

Southeast Texas Geriatrics Workforce Enhancement Program

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# Southeast Texas Geriatrics Workforce Enhancement Program

INTEGRATED GERIATRICS EDUCATION  
TO SERVE AN AGING AMERICA

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# Pain Management and Opioid Use in Older Adults



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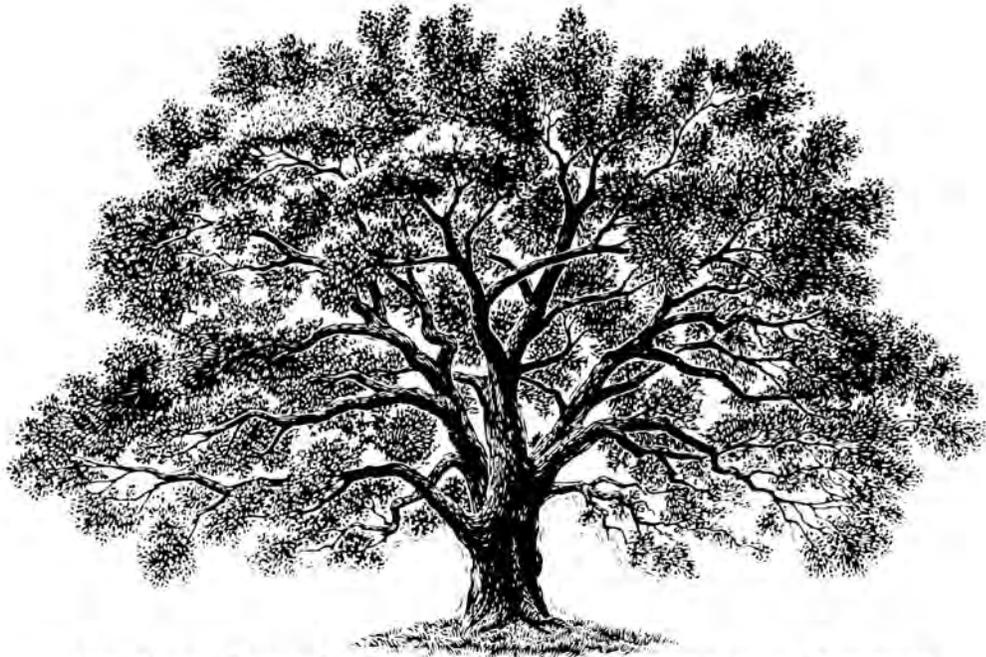
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# Southeast Texas GWEP & Claiming Credits of Education

- Pain Management and Opioid Use in Older Adults. This course is part of a 2-part series that considers both the clinical and social aspects of care in fulfillment of licensure requirements related to opioid prescribing.
- This content is brought to you by the Southeast Texas Geriatrics Workforce Enhancement Program, which is a collaborative program between Baylor College of Medicine and Michael E DeBakey Veteran Administration Medical Center, in partnership with other academic and community service organizations.
- This project is one of a network of 48 nationwide GWEPs supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS). Our aim is to improve health outcomes for older adults by developing a healthcare workforce that maximizes patient and family engagement, by integrating geriatrics and primary care along with the 4Ms framework to create Age Friendly Healthcare Systems.
- This training consists of two 1- hour sessions
- Baylor College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education (CME) for physicians.
- This activity is approved for AMA PRA Category 1 Credits™.
- Baylor College of Medicine, Division of Continuing Professional Development (License Number 7270) is an approved continuing education provider for Social Workers through the Texas State Board of Social Worker Examiners. This activity has been approved for 2.00 continuing education units.



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# Opioid Management in the Aging Adult

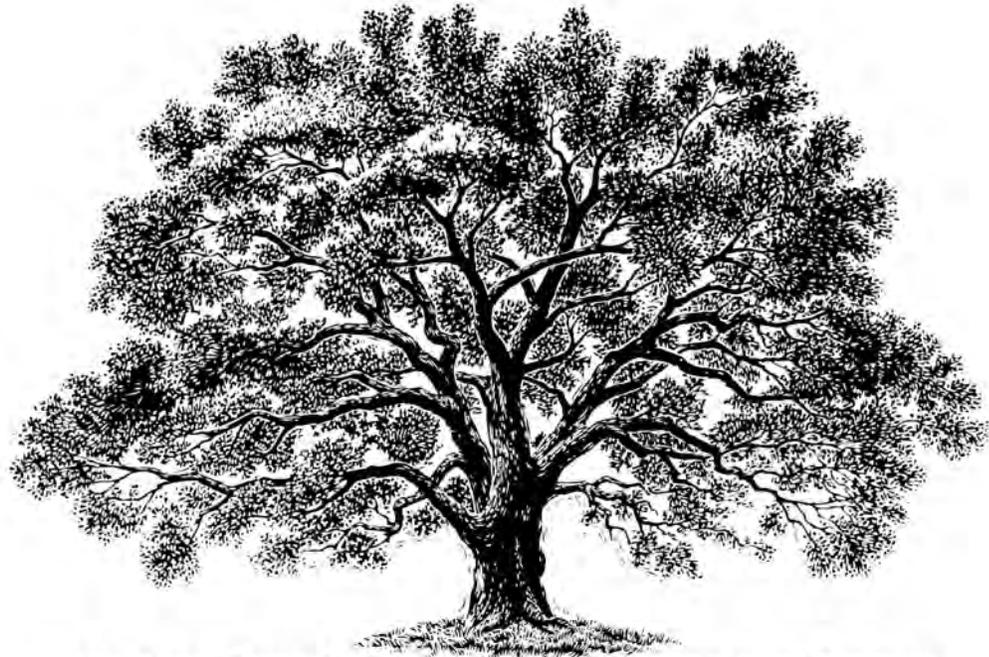
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# Learning objectives:

