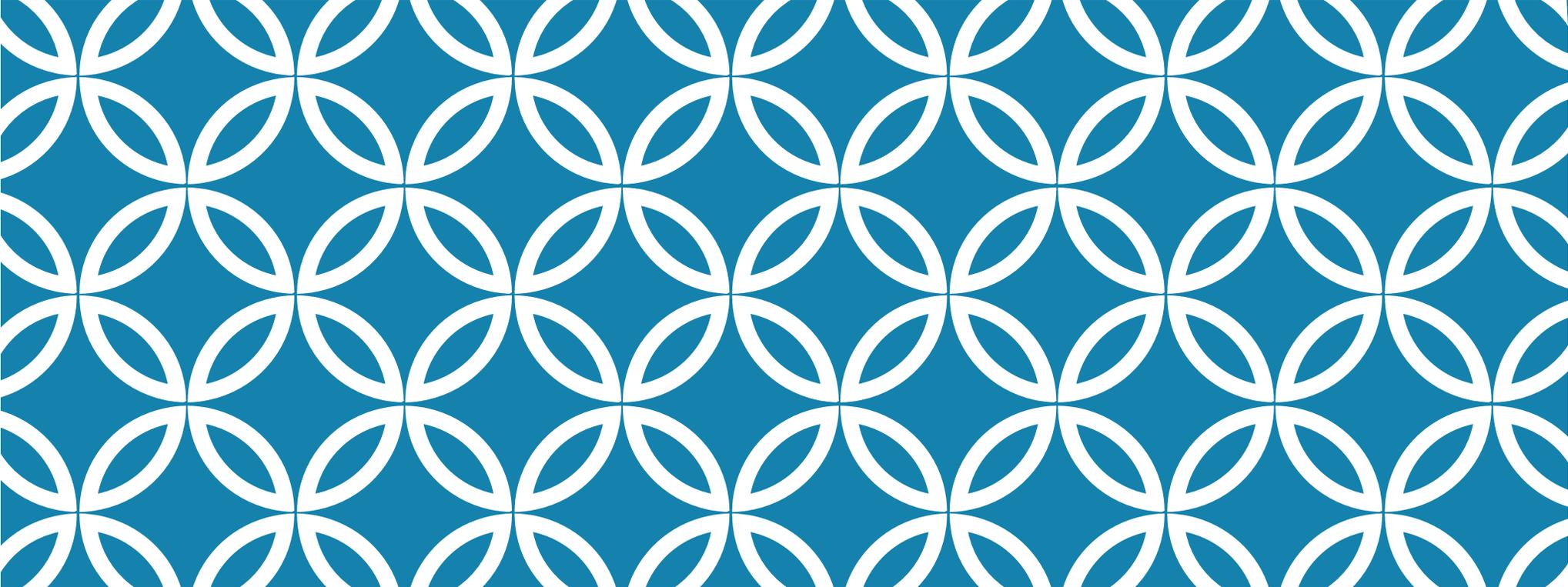


**THANK YOU FOR JOINING US
TODAY!**

PLEASE STAY ON THE LINE AS WE WAIT FOR MORE
PARTICIPANTS TO JOIN THE WEBINAR.



THE OPIOID CRISIS AND MANAGING PAIN IN SENIOR LIVING

Rebecca Wingate, Pharm.D.
March 28, 2020

BEFORE WE START...

- The presentation will be emailed to all attendees within two hours of the end of the webinar today.
- In case of any audio issues, please raise your hand using the GoTo Webinar tool and we will reach out on a case by case basis. In many cases, using your phone for your audio choice yields the best results.
- We will be allowing time for questions at the end of the presentation. However, all attendees will be placed on mute for the duration of the presentation. We will monitor the Chat Window for questions as they are submitted throughout the webinar.
- For any questions after the time of the webinar, please email pharmerica@pharmerica.com and we will channel the question to the correct individual(s).
- Thank you and enjoy our presentation!

