Social history

What health conditions do you have?

What medication allergies do you have or what medications are you unable to tolerate?

Tell me the medications, this could include prescription, over the counter, or supplements that you currently take.

How often do you use alcohol or tobacco products?

Step 1: Collect Information- Pain Characteristics

Pain Characteristics

- Location(s)
- Duration/Onset
- Severity
- Quality
- Remitting factors
- Aggravating factors
- Temporal factors
- Function

Location: Where is the pain?

Duration/Onset: How long have you had the pain? When did it begin?

Severity: Rate the intensity of the pain on a numeric scale of 0–10 or use Wong-Baker FACES pain rating scale.

Quality: Describe the pain (aching, throbbing, stabbing, tingling, burning, radiating, etc.)

Remitting factors: What makes the pain better? (activities, treatments, etc.)

Aggravating factors: What makes the pain worse?

Temporal factors: Is the pain constant or intermittent?

Function: How does the pain limit your activities?

Step 1: Collect Information- Management Strategies

Management Strategies

- Medications
- Non-pharmacologic
- Coping strategies

What methods have you used to manage the pain?

What methods have worked?

What methods have not provided relief?

Step 2: Assess for Exclusions to Self-Treatment

General

- ☐ Severe head pain or general pain (pain score >6)
- ☐ Increased intensity or change in character of pain
- ☐ Nausea, vomiting, fever or other signs of systemic infection or disorder
- ☐ History of liver disease or consumption of ≥ alcoholic drinks per day
- ☐ Pregnancy

Headache

- ☐ Pain persist for 10 days with our without treatment
- ☐ Symptoms of migraine, but no formal diagnosis of migraine headache
- ☐ Headache associated with underlying pathology (secondary headache)- *exception minor sinus headache*
- ☐ Last trimester of pregnancy

Musculoskeletal Conditions

- ☐ Pain not from overexertion, or from muscle or join injury (*consider osteoarthritis)*
- ☐ Pain that lasts > 10 days
- ☐ Pain that continues > 7 days after treatment with a topical analgesic
- ☐ Pelvic or abdominal pain (*except dysmenorrhea*)
- ☐ Visually deformed joint, abnormal movement, weakness in any limb, numbness, or suspected facture
- ☐ Back pain and loss of bowel and/or bladder control

Ref: JCPP; OTC Handbook

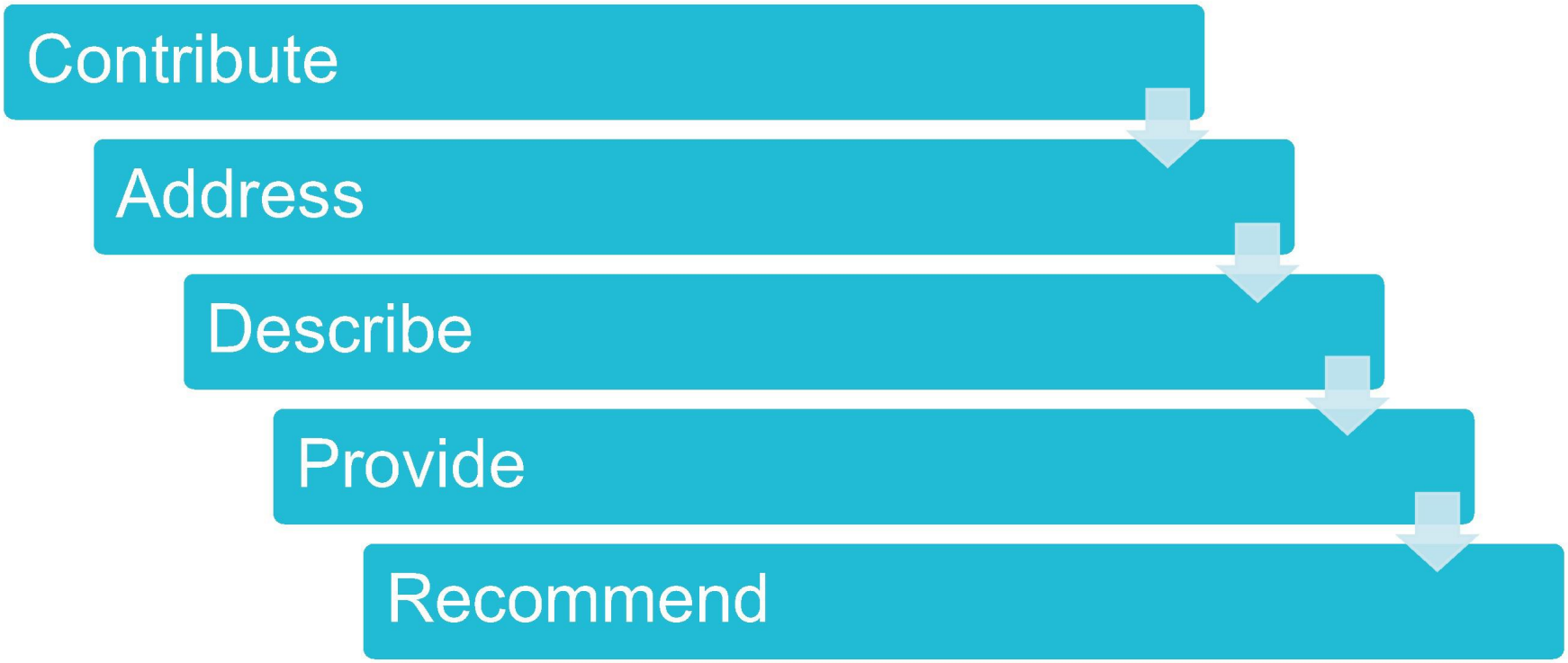
Step 3: Plan for Pain Management

Sample pain management goals for patients

- Decreasing the intensity/severity of pain
- Decrease duration of pain
- Restore function to the affected area
- Prevent re-injury and disability
- Prevent acute pain from becoming chronic persistent pain.