- Identify and describe age-related changes that affect medication use in pain management in the elderly
- Utilize strategies to reduce the risk of medication related problems and apply the 4M principles in pain management
- Discuss comprehensive pain management requirements set forth in the Texas Administrative Code
- Utilize screening tools in chronic pain patients
- Assess the prescription drug monitoring program and appreciate it's role in a comprehensive patient work up
- Implement physician-patient pain treatment agreements
- Incorporate the comprehensive pain management requirements set forth in the Texas Administrative Code
- Discuss potential "red flags" in opioid prescribing



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# Geriatric Pharmacotherapy

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# Pharmacokinetic Changes in the Older Adult – Effect of Body on Drug

Parameter	Changes
Absorption	Reduced surface area; Reduced GI secretions Reduced gastrointestinal motility Unchanged passive diffusion; no change in bioavailability for most drugs
Distribution	Reduced lean body mass & reduced serum albumin Reduced total body water Decreased volume of distribution and increased concentration of water-soluble drugs Increased volume of distribution and increased half-life of lipid-soluble drugs
Metabolism	Reduced liver size & enzyme activity & hepatic blood flow Decreased clearance and increased half-life of medications
Excretion	Reduced renal blood flow Reduced number of functioning nephrons Decreased clearance and increased half-life for renally eliminated drugs

# Pharmacodynamic Changes in the Older Adult – Effect of Drug on Body

Parameter	Changes
Receptor sensitivity	Altered number and affinity; Altered cellular response
Baroreceptor response to blood pressure changes & response to beta-blockers	Decreased
Antibody response to vaccination	Decreased
Insulin sensitivity	Decreased
Sensitivity to benzodiazepine's CNS effects	Increased
Response to anticoagulants	Increased

# Disease States That Alter Pharmacokinetic & Pharmacodynamics

## Renal Failure

- Increases distribution
- Decreases elimination
- Alters distribution
- Decreases baroreceptor sensitivity

## Congestive Heart Failure

- Increases distribution
- Decreases elimination

## Liver Disease

- Decrease metabolism

# Drug-related Problems in the Elderly

Polypharmacy

Inappropriate  
prescribing

Medication  
adherence

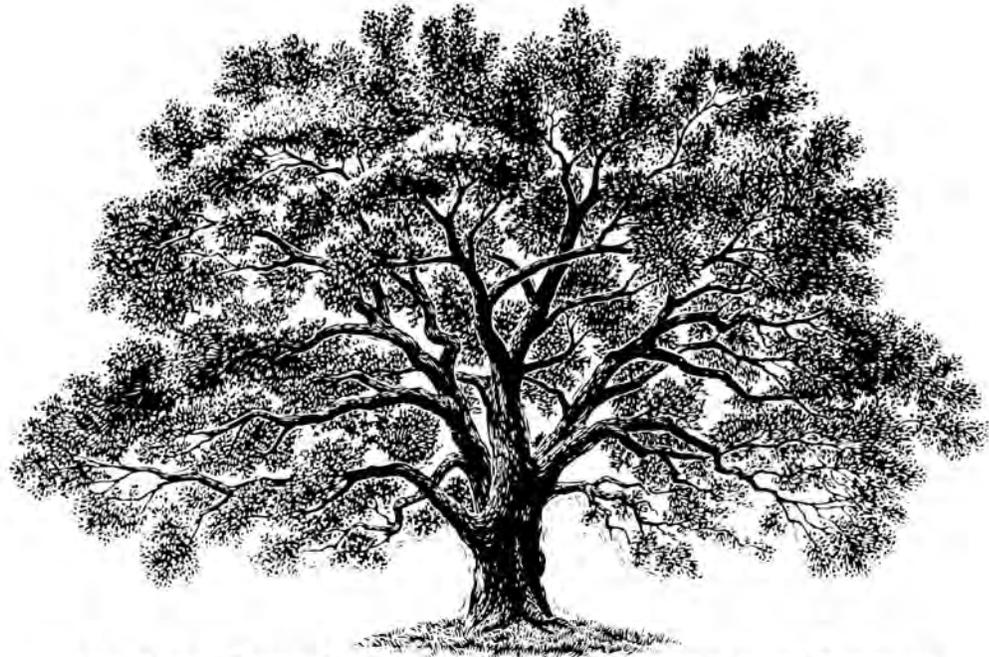
Inadequate  
drug therapy

# Polypharmacy

- Strictly defined as the use of multiple medications
  - Threshold for the total number qualifying varies in the literature (2-10)
  - Commonly defined as use of 5 or more medication
- Risk factors: age > 62; cognitive impairment; lack of primary care physician; seeing multiple subspecialties
- Polypharmacy can increase risk of adverse consequences, decreased quality of life; increased use of healthcare system

# Indicators of Polypharmacy

- Prescribing medications with no apparent indication
- Use of medications in same drug category
- Concurrent use of interacting medications
- Prescribing drugs contraindicated in the elderly
- Ordering inappropriate dosages
- Using a drug to treat an adverse drug reaction