CONTINUING EDUCATION (CE) CREDIT INFORMATION

- The National Continuing Education Review Service of the National Association of Long Term Care Administrator Boards (NAB) has approved this session for 1 clock hour of credit.
- CE credit is only available for those listening live and you must view the event in its entirety to qualify for a credit certificate. A certificate cannot be created for multiple attendees if they listen live on one computer.
- **If you achieved the required viewing time, your certificate will be sent via email within three business days.**
If you provided a valid NAB ID number, your credit will be reported to NAB on your behalf within three business days.
- If you are requesting credit from an association other than NAB, please contact that association directly.

SPEAKER INTRODUCTION

Rebecca Wingate, Pharm.D.

Director of Clinical Operations – North,
PharMerica

rebecca.wingate@pharmerica.com

(904) 238-2537

No actual or potentially relevant financial
relationship to disclose and no conflicts of
interest in relation to this activity



OBJECTIVES OVERVIEW

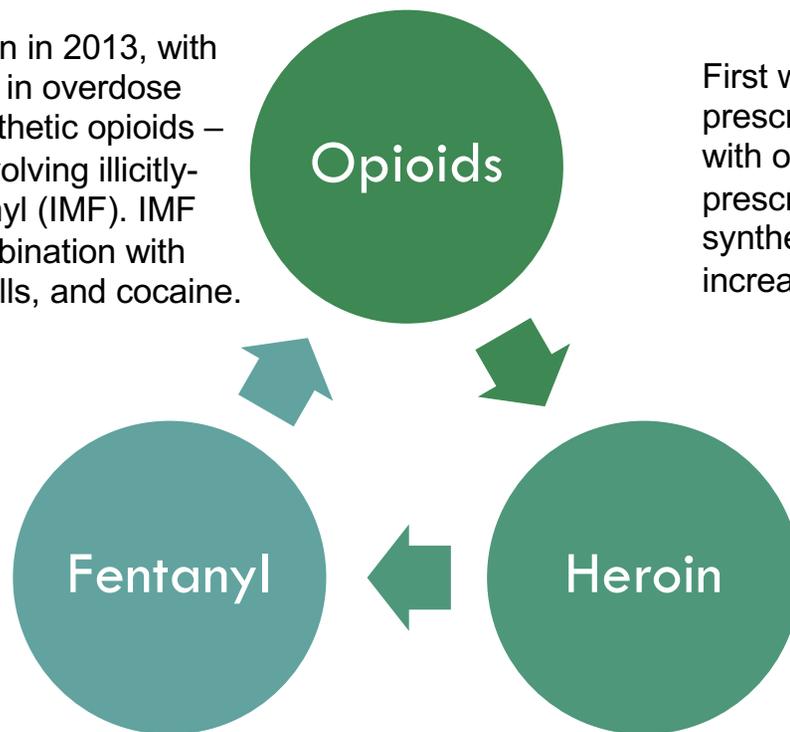
- ❖ Review of the opioid epidemic
- ❖ Pain overview with management and strategies in the senior living setting
- ❖ Treatment options-pharmacological/non-pharmacological
- ❖ Genetic and medical marijuana considerations

PAIN TREATMENT THROUGH THE AGES

- 500–1500 A.D.** Leeches were a mainstay in conventional treatment of pain and inflammatory diseases in the Middle Ages.
- Early 1800s** Morphine was first separated from opium by European chemists, and was found soon after in the United States, where it began to take the place of opium in patented pain medicines.
- 1874** The cannabis plant, from which marijuana is made, became a well-regarded headache remedy by prominent physicians.
- 1939** Methadone was first synthesized in Germany in research efforts aimed at developing a new painkilling medication.

THE WAVE OF THE OPIOID EPIDEMIC

The third wave began in 2013, with significant increases in overdose deaths involving synthetic opioids – particularly those involving illicitly-manufactured fentanyl (IMF). IMF can be found in combination with heroin, counterfeit pills, and cocaine.



First wave began with increased prescribing of opioids in the 1990s, with overdose deaths involving prescription opioids (natural and semi-synthetic opioids and methadone) increasing since then.

The second wave began in 2010, with rapid increases in overdose deaths involving heroin.