Ref: JCPP; OTC Handbook

Step 4: Implement



Ref: JCPP

WAGCN00291807

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00034

Step 5: Follow Up- Monitor and Evaluate

- Medication appropriateness, effectiveness, and safety and patient adherence
  - Use available health data, biometric test results, and patient feedback
- Clinical endpoints that contribute to the patient's overall health
- Outcomes of care
  - Measure progress towards the achievement of goals of therapy
- Modify plan and/or recommend that the patient see a physician, if clinically appropriate

Ref: JCPP; OTC Handbook

Patient Education

Explain the rationale for selection from the considered therapeutic alternatives

Non-drug measures

Over the counter drug therapy education

- Appropriate dose and frequency of administration
- Maximum number of days of therapy
- Product administration
- Expected time to onset of relief
- Degree of relief that can reasonably be expected
- Common side effects and when side effects warrant referral
- Options if the condition worsens

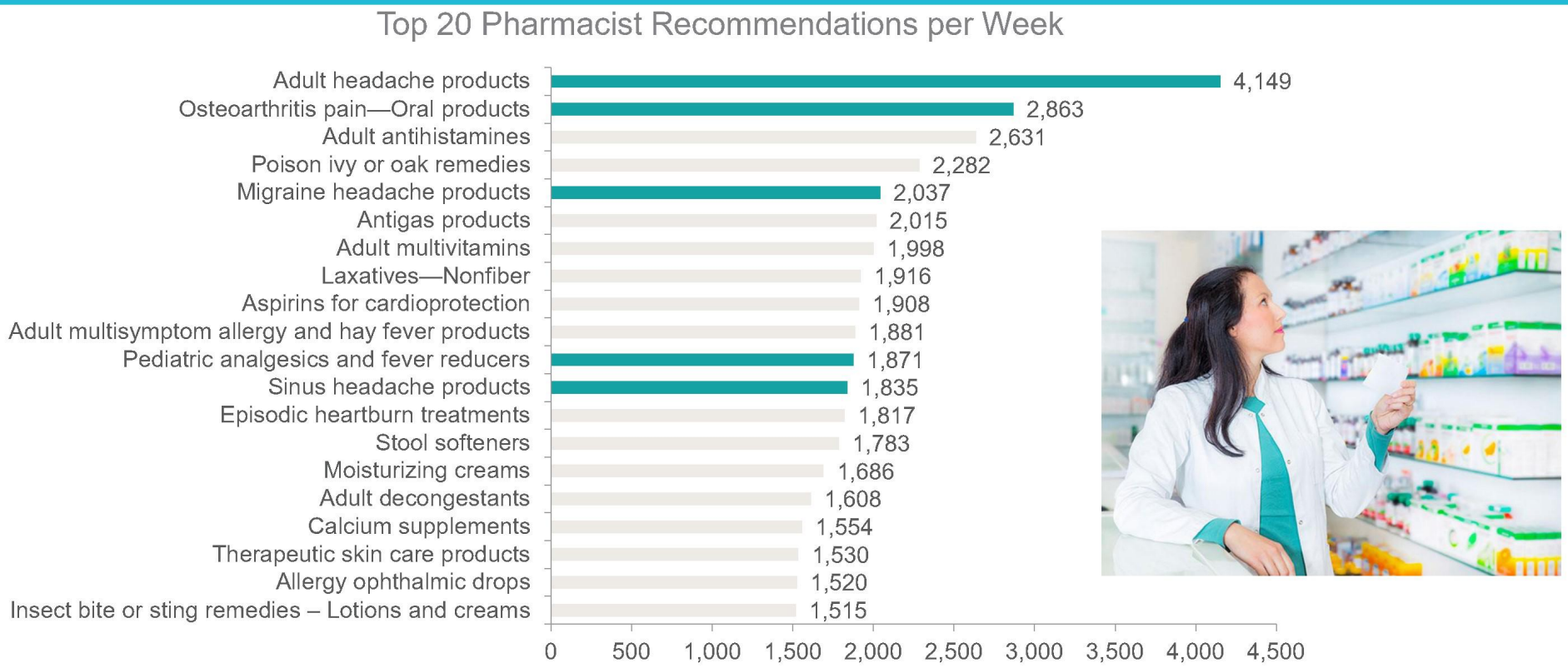
Confirm patient understanding and address any questions