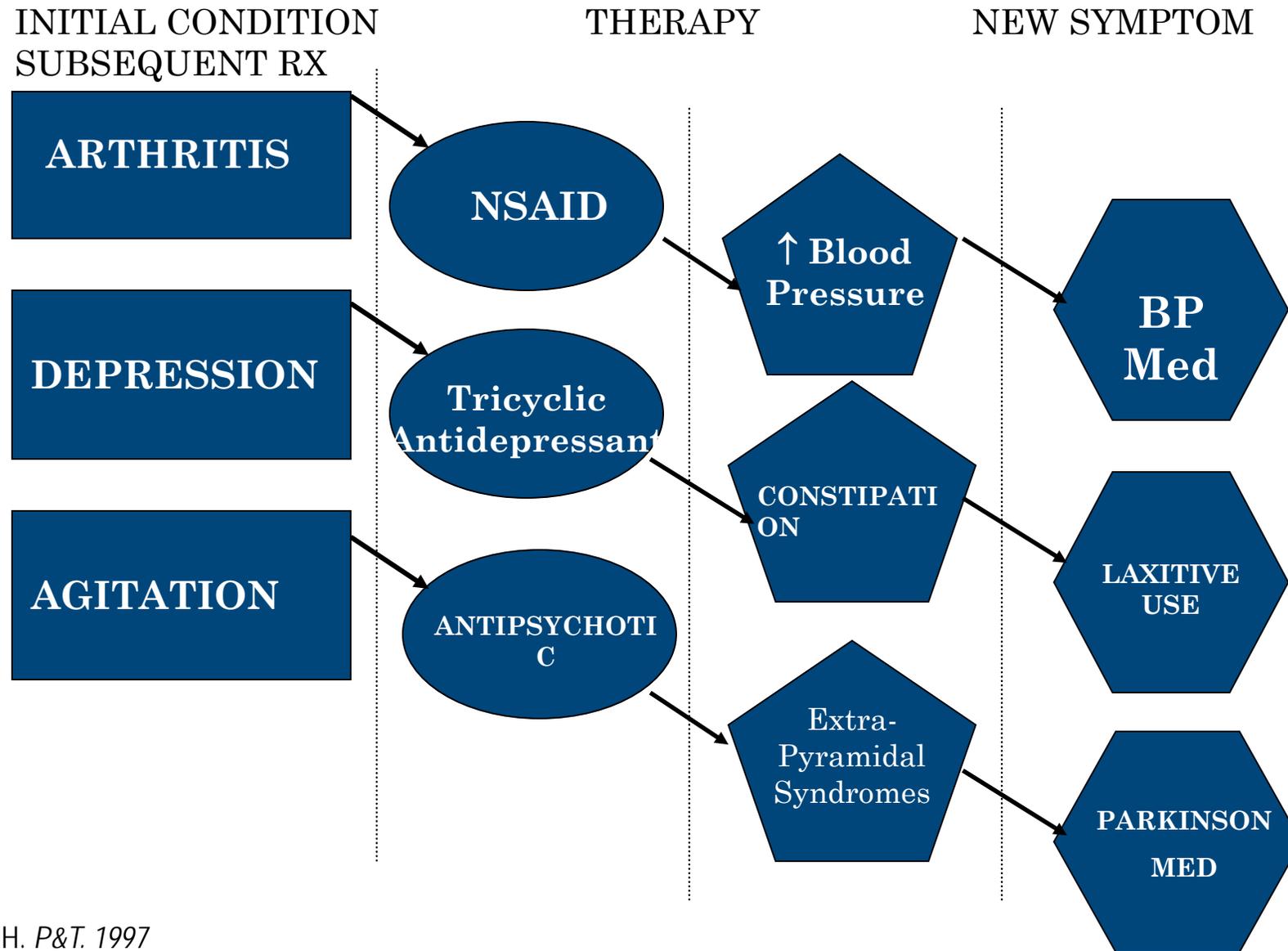
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# Prescribing Issues

# The Prescribing Cascade



# Types of Drug Interactions

- Additive effects (toxicity)
  - Probably most significant in terms of morbidity and mortality
  - Benzodiazepines and sedating antihistamines
- Antagonistic effects (effectiveness)
  - Probably as common but less significant
  - Antihypertensives and pseudoephedrine

# Common OTC and Disease Interactions

Disease	OTC Drug	Result
Heart Failure	NSAIDS, Salt Laxative, or Drugs $\uparrow$ Na <sup>+</sup>	$\uparrow$ Na <sup>+</sup> and H <sub>2</sub> O resulting in Exacerbation
Hypertension	Pseudoephedrine, Phenylephrine	Refractory hypertension
Peptic Ulcer Disease or GERD	NSAIDS	Decreased healing, Increased symptoms, or GI bleeding
Clotting Disorders	NSAIDS	Increased risk of bleeding
Benign prostatic hyperplasia (BPH)	Antihistamines or Decongestants	Obstruction and impaired micturition
Glaucoma	Antihistamines Decongestants	Exacerbation of glaucoma
Dementia or Impaired Cognition	Antihistamines	Anticholinergic activity results in $\downarrow$ cognition

# Potentially Inappropriate Prescribing (PIP)

- Defined as prescribing that poses more risk than benefit to the individual.
- Using medications either have no clear evidence-based indication, carry a substantially higher risk of ADE or are not cost-effective.
- The risk of adverse drug event (ADE) resulting from PIP ranges from weakness, to falls and fractures, even to life threatening events.
- The Beers criteria is one of the most widely cited guidelines.
- Other guides exist to determine appropriateness of therapy.