THE OPIOID EPIDEMIC BY THE NUMBERS



130+

People died every day from
opioid-related drug overdoses³
(estimated)



11.4 m

People misused
prescription opioids¹



47,600

People died from
overdosing on opioids²



2.1 million

People had an opioid use
disorder¹



886,000

People used heroin¹



81,000

People used heroin
for the first time¹



2 million

People misused prescription
opioids for the first time¹



15,482

Deaths attributed to
overdosing on heroin²



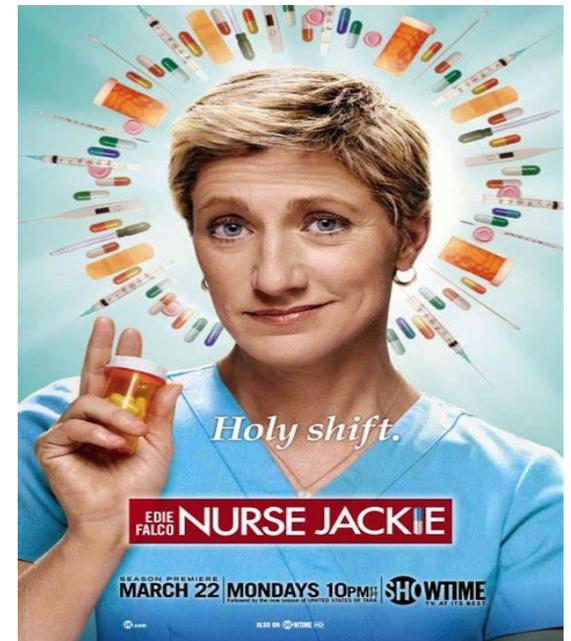
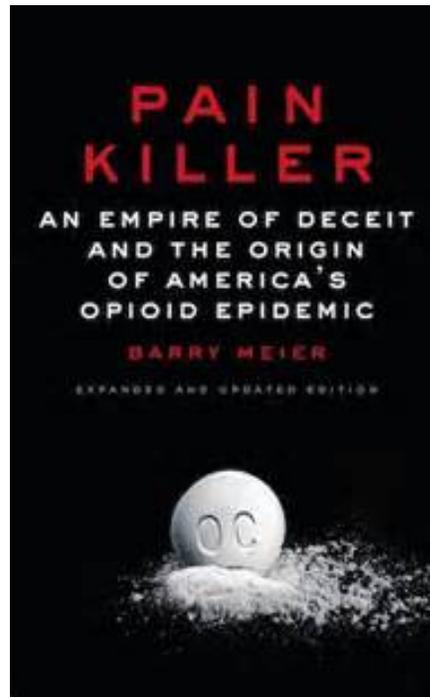
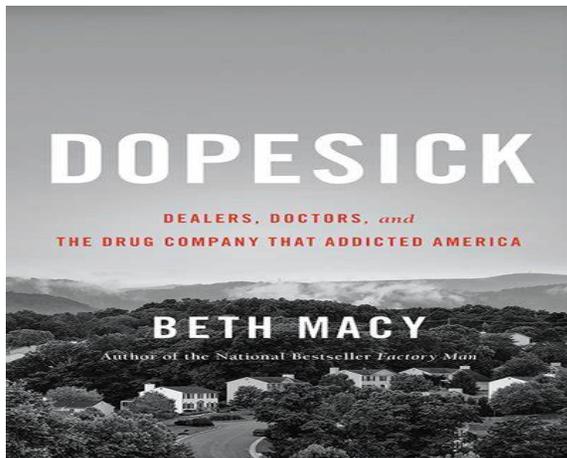
28,466

Deaths attributed to
overdosing on synthetic
opioids other than
methadone²

SOURCES

1. 2017 National Survey on Drug Use and Health. Mortality in the United States, 2016
2. NCHS Data Brief No. 293, December 2017
3. NCHS, National Vital Statistics System. Estimates for 2017 and 2018 are based on provisional data.