Ref: JCPP; OTC Handbook

10 minute Break

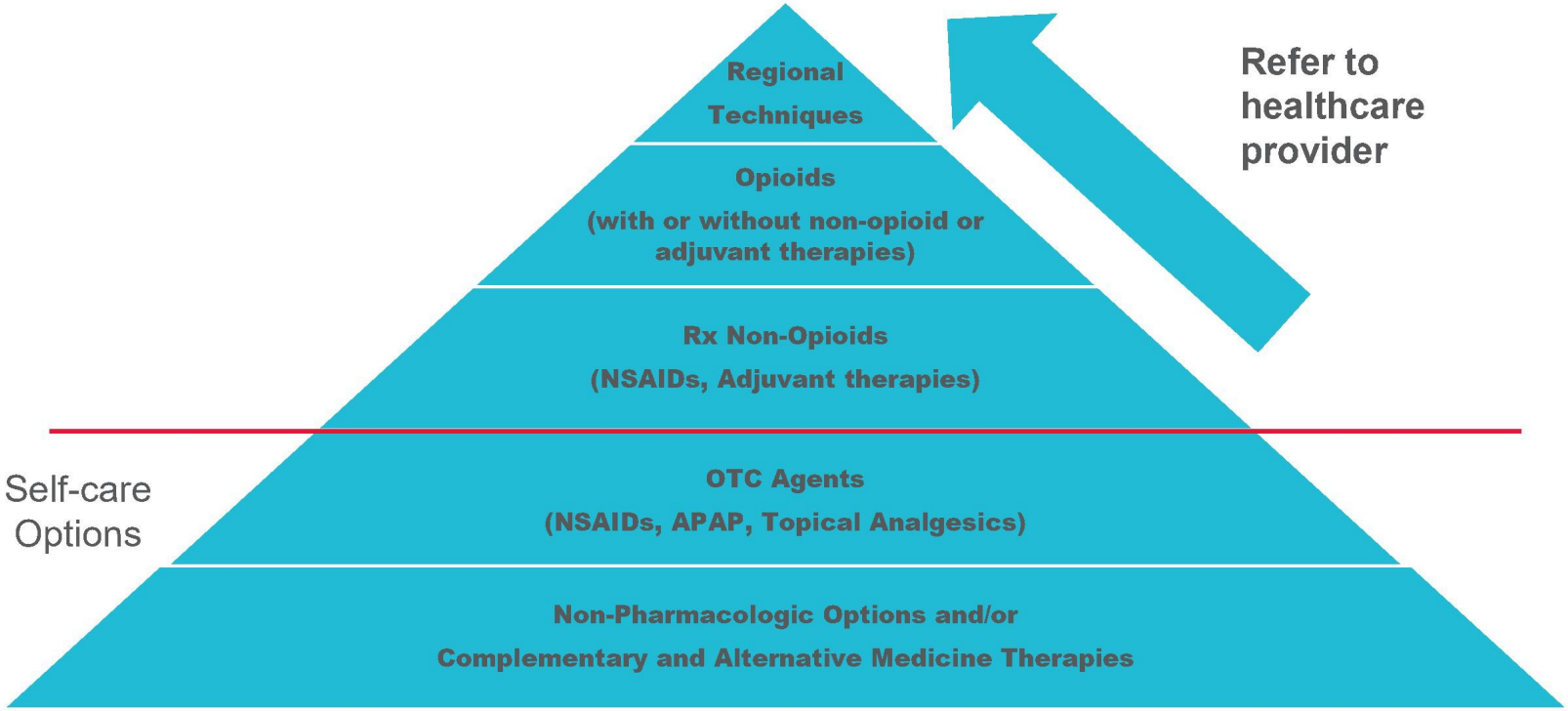
Role of Non-Opioid Options in Pain Management

Pain represents 3 of the top 5 Pharmacist Recommendations



Reference: OTC Supplement Survey 2016

Chronic Pain Algorithm



Ref: Children Journal. CDC.

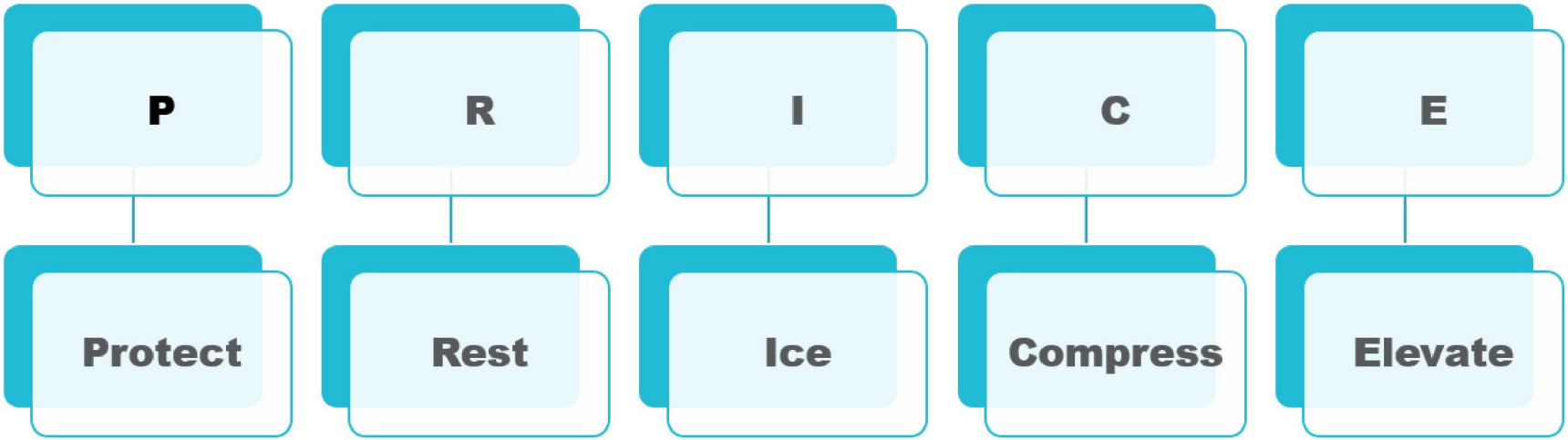
WAGCN00291813

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00040

Role of Non-Pharmacological Therapies in Pain Management

PRICE



References: UptoDate, APE Medical

Cold and Heat Therapies for Pain

Cold Therapies

Ice constricts blood vessels which numbs pain, relieves inflammation, and limits bruising

Indications

- Chronic pain, post-op pain, headache, lower back pain, sprains, swelling, and arthritis.