# Beers Criteria

- Guidelines for the category of unnecessary drugs were based on article by Dr. Mark Beers
- Updated in 2019 by the American Geriatric Society (AGS)
- Guide for identifying potentially inappropriate medications for older adults
- List is to not supersede clinical judgment
- Can be used with other criteria to help guide decision making
- Not applicable in all circumstances

J Am Geriatr Soc J Am Geriatr Soc. 67:674-694, 2019; Arch Intern Med 2003;163:2716-24; J Am Geriatr Soc J Am Geriatr Soc. 2015;63(11):2227-2246.

# Beers Criteria

History of falls or fractures

Antiepileptics

Antipsychotics<sup>b</sup> Benzodiazepines  
Nonbenzodiazepine, benzodiazepine  
receptor agonist hypnotics  
Eszopiclone  
Zaleplon  
Zolpidem

Antidepressants

TCA

SSRI

SNRI

Opioids

In the Beers Criteria, opioid are considered to increase risk of falls.

# Screening Tool of Older Persons' Potentially Inappropriate Prescriptions (STOPP)

- STOPP is comprised of 65 clinically significant criteria for potentially inappropriate prescribing in older people. It incorporates commonly encountered instances of potentially inappropriate prescribing in older people.
  - includes drug-drug and drug-disease interactions, drugs which adversely affect older patients at risk of falls and duplicate drug class prescriptions.
  - criteria are arranged according to relevant physiological systems.
  - each criterion is accompanied by a concise explanation as to why the medication is potentially inappropriate.

# Screening Tool to Alert Doctors to the Right Treatment (START)

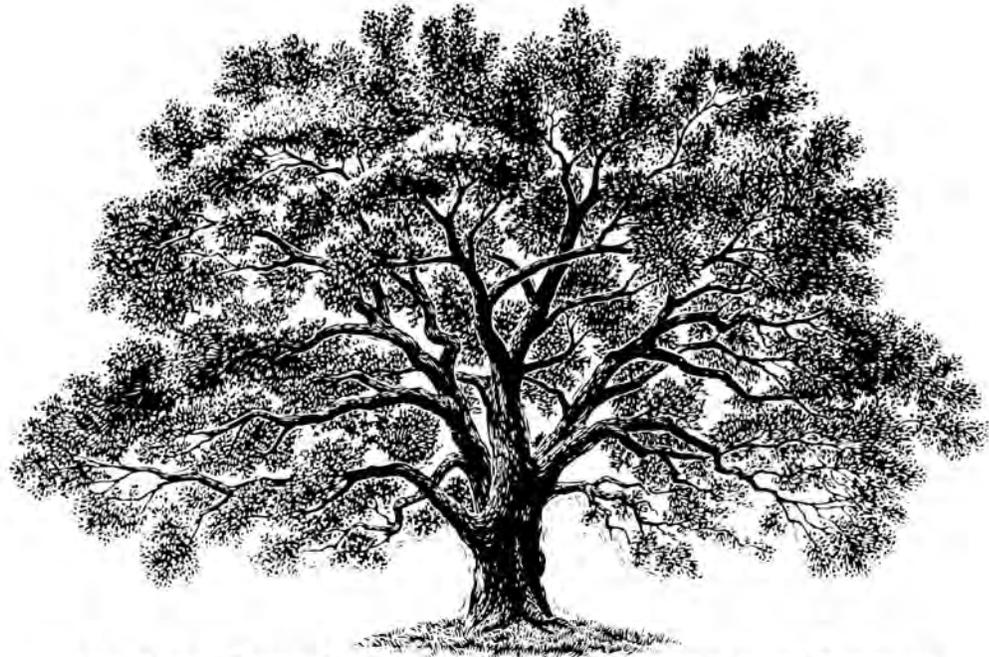
- START consists of 22 evidence-based prescribing indicators for commonly encountered diseases in older people. The tool helps to identify prescribing omissions (medication indicated, but not prescribed).
  - *Cardiovascular system*
    - Warfarin in the presence of chronic atrial fibrillation, where there is no contraindication to warfarin
    - Beta blocker in chronic stable angina, where no contraindication exists
  - *Respiratory system*
    - Inhaled steroid in moderate-to-severe asthma or COPD, where reversibility of airflow obstruction has been shown
  - *Central nervous system*
    - L-dopa in idiopathic Parkinson's disease with definite functional impairment and resultant disability
  - *Gastrointestinal system*
    - Proton pump inhibitor in the presence of chronic severe gastro-esophageal acid reflux
  - *Locomotor system*
    - Calcium and vitamin D supplement in patients with known osteoporosis
  - *Endocrine system*
    - ACE inhibitor or Angiotensin Receptor Blocker in diabetes with nephropathy

# Inadequate Drug Therapy - Underuse

- Untreated indication: patient has medical problem that requires drug therapy but not receiving drug
- Subtherapeutic dosage
- Example: Depression in the elderly is underdiagnosed and undertreated
- Example: Subtherapeutic dose for pain medications

# Medication Adherence in the Elderly

- Defined as the extent to which a patient's or caregiver's medication administration behavior coincides with medical advice
- Rate of adherence  $\geq 60$  years: 26-59%
- Nonadherence acct for 10% hospital & 23% nursing home admissions
- Complex and there is no "one size fits all" solution
  - Patient Specific Factors
  - Medication Specific Factors
  - Prescriber Specific Factors
  - Health Plan Specific Factors
- Multimodal interventions that address behavioral aspects provide more benefit than education alone.