AN ERA OF AWARENESS



PAIN IN THE OLDER ADULT



79% of
patients ≥ 85
years old



25-50%
community-
dwelling older
adults



45-85% of
nursing home
residents

PAIN TYPES

Type of Pain and Examples	Typical Description	Effective Drug Classes and Nonpharmacologic Treatments
Peripheral		
Nociceptive: somatic (eg, tissue injury of bones, soft tissue, joints, muscles)		
Arthritis, low-back pain, myofascial pain	Well localized, constant; aching, stabbing, gnawing, throbbing	Exercise, PT and CBT, other nondrug tx, APAP, topical anesthetics/NSAIDs, intraarticular corticosteroid, salsalate, NSAIDs, duloxetine, tramadol, hydrocodone/APAP, oxycodone, fentanyl, methadone
Acute postoperative, fracture, bone metastases	Well localized, constant; aching, stabbing, gnawing, throbbing	APAP, topical anesthetics/NSAIDs, nondrug tx (eg, massage, music), NSAIDs, opioids
Nociceptive: visceral (eg, tissue injury of visceral organs including heart, lungs, testes, and biliary system)		
Renal colic Constipation	Diffuse, poorly localized, referred to other sites, intermittent, paroxysmal; dull, colicky, squeezing, deep, cramping; often accompanied by nausea, vomiting, diaphoresis	Tx of underlying cause, APAP, IV NSAID, opioids with nondrug tx

PAIN TYPES

Type of Pain and Examples	Typical Description	Effective Drug Classes and Nonpharmacologic Treatments
Peripheral		
Neuropathic: peripheral nervous system (eg, injury to nervous system—nerves and spinal cord)		
Cervical or lumbar radiculopathy, postherpetic neuralgia, trigeminal neuralgia, diabetic neuropathy, phantom limb pain, herniated intervertebral disc, drug toxicities	Prolonged, usually constant, but can have paroxysms; sharp, burning, pricking, tingling, pins-and-needles, shooting electric-shock–like; associated with other sensory disturbances, eg, paresthesias and dysesthesias; allodynia, hyperalgesia, impaired motor function, atrophy, or abnormal deep tendon reflexes	Nondrug tx, topical anesthetics, TCAs, SNRIs, anticonvulsants, opioids
Central, Undetermined, or Mixed (eg, pain from neurologic dysfunction or combined and uncertain causes)		
Myofascial pain syndrome, somatoform pain disorders, fibromyalgia; poststroke; temporomandibular joint dysfunction, tension HA	No identifiable pathologic processes or symptoms out of proportion to identifiable organic pathology; widespread musculoskeletal pain, stiffness, and weakness; fatigue, sleep disturbance; taut bands of muscles and trigger points; sensitivity to sensory stimuli	Exercise, PT and CBT, other nondrug psychologic tx, antidepressants, antianxiety agents

SIGNS OF PAIN

- Tears
- Eyes that are closed tightly
- Knitted eyebrows
- Wrinkled forehead (grimacing)
- Groaning when moved
- Clenched fists
- Decreased activity level
- Trouble sleeping
- Poor appetite
- A stiffened upper or lower body that is held rigidly and moved slowly



ASSESSMENT OF PAIN

Pain should be assessed for all individuals in Senior Living Communities and Nursing Homes

Appropriate assessment tools for each individual

Pain is always subjective-accept and respect individual self report

A uniform pain threshold does not exist

Unrelieved pain has adverse physical and psychological consequences

ASSESSMENT OF PAIN

Acute or Chronic:

- new move in with limited information, recent fall with fracture

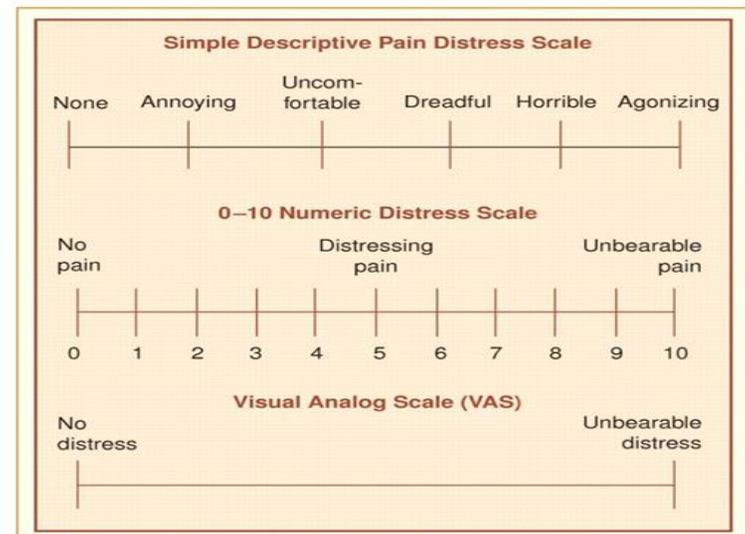
Descriptive words for pain:

- throb, sore, sting, ache, burn, pinch, cramp

Tools:

- Faces pain scale, numeric pain scale, verbal descriptor scale or pain thermometer scale, pain diary, comprehensive assessment form

Wong-Baker FACES Pain Rating Scale



PAIN MANAGEMENT CONCERNS

Geriatric patients have unique pain considerations and conditions that cause or lead to pain:

- Pain secondary to chronic disease and comorbidities
- Frailty-related concerns
- Bone and Joint Disorders
- Cancer
- Between 25% and 50% of community-dwelling elderly have reported pain problems
- Unrelieved Pain
- Age
- Overprescribing
- Addiction
- Diversion
- Benefits versus Risks
- Legal liability

OLDER ADULT CONSIDERATIONS

- Evaluate for treatable conditions and contributing factors
- Cognitive impairment may be a barrier to evaluation, assessment, reporting and adequate pain control
- Assess the pain with respect to intensity, type, chronicity
- Be aware of verbal and non-verbal cues
- The resident or family member should be informed of the risks and potential benefits of all treatment options
- Initiate therapy using a combination of modalities, both non-pharmacologic and pharmacologic as appropriate
- Avoid initiating therapy with long acting medications
- Evaluate patient's comorbidities
 - Multiple disease states may lead to a prescribing cascade and polypharmacy which may place resident at risk for adverse drug events

SURVEY CONSIDERATIONS: PAIN MANAGEMENT

For residents with significant, or difficult to manage pain: How were the interventions developed? What was the basis for selecting them?

Review information such as MARs, controlled medication records/count sheets, multidisciplinary progress notes, and any specific assessments regarding pain that may have been completed. Determine whether the information accurately and comprehensively reflects the resident's condition, and extent to which pain is managed.

Physician's orders (e.g., pain management interventions, PRN or routine pain medications, type of pain medications [opioid, non-steroidal anti-inflammatory], and route [injectable, oral, topical]).

- Pertinent diagnoses.
- Care plan (e.g., measurable goals for pain management, current pain management interventions, pharmacological and non-pharmacological interventions, timeframes, and approaches for monitoring the status of the resident's pain, including the effectiveness of the interventions).

SURVEY CONSIDERATIONS: OPIOIDS

- Opioids should be selected and dosed in accordance with current professional standards of practice and manufacturers' guidelines.
- Adverse consequences of opioids may be especially problematic when the resident is receiving other medications with significant effects on the cardiovascular and central nervous systems.
- Careful titration of dosages based on monitoring/evaluating the effectiveness of the medication and the occurrence of adverse consequences is necessary.
- The clinical record should reflect the ongoing communication between the prescriber and the staff is necessary for the optimal and judicious use of pain medications.

SURVEY CONSIDERATIONS: BEERS LIST

Table 5. 2019 American Geriatrics Society Beers Criteria[®] for Potentially Clinically Important Drug-Drug Interactions That Should Be Avoided in Older Adults

Object Drug and Class	Interacting Drug and Class	Risk Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
RAS inhibitor (ACEIs, ARBs, aliskiren) or potassium-sparing diuretics (amiloride, triamterene)	Another RAS inhibitor (ACEIs, ARBs, aliskiren)	Increased risk of hyperkalemia	Avoid routine use in those with chronic kidney disease stage 3a or higher	Moderate	Strong
Opioids	Benzodiazepines	Increased risk of overdose	Avoid	Moderate	Strong
Opioids	Gabapentin, pregabalin	Increased risk of severe sedation-related adverse events, including respiratory depression and death	Avoid; exceptions are when transitioning from opioid therapy to gabapentin or pregabalin, or when using gabapentinoids to reduce opioid dose, although caution should be used in all circumstances.	Moderate	Strong