More commonly used during the inflammatory and early reparative phase

- Up to 7 days after injury to decrease swelling and pain).

Heat Therapies

Heat increases blood flow, which relaxes tight muscles, and relieves aching joints

Indications

- Arthritis, menstrual cramps, and injuries greater than 6 weeks old

Heat had similar efficacy as ibuprofen and was more effective than acetaminophen in menstrual cramps

Reference: Cleveland Clinic

TENS

- Transcutaneous electrical nerve stimulation (TENS) is a pain treatment that uses low voltage electric current to scramble pain signals in your body
- Over-the-counter TENS is not recommended for use by patients with heart conditions, epilepsy, pregnant patients, or those at risk of internal bleeding
- OTC TENS devices are considered safe
  - Inconclusive, insufficient, and conflicting evidence regarding efficacy of OTC TENS devices

Reference: The Pharmacist's Letter. Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

WAGCN00291817

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00044

Kinesiology Tape

- Elastic tape that may be applied to an injured region with the intention of improving blood and lymph flow
  - Indications range from lower back pain to neurological disorders
- Theoretical warning for patients with DVT, kidney problems, CHF, infection, or cancer due to increased circulation and lymphatic draining
- Counseling tips
  - Tape should not be placed near an open wound, damaged, or broken skin
  - Tape should be changed every 3 to 5 days
  - Baby oil can be used to dissolve any adhesive remaining on the skin

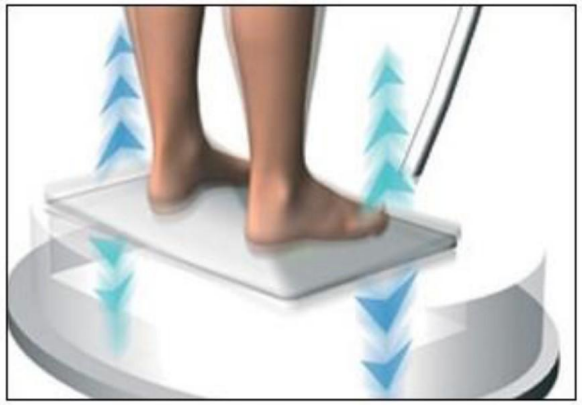
References: The Pharmacist's Letter, UptoDate.

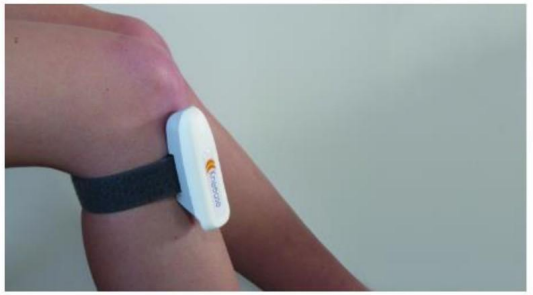
Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

WAGCN00291818

Vibration Therapy

- There are two types of vibration therapy that cause muscles to contract and relax when the vibrations are transmitted
    - Whole-body: the patient is placed on a machine supported by a vibrating platform
    - Localized: a hand-held device is placed on certain parts of the patient's body, such as calf or thigh muscles
- Indications include low back pain, fibromyalgia, chronic pain, overuse pain (i.e. tennis elbow and plantar fasciitis), osteoarthritis pain





(Source: Medical Technologies Limited UK)

Reference: Science-Based Medicine

Physical Medicine Therapies

- Options include Physical Therapy, Occupational Therapy, and Chiropractors as indicated by patient's pain, preference, availability, etc.
  - Exercise is the core part of any physical or occupational therapy program
  - Stretching is also recommended for increased range of motion
- Physical activity should be recommended as first line therapy for most patients

References: CDC, Best Pract Res Clin Rheumatol, HHS

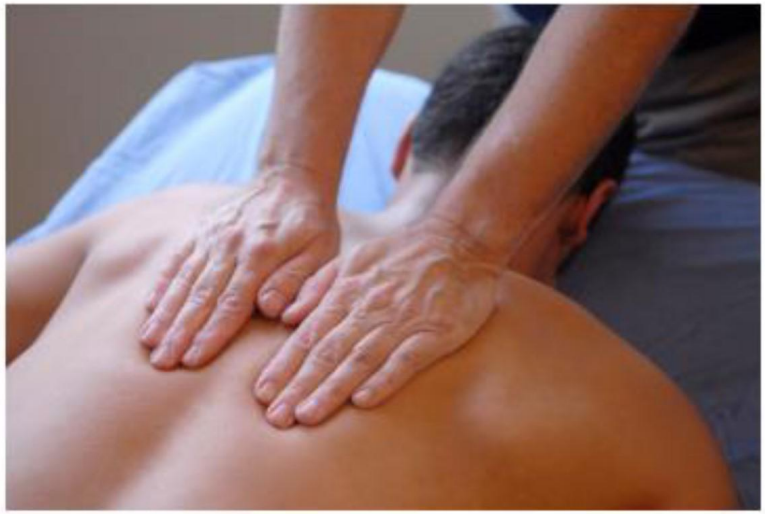
Behavioral Medicine Therapies

- Cognitive Behavioral Therapy (CBT)
- Meditation
- Distraction
    - Virtual Reality (VR)
- Relaxation techniques
- Hypnosis
- Music