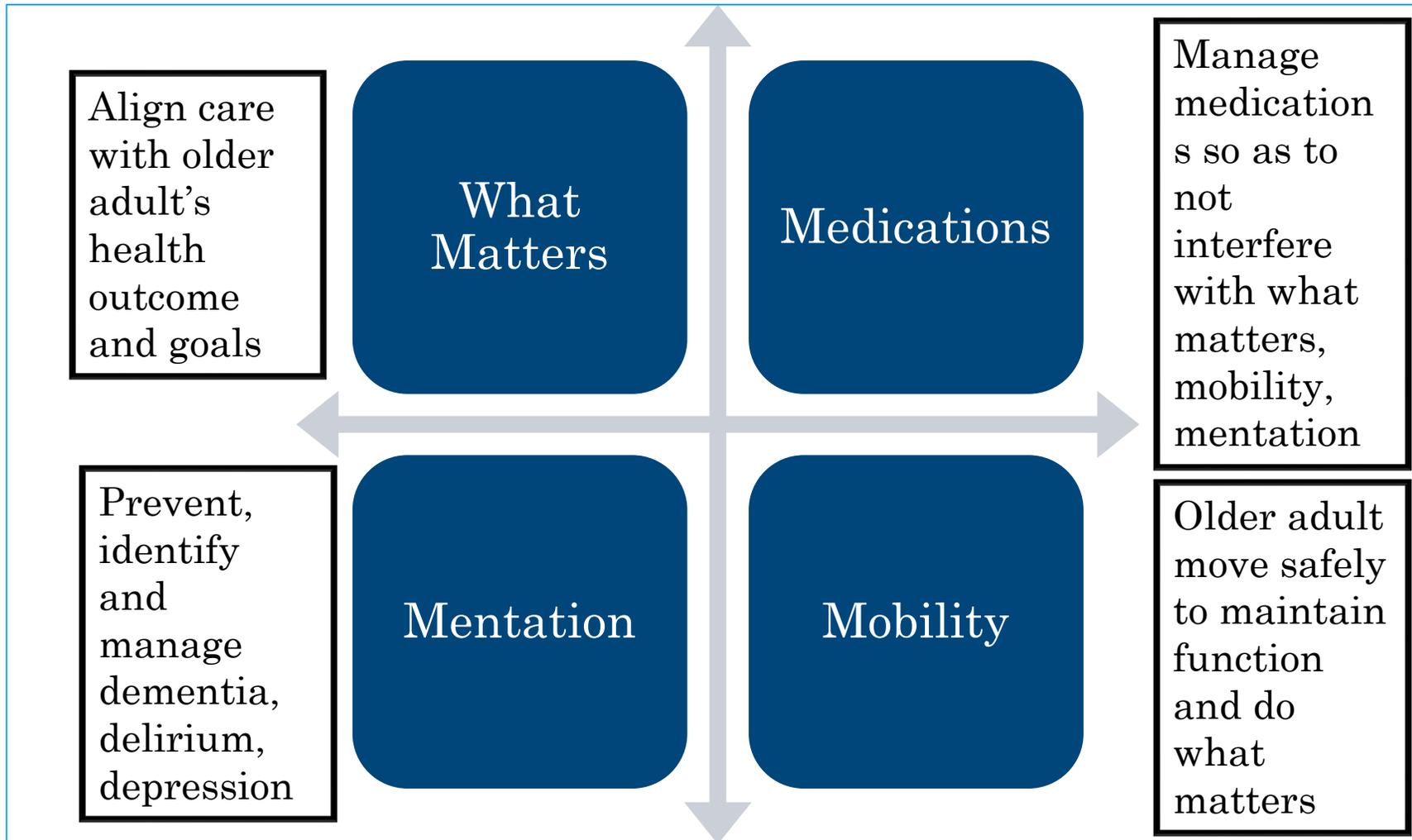
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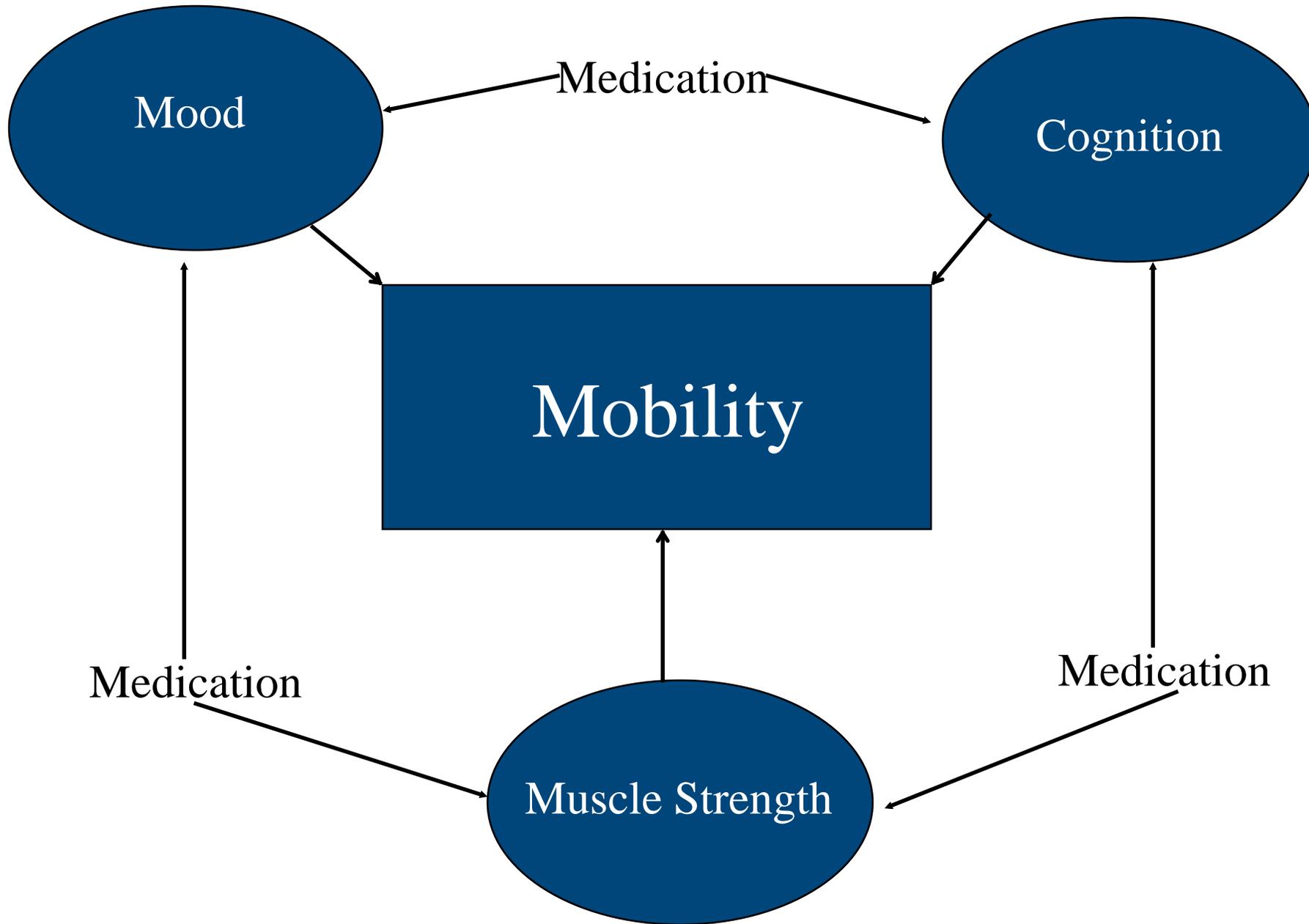
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