TREATMENT OPTIONS

- Non-Pharmacological Interventions
- Acetaminophen
- Non-steroidal Anti-inflammatory Drugs (NSAIDs)
- Muscle Relaxants
- Opioids
- Antidepressants
- Anticonvulsants
- Miscellaneous Agents



NON-PHARMACOLOGICAL INTERVENTIONS

- Environment
- Physical Therapy
- Massage
- Heat, ice
- Acupressure, Acupuncture
- TENS
- Meditation
- Music
- Cognitive
- Movement (Tai Chi, Yoga)
- Distraction, Humor, Relaxation Techniques, Music
- Chiropractic-pro's and con's



ACETAMINOPHEN

Maximum daily dose: 3-4 g

- Including acetaminophen in combination products
- Consider 3 g/day maximum for patients with liver insufficiency, history of excessive alcohol use, or those taking acetaminophen

COMMON PRODUCTS

- Tylenol®
- NyQuil®
- Midol Complete®
- Theraflu®
- Percocet®

Step 1

Non-opioid agent, including NSAIDs and acetaminophen
± Adjuvant analgesia, including corticosteroids and antidepressants

NSAIDS

MOA: inhibit COX-1 and 2 enzymes, decreasing prostaglandin formation

Maximum daily doses:

- Aspirin: 4g
- Ibuprofen: 3.4g
- Naproxen: 1g*
- Celecoxib: 400mg*
- Diclofenac gel: 32g (total body)

COMMON PRODUCTS

- Aspirin[®]
- Bayer[®]
- Bufferin[®]
- Advil[®]
- Motrin[®]
- Aleve[®]
- Naproxen[®]
- Anaprox[®]

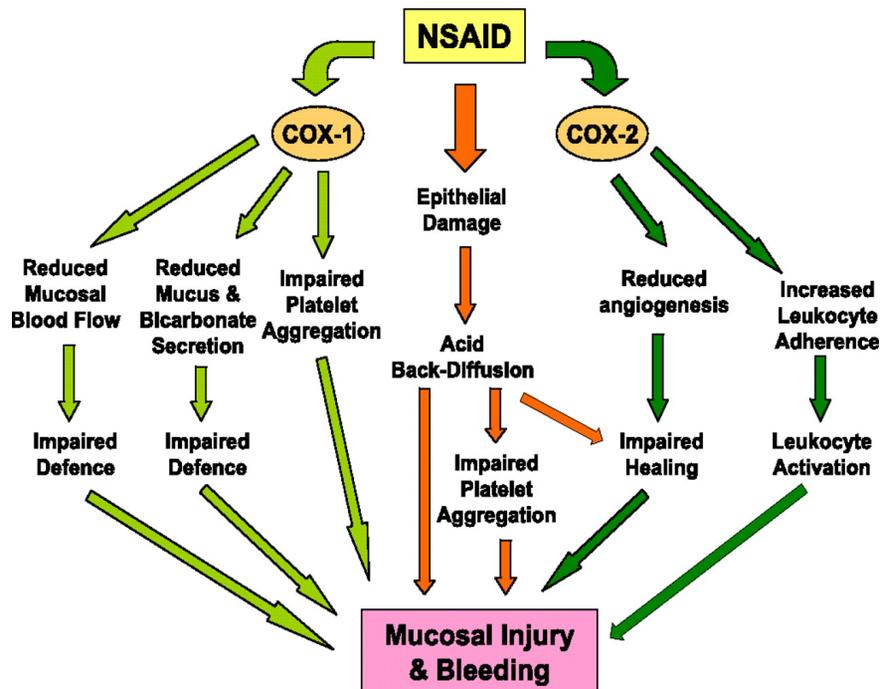
Beers Criteria for Potentially Inappropriate Medication Use in Older Adults recommends avoiding chronic use unless no alternatives are effective and the patient is able to take a gastroprotective agent