References: UptoDate, NIH, AppliedVR

Massage Therapy

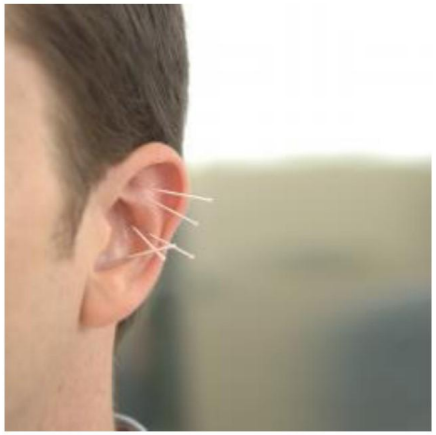
- Currently being studied by the NIH
  - May be helpful in low-back pain, neck and shoulder pain, osteoarthritis pain, fibromyalgia, and headaches.
- Low risk of side effects
- Includes many different techniques
  - Swedish, Sports, Shiatsu, Tuina (pronounced “twee naw”)



Reference: NIH

Acupuncture

- Technique for balancing the flow of energy or life force, known as chi (pronounced “chee”)
- Indications
  - Dental pain, headaches (including tension headaches and migraines), labor pain, low back pain, neck pain, osteoarthritis, and menstrual cramps
- Risks to be aware of:
  - Bleeding disorder: chance of bleeding and bruising is increased
  - Pacemaker: some needles have mild electrical pulses which can interfere with the pacemaker
  - Pregnancy: can stimulate labor (unless that is the indication)



Reference: NIH

Role of Pharmacological Therapies in Pain Management:

Complementary and Alternatives (CAM) Medicines

Homeopathic Options

- Arnicare
  - Indicated for pain caused by osteoarthritis, surgery, and other conditions
  - The dose used in studies for OA was two to three times daily for 3 weeks
  - Can be unsafe if taken orally
- Theraworx
  - Indicated to prevent cramps, release muscle tightness, and relieve muscle soreness
  - Shake well, apply 2 pumps onto entire area, briskly rub in until absorbed, repeat, and allow to air dry

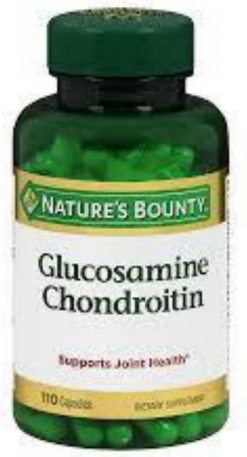
Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

References: NIH; Pharmacist's Letter

WAGCN00291825

Additional Supplement Options

- Turmeric
  - Related to ginger and found commonly in curry powder
  - Should be dosed with black pepper for better availability
  - Studies are still being conducted for efficacy in pain management
- Glucosamine
  - Unclear whether glucosamine helps with joint pain
  - Use caution in patients with diabetes
- Chondroitin
  - Some but not all studies have found evidence that chondroitin might help



Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

References: NIH,

WAGCN00291826

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00053

CBD

- Cannabidiol
  - FDA-Approved use: Seizure disorders (Rx)
  - OTC dosing still being evaluated
- Side effects (Rx only-unclear for topicals)
  - Dry mouth, diarrhea, reduced appetite, drowsiness, and fatigue.
  - Warning for increased risk of suicide, liver damage
- Drug interactions: CYP metabolized
- Recommend products from reputable sources to avoid impurities

References: NIH

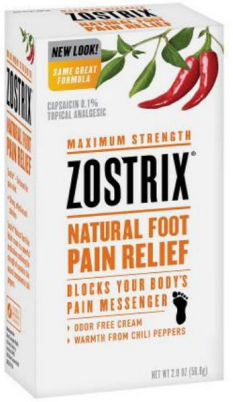
Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

WAGCN00291827

OTC Agents

Counterirritants- Capsaicin

- Start with a low dose and titrate up to improve tolerability
  - OTC doses range from 0.025% to 0.1%
- Usually applied 2 to 4 times per day
- Systemic adverse events are rare
- Proven efficacy compared with placebo for osteoarthritis
  - May be helpful for other chronic painful conditions



Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

Reference: Pharmacist's Letter

WAGCN00291829

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00056

Salicylates and Counterirritants

- Indications
  - OTC doses range from 0.025% to 0.1%
- Usually applied 2 to 4 times per day
- Systemic adverse events are rare
- Proven efficacy compared with placebo for osteoarthritis
  - May be helpful for other chronic painful conditions

Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

Reference: Pharmacist's Letter

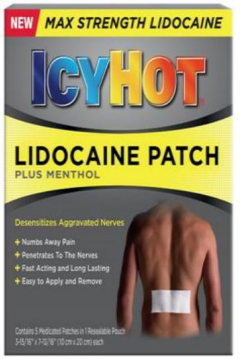
WAGCN00291830

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00057

OTC lidocaine ≤ 4%

- Indications
  - Localized peripheral neuropathic pain
- Consider first-line for peripheral neuropathic pain in patients when adverse effects of systemic medications are of concern (e.g., elderly)
- OTC lidocaine patches may include additional ingredients (menthol, etc.)
- Brands include Icy Hot, Salonpas, Aspercreme, and others



Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

References: UptoDate; Pharmacist's Letter; Lexicomp

Acetaminophen/paracetamol

- Indications
  - Pain from the common cold
  - Headache
  - Backache
  - Minor arthritis pain
  - Toothache
  - Muscular aches
  - Premenstrual and menstrual cramps

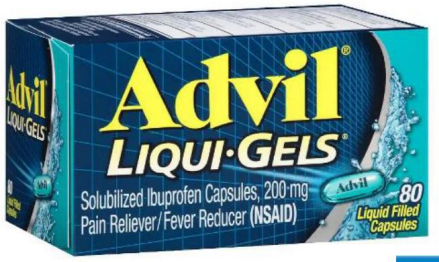
- In chronic liver impairment, limit the total daily dose to 2 to 3 grams.
- Use WITH an NSAID for better efficacy (e.g., acetaminophen 500 to 1,000 mg concomitantly with ibuprofen 200 to 400 mg every six hours as needed in adults).

Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

References: U.S. Pharmacist; Pharmacist's Letter.

NSAIDs (ibuprofen/naproxen)

- Indications
  - Pain from the common cold
  - Headache
  - Backache
  - Minor arthritis pain
  - Toothache
  - Muscular aches
  - Opioid-sparing effect in more severe pain
  - Premenstrual and menstrual cramps



- Avoid NSAID use in patients with high gastrointestinal risks, history of complicated ulcer, taking anticoagulants or corticosteroids, history of renal insufficiency, and more than two of these risk factors: age over 65, high-dose NSAID, history of uncomplicated ulcer, or use of aspirin or other antiplatelet agent.
- If a patient must use with aspirin for prevention of vascular disease, counsel them to take it 30-60 min before or 8 hours after NSAID

Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

References: UptoDate; Pharmacy Times; FDA

Salicylates (acetylsalicylic acid, magnesium)

- Indications
  - Minor aches and pains
  - Migraine

- Avoid use in pediatric patients that have symptoms associated with a viral condition
- Avoid use in patients with high gastrointestinal risks, history of complicated ulcer, gout or hyperuricemia, taking anticoagulants or corticosteroids, more than two risk factors: age over 65, high-dose NSAID, history of uncomplicated ulcer, or use of other antiplatelet agent.
- Aspirin may be found in combination products with other pain relievers as treatment for specific conditions, such as migraine.

Walgreens neither recommends nor endorses any specific product that is highlighted in this presentation.

References: Handbook of Nonprescription Drugs

WAGCN00291834

HIGHLY CONFIDENTIAL

WAG-MDL-03111.00061

Patient Case # 1

Kristen is a 22-year old woman presenting to the pharmacist with abdominal cramps. She reports that she is due to get her period any day now. After a brief pain assessment, the pharmacist rules out pregnancy, establishes her pain is a 5 on the Wong-Baker scale, verifies she has no exclusions to self-treatment, and confirms she has not tried anything to relieve the pain yet.

What would your recommendation be?

Ref: Akin 2001; Akin 2004; Marjoribanks 2015

Patient Case #1 Answer

- Preferred first-line treatment for this patient's dysmenorrhea is an NSAID.
  - If unable to tolerate an NSAID, then acetaminophen is an alternative treatment option.

- Possible NSAID recommendations
  - Ibuprofen 400mg q 4 to 6 hours, increase as appropriate, maximum dose of 2400 mg/day
  - Naproxen 220mg q 8 hours, increase as appropriate, maximum dose of 660 mg/day
  - Counsel to begin taking with the onset of symptoms or menses, and continue for two or three days based on the patient's usual symptom pattern
  - Counsel to take it on a schedule for maximum efficacy

- Possible non-pharmacological recommendations
  - Application of heat to the lower abdomen had similar efficacy as ibuprofen
  - Patients may find using heating pads more complicated than taking medications
  - Heat therapy has a faster onset of action than oral analgesics
  - Heat therapy may also augment the effects of other treatments such as NSAIDs or exercise

Ref: Akin 2001; Akin 2004; Marjoribanks 2015

Non-Opioid Prescription Drugs

NSAIDs

Agent Name	Indications	Clinical Considerations
NSAIDs (ibuprofen, naproxen, diclofenac, indomethacin, meloxicam, etodolac, oxaprozin, piroxicam, sulindac, flubiprofen, fenoprofen, ketoprofen, ketorolac, meclofenamate, mefenamic acid, nabumetone, tolmetin, celecoxib)	• Rheumatoid Arthritis/Osteoarthritis • Ankylosing Spondylitis • Migraine • Gout • Bursitis/Tendonitis of the shoulder • Dysmenorrhea	Avoid NSAID use in patients with • Gastrointestinal disease • Cardiovascular disease and risk • Chronic kidney disease and risk • Aspirin-exacerbated respiratory disease (Selective NSAIDs may be less likely to provoke symptoms)

References: UptoDate; Pharmacy Times; FDA

Lidocaine

Agent Name	Indication	Clinical Considerations
Lidocaine Patch **(Also available in: Cream, Solution, Ointment, Gel)**	Localized peripheral neuropathic pain. Negligible blood levels, so systemic adverse events are rare.	Patches may be cut into smaller sizes prior to removal of the release liner Adherence of the patch may be affected by contact with water; advise patients to avoid activities such as bathing, swimming, or showering while wearing the patch Wear for up to 12 hours within a 24-hour period

References: UptoDate; Pharmacist's Letter, Clinical Pharmacology.

Topical Diclofenac

Agent Name	Indications	Clinical Considerations
Diclofenac **(Voltaren gel, Flector patch, and Pennsaid solution)**	Relief of osteoarthritis pain in joints amenable to topical therapy (e.g., ankle, elbow, foot, hand, knee, wrist). Treatment of acute pain due to minor strains, sprains, and contusions in adults and children ≥6 years of age.	• Don't combine topical plus oral NSAIDs, not shown to increase efficacy over an oral NSAID alone and may increase adverse events. • Showering/bathing should be avoided for at least 1 hour following application. • Wash hands immediately after application (unless hands are treated joint, then wait at least 1 hour to wash hands). • Do not cover with bandage or heating pad after application.

References: UptoDate; Facts and Comparison; Pharmacist's Letter.