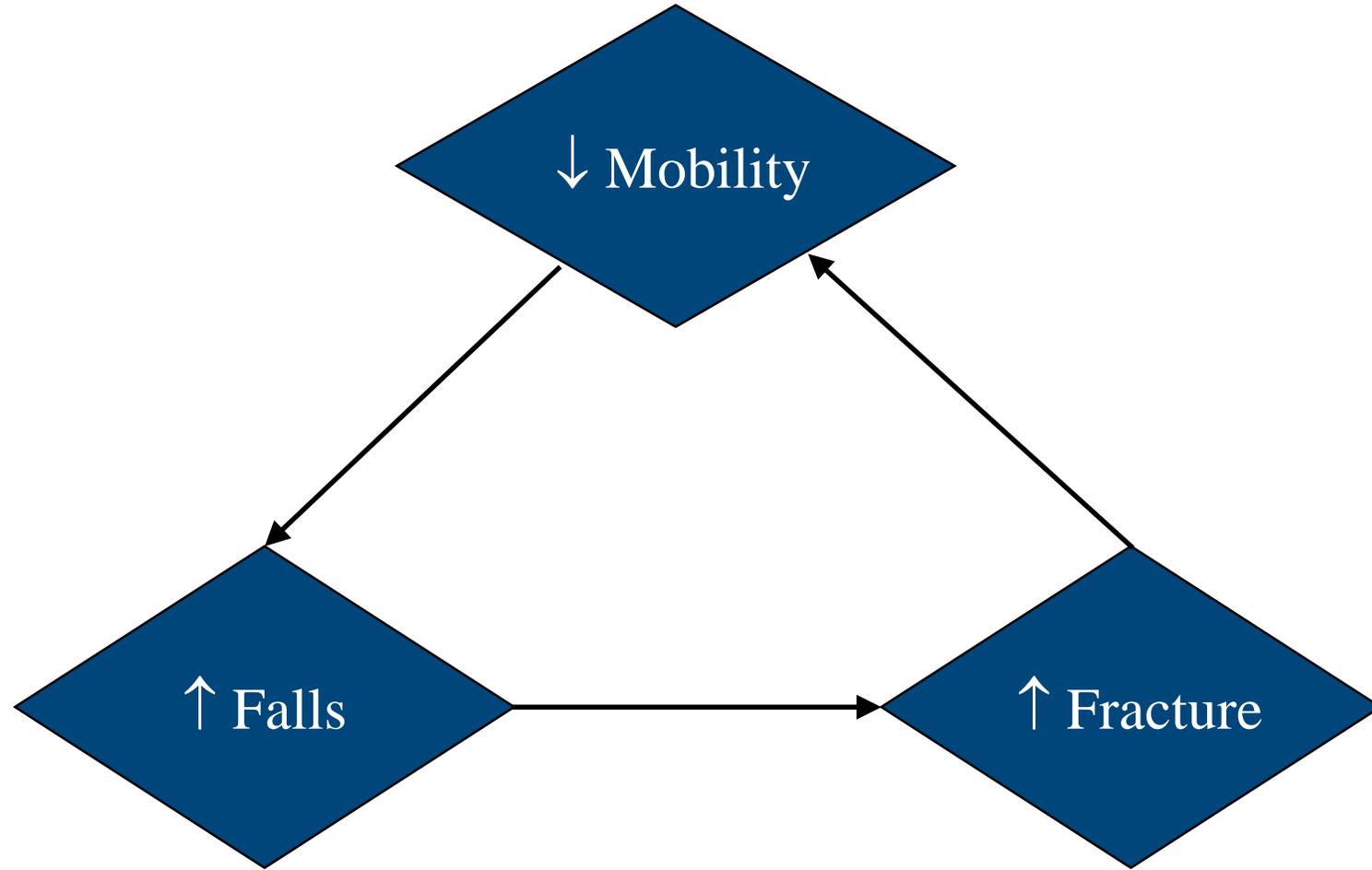
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# Optimization of Geriatric Pharmacotherapy