NSAIDS

Bleeding, especially when combined with anticoagulants

Black Box Warnings for increased risk of cardiovascular thrombotic events & serious GI bleeding

Contraindicated in active peptic ulcer disease or chronic kidney disease



MUSCLE RELAXANTS

Tizanidine

Baclofen

Flexeril

Carisoprodol

Metaxalone

Methocarbamol

Chlorzoxazone

Orphenadrine

Alternatives to Skeletal Muscle Relaxants		
Indication	Skeletal Muscle Relaxants	Possible Alternatives
Acute low back pain	Short-term cyclobenzaprine, carisoprodol, metaxalone, methocarbamol	Physical therapy, ibuprofen (if no heart failure, hypertension, other considerations)
Chronic low back pain	Should not be used	Physical therapy, NSAIDs, tramadol, opioids ^a
Spasticity	Baclofen, tizanidine, dantrolene scheduled	Physical therapy; baclofen, tizanidine, dantrolene as needed

OPIOIDS

The most common types of opiate/opioid painkillers

- **Hydrocodone** (Vicodin or Lortab)
- **Oxycodone** (OxyContin, Roxicodone, Percodan, Percocet)
- **Hydromorphone** (Dilaudid)
- **Morphine**
- **Codeine**
- **Fentanyl** (Duragesic, Actiq, Sublimaze)
- **Methadone** (Dolophine)
- **Buprenorphine** (Buprenex, Suboxone)

OPIOIDS

Not all are equally potent

- Weaker: codeine, tramadol, hydrocodone,
- Stronger: oxycodone, hydromorphone, fentanyl

Adverse effects:

- **Sedation, respiratory depression, constipation**
- Monitoring for adverse effects is especially important when switching agents & titrating doses

- ❖ Beers Criteria recommends avoiding use except in patients with a recent fracture or joint replacement



OLDER ADULT CONSIDERATIONS

Opioid Use:

Initiate therapy using a combination of modalities, both non-pharmacologic and pharmacologic as appropriate

Avoid initiating therapy with long acting medications

START LOW.....GO SLOW

- May impair physical and mental functioning
- Begin dosing at 25 to 50% of the usual adult dose
- High dose opioids are not associated with improved efficacy
- Consider treatment for constipation (Senna or Senna-S)
- Associated with increased fall/fracture risk
- Addiction is a very real potential if opioids are used long term



ANTIDEPRESSANTS

Tricyclic antidepressants

- Often used for neuropathic (nerve) pain
- High risk of falls & cognitive impairment in the elderly
- Ex: amitriptyline, imipramine, doxepin
- Beers Criteria recommends avoiding in patients with a history of syncope as well as monitoring serum sodium when starting or changing doses

Venlafaxine

- Often used for diabetic neuropathy
- Do not use within 2 weeks of monoamine oxidase inhibitors
- Beers Criteria recommends monitoring serum sodium when starting or changing doses due to potential to cause hyponatremia

Duloxetine

- Often used for diabetic neuropathy, fibromyalgia, & chronic musculoskeletal pain
- Do not use within 2 weeks of monoamine oxidase inhibitors
- Beers Criteria recommends monitoring serum sodium when starting or changing doses due to potential to cause hyponatremia

ANTICONVULSANTS

Neurontin (Gabapentin)

- Often used for nerve pain such as post-herpetic neuralgia, fibromyalgia, diabetic neuropathy, phantom limb pain

Pregabalin (Lyrica)

- Often used for nerve pain such as post-herpetic neuralgia, fibromyalgia, diabetic neuropathy, phantom limb pain

Carbamazepine (Tegretol)

- Sometimes used for neuralgias
- Requires periodic CBC, LFT, and serum level monitoring

Valproic Acid (Depakote)