Anticonvulsants

Agent Name	Indications	Clinical Considerations
Gabapentin	• Post-herpetic neuralgia (off-label) **The use of the of this drug in this health condition is off-label. The FDA has not determined the safety and efficacy of the drug for the unapproved use.**	• Respiratory depression has been reported in older patients • Start low and titrate slowly • Classified as a non-controlled substance at the federal level but several states have changed it to a controlled substance
Pregabalin	• Post-herpetic neuralgia • Fibromyalgia • Diabetic neuropathy • Mixed neuropathic pain	• This class of medications has abuse potential with gabapentinoid-naïve patients • Classified as a controlled substance at the federal level

Reference: UptoDate

Antidepressants

Agent Name	Indications	Clinical Considerations
Tricyclics (amitriptyline, nortriptyline, doxepin, imipramine, protriptyline, clomipramine, desipramine)	• Chronic pain (off-label)	• Sedation is a known side effect but can be useful since many chronic pain patients suffer from sleep disturbances • Can also cause constipation • Anticholinergic effects may diminish over time • If patients awake with a morning "hangover," medication should be taken earlier in the evening • May take weeks for full analgesic effect
Serotonin and Norepineprhine Reuptake Inhibitors (venlafaxine, desvenlafaxine, duloxetine, milnacipran)	• Diabetic neuropathy • Fibromyalgia • Chronic low back pain • Osteoarthritis	• Can cause nausea, dry mouth, insomnia, drowsiness, constipation, fatigue, and dizziness • Generally don't work as well as tricyclic antidepressants for pain, but they often produce fewer side effects.

The use of the of these drugs in this health condition may be off-label. The FDA has not determined the safety and efficacy of the drug for the unapproved use.

Reference: UptoDate

Patient Case # 2

Lisa is a 42-year old woman who presents to the pharmacy with a new Vicodin #30 (1-2 ts po q 4 -6 h prn) prescription from her dentist. She has an appointment later that week with her dentist for wisdom teeth removal and wants to make sure she has the pain medication prior to the procedure. Lisa asks the pharmacist what she should expect as her first time taking this pain killer.

What would be your recommendation?

Ref: Pharmacist's Letter; CDC

Patient Case Answer # 2

- Opioids for dental pain
  - Can lead to a higher risk of later opioid use and misuse.
  - OTC pain medications should be recommended as first line

- NSAID + Acetaminophen together
  - Ibuprofen 400 mg one hour before a procedure, then ibuprofen 400 mg PLUS acetaminophen 500 to 1,000 mg every 6 hours for a day or two, then as needed.
  - Research shows patients report more pain relief with this combo than either medication alone or with acetaminophen plus oxycodone or codeine.

Pharmacists can make a tremendous impact on opiate-naïve patients by understanding the pain management guidelines and advocating for their patients.