# 4M Principles





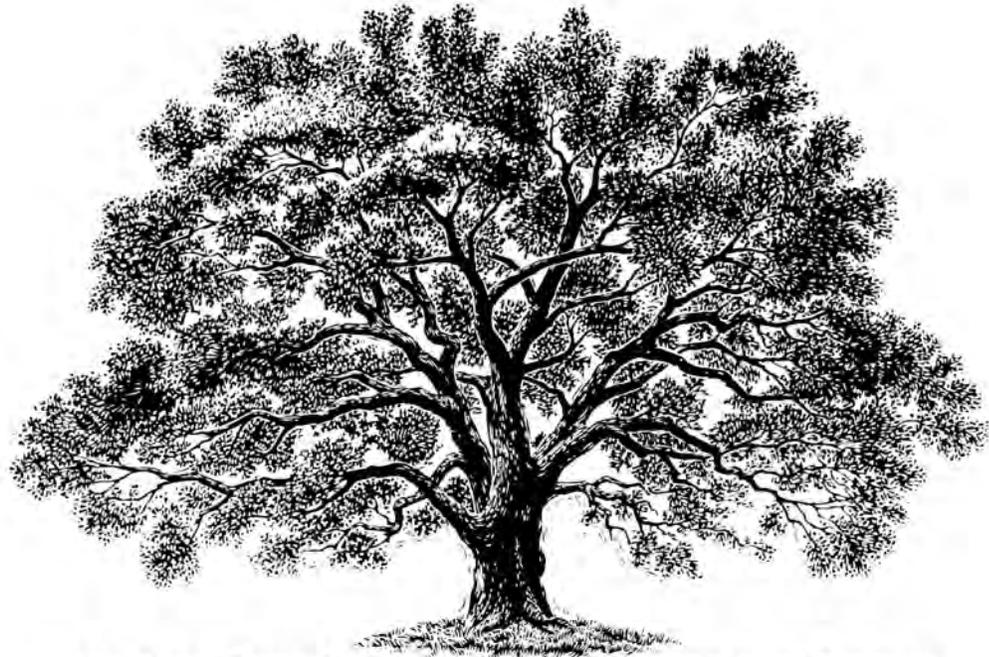


# Medications with Potentially Negative Effects on Mobility

- Sedative-hypnotics
  - Benzodiazepines
  - Flurazepam – long-acting
- Anxiolytics
  - Diazepam)
- Neuroleptics - antipsychotics
  - Haloperidol
- Tricyclic antidepressants
  - Amitriptyline
- Narcotic analgesics - Opioids
- Antihypertensives
  - Prazosin

# Strategies for Optimizing Opioid Therapy in Geriatric Patients using 4Ms

- What matters most?
  - Quality of life
  - Align with patient goals of pain treatment
- Medications
  - Dosing: “Start low and go slow”
  - Simplify regimen – minimize dose frequency and number of drugs
  - Minimize adverse side effects of opiates
  - Minimize drug interaction with other medications
- Mentation
  - Minimize CNS adverse effects of opiates



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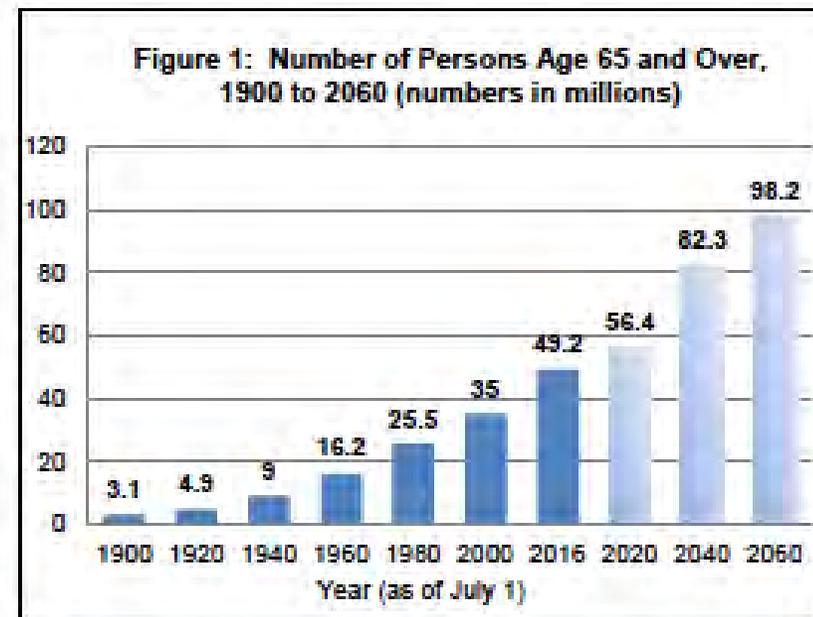
# Providing pain management to older adults

Julianna Fernandez, PharmD, BCPS, BCGP

# Pain in the Aging Patient

- Almost 50 million patients > 65 yrs in 2016
- About 50% of patients >65 yrs old experience pain in previous month
- 75% of patients with pain report pain in more > 1 location

Figure 1: Number of Persons Age 65 and Over: 1900-2060 (numbers in millions)



Note: Increments in years are uneven. Lighter bars indicate projections.  
Source: U.S. Census Bureau, Population Estimates and Projections.