- Numerous drug-drug interactions
- Sometimes used for neuralgias

OVER-THE-COUNTER AGENTS

Ben gay

Biofreeze

Aspercreme

Icy hot

Capzasin-P

Salonpas



MISCELLANEOUS AGENTS

Lidocaine

- Topical cream, gel, jelly, lotion, ointment, solution, & patches available
 - Good for neuropathic pain
 - Patches may be cut to obtain desired strength (drug is evenly distributed throughout surface area)
 - Apply directly to site of pain
 - Gauze will absorb gels, ointments, etc. & diminish analgesia
 - Only occlusive dressings should be used over application sites



NALOXONE



Emergency narcotic overdose treatment

- ✓ IM, IV, SQ, and intranasal forms available
- ✓ Indicated for complete or partial reversal of opioid-induced CNS depression
 - Decreased breathing, loss of consciousness, or non-responsiveness
- ✓ Effective for prescription & illicit opioid overdose
- ✓ Naloxone works within minutes, but only for a short amount of time. Patients should be monitored for the return of overdose symptoms and given additional doses as necessary.
- ✓ Emergency personnel should be notified immediately if opioid overdose is suspected, even if naloxone is administered.
- ✓ Naloxone can illicit opioid withdrawal symptoms. The patient should be placed on his/her side to reduce the risk of emesis aspiration. Caution should also be used because patients can quickly become agitated and/or combative.

MEDICAL MARIJUANA

- ❖ Medical marijuana is the is a term for derivatives of the Cannabis sativa plant that contains many active compounds, but two are of interest for medical purposes: THC (delta-9 tetrahydrocannabinol) and CBD (cannabidiol). THC is the primary ingredient in marijuana that makes people "high."
- ❖ When assessing use of a cannabinoid in an older adult, it is important to assess current medications for drug interactions.
- ❖ THC and CBD come in a variety of formulations, with topical agents and CBD-based therapies being safer due to decreased psychoactive effects.
- ❖ Available in 6 different forms: pills/capsules, extracts, liquids/tinctures, topicals and vaping.
- ❖ Medical marijuana programs vary by state and while a state laws may allow use of marijuana for medicinal purposes, federal law does not.

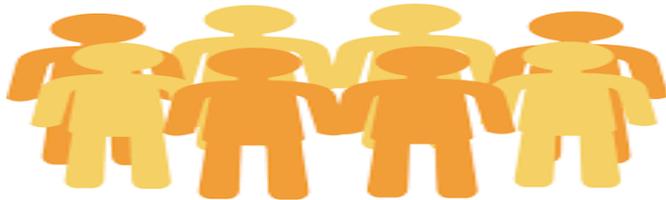
MEDICAL MARIJUANA

THC	CBD
Pain	Pain
Anxiety	Anxiety
Nausea	Nausea
Muscle Spasticity	Seizures
Low appetite	Migraines
Glaucoma	Psychosis/Mental Disorders
	Inflammatory Bowel Disease
	Depression
	Sleep Induction

GENETIC CONSIDERATIONS

Many pain medications are metabolized in the liver by different types of cytochrome P450 (CYP) enzymes

- Differences in genes that code for these enzymes can cause clinically-significant, individualized differences in drug metabolism
- Pharmacogenetic testing can determine these specific differences by analyzing saliva or blood samples



Patients with unusual CYP activity may be susceptible to decreased effects or an increase in toxicities

- “Rapid Metabolizers”
 - Increased breakdown of medications leads to inadequate effects due to decrease in active drug concentration
- “Poor Metabolizers”
 - Decreased breakdown of medications leads to potential toxicity due to increase in active drug concentration

IN SUMMARY

- ❖ Pain is a subjective condition, dependent on the perception, past experience and disease state of the patient and requires individually tailored therapies.
- ❖ Assessment, monitoring, and appropriate non-pharmacological and pharmacological treatment are key to improving overall quality of pain in the Senior Living environment
- ❖ Adherence to both clinical and regulatory guidance is necessary for successful interventions and identifying and preventing potential diversion.



Q & A

PLEASE FEEL FREE TO ASK ANY RELATED QUESTIONS AT THIS TIME.

THANKS AGAIN FOR BEING A PART OF TODAY'S WEBINAR!