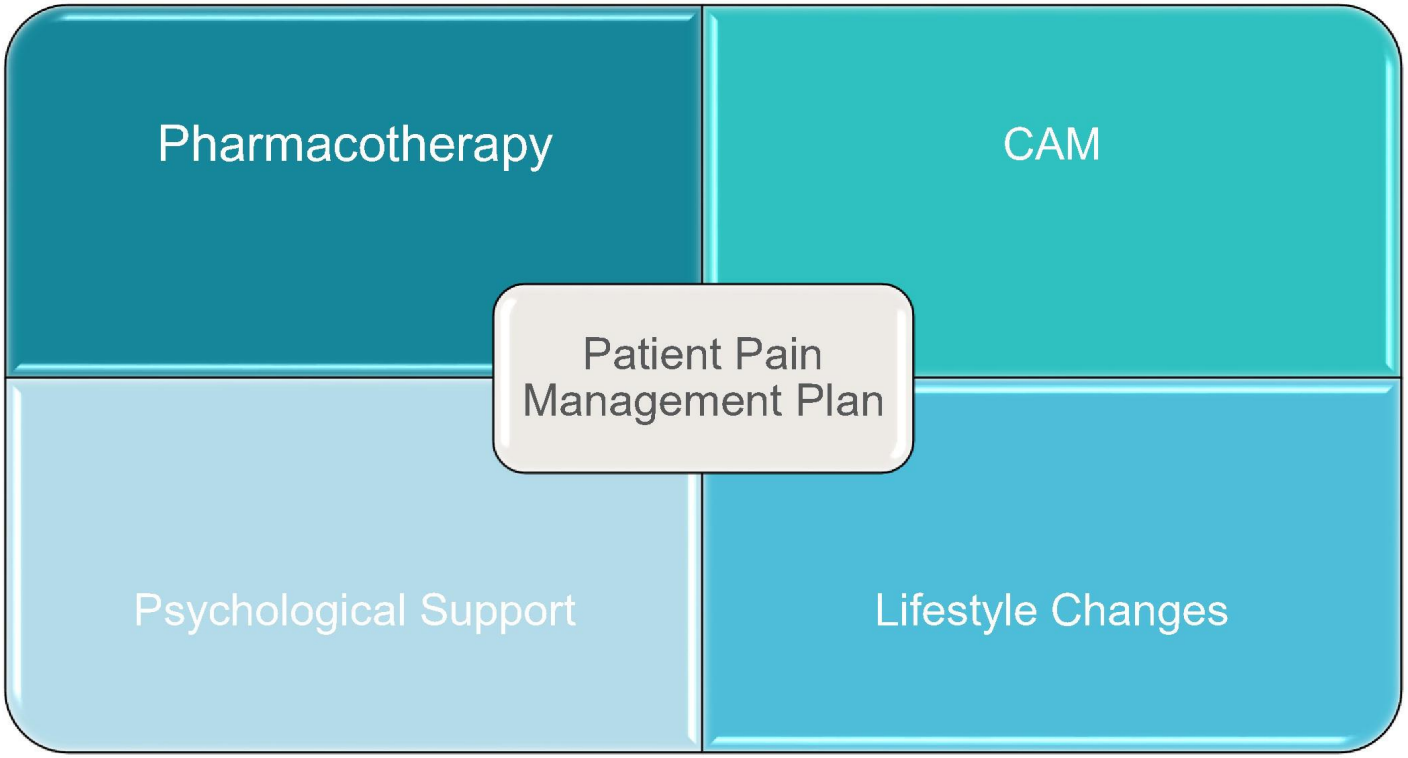
Ref: Pharmacist's Letter; CDC

Multi-Modal Plan for Pain Management

WAGCN00291845

HIGHLY CONFIDENTIAL

Multi-Modal Plan



Reference: CDC

Managing Patient Expectations

- The goals should be about functional improvement
  - Pain free may not be realistic
- Goals should be SMART
- Be empathetic and use reflective listening

Reference: The Pharmacist's Letter.

Pain Resources

- Centers for Disease Control and Prevention (https://www.cdc.gov)
- National Institutes of Health – Pain Consortium (https://www.painconsortium.nih.gov)
- Global Healthy Living Foundation (https://www.ghlf.org)
  - Creaky Joints
  - Pain Spot
- National Center for Complementary and Integrative Health (https://nccih.nih.gov)
- The Foundation for Peripheral Neuropathy (https://www.foundationforpn.org/)
- American Academy of Pain Medicine (https://painmed.org/)
- Arthritis Foundation (https://www.arthritis.org/)

Referral Sources

- Behavioral and Cognitive Services
  - Association for Behavioral and Cognitive Therapies
    - http://www.findcbt.org/FAT/
- Acupuncture
  - American Society of Acupuncturists
    - https://www.asacu.org/find-a-practitioner/
- Chiropractic
  - International Chiropractors Association
    - http://www.chiropractic.org/
  - American Chiropractic Association
    - https://www.acatoday.org/
- Physical Therapy
  - American Physical Therapy Association
    - https://www.choosept.com/Default.aspx

Multi-modal Planning

1

Read

- Read each case

2

Create

- Create a multi-modal plan

3

Work

- Work together in teams

Multi-modal Planning # 1

A 65-year old male walks up to the counter for a consultation. He states his doctor has recommended he take over the counter Tylenol for his newly diagnosed arthritis, but he is unsure which one to take and worried about what this may mean for his future. He currently presents mild pain and stiffness in his hands and knees. He currently takes lisinopril and atorvastatin. He states he has other health conditions.

How could you emphatically respond to this patient and what are some recommendations you might provide?

Ref: Pharmacist's Letter; Mayo Clinic

Multi-modal Planning # 2

A 38-year old female presents to the pharmacy with headache that has kept her in bed for the past day. She describes the pain as a moderate intensity, bilateral, non-throbbing headache without any aura or light sensitivity. She states "It feels like a heavy weight on my head." She has no other health conditions and does not take any medicines.

What if the patient was pregnant? What is she had auras and light sensitivity? Would that change your answer?

Ref: UpToDate

Multi-modal Planning # 3

A 45-year old female comes in with a chief complaint of lower back pain that started yesterday. The pain is making it difficult for her to get some work done around the house today. She has diabetes for which she takes metformin for. No other health conditions or medications.

How quickly should the patient feel relief? What are some of her goals? What kind of follow-up would you recommend?

Ref: UpToDate

Multi-modal Planning # 4

A 67-year old female patient presents to the pharmacy with a Lidoderm prescription for pain related for her post-herpetic neuralgia. She is currently recovering from shingles and wants something for the pain now that the rash has resolved. After running the prescription, you explain that it needs a prior authorization which could take some additional time for processing. She asks you if there is anything she can take over the counter in the meantime.

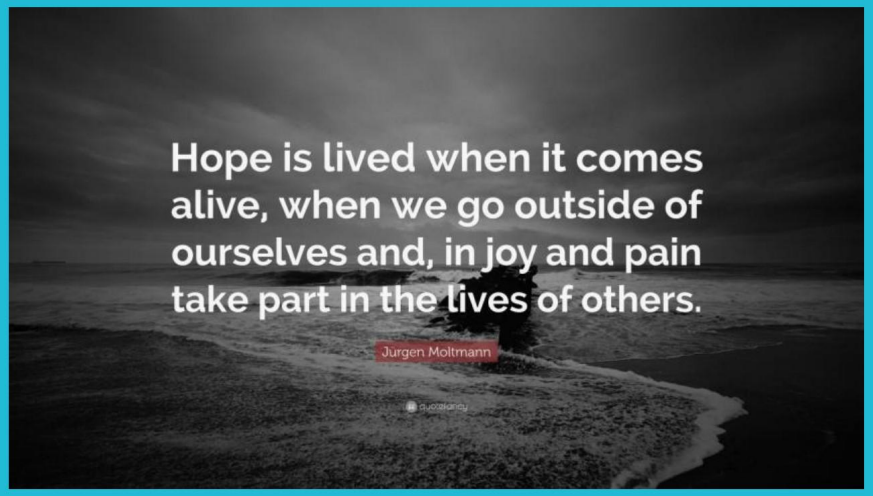
What would be your recommendations and how might you be able to empathetically connect with this patient?

Ref: UpToDate

Key Takeaways

- Listen empathetically
- Individualize therapy
- Consider non-pharmacological agents
- Maintain your knowledge on pain management therapies

THANK YOU!


Hope is lived when it comes alive, when we go outside of ourselves and, in joy and pain take part in the lives of others.
Jürgen Moltmann