# Challenges with Care of the Aging Patient

- Multiple comorbidities and medications
- Under reporting due to communication issues (eg. Hearing or vision impairments)
- Increased risk of adverse effects and drug-drug interactions
- Organ and cellular function affected by aging process
  - Kidneys
  - Liver
  - Lungs
  - GI tract
  - Heart
- Increased risk of falls
- Potential for dependency or abuse

# Texas Administrative Code Requirements

- As a part of standard of care for all patients suffering from pain
  - Thorough evaluation of patient is required
    - Medication history
    - Physical exam

# Key Elements of Pain Documentation

Nature/intensity

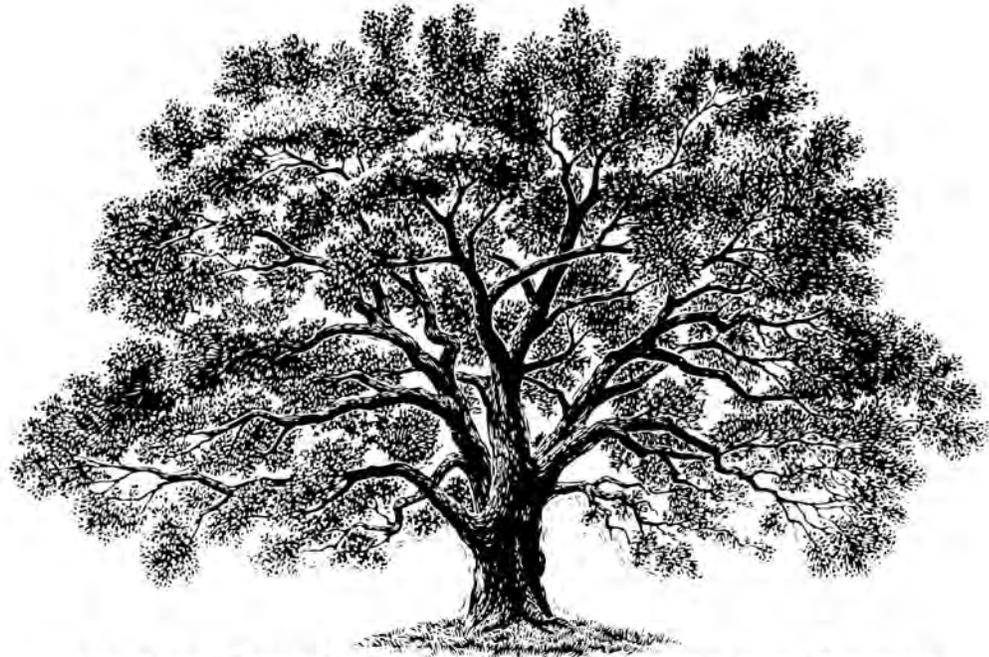
Current/past treatments

Underlying/co-existing diseases or conditions

Effect on physical and psychological function

Hx of or potential for SUD or diversion

Presence of  $\geq 1$  indication needing Rx or scheduled medication



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# Utilizing opioid screening tools

# Approaching Treatment of the Chronic Pain Patient

- Universal Precautions
  - Assume all patients are at risk for medication misuse or abuse
- Proper screening includes:
  - Patient interview
  - Thorough medical history
  - Utilization of an opioid screening tool
  - Analysis of the patient's prescription drug monitoring program profile
  - Close monitoring once a prescription has been issued

# Utility of Opioid Screening Instruments

- Opioid-based metrics are a part of increasing number of value-based metrics
- Intended for use before initiation of opioid drug therapy
- Utilized to help identify patients at risk for aberrant drug-related behaviors
  - Aberrant behaviors – behaviors that do not follow or align with expected or typical behavior
    - Examples of aberrant behaviors:
      - Visiting multiple providers to get opioid prescriptions
      - Diverting medications for self-use
      - Using opioids at doses/frequencies outside of what has been prescribed
      - Requesting early refills

# Instruments Used to Assess Patients Needing Long-Term Opioid Treatment

Name of Instrument	Number of Items	Administered By
SOAPP	14	Self-reported
SOAPP-R	24	Self-reported
DIRE	7	Clinician/PCP
ORT	10	Self-reported

# The Screener and Opioid Assessment for Patients with Pain-Revised (SOAPP-R)

- Revised version of the SOAPP screening tool to help eliminate some of the limitations of the original SOAPP screening tool
- Easily understood by patients
- All questions are intended to measure the likelihood/risk of aberrant medication-related behaviors 6 months after they are initially screened
- Scoring of the assessment is not transparent to patients so there is hopefully patients answer questions truthfully

# SOAPP-R

- 24 item screening tool
- Scored on a Likert scale from 0 (Never) to 4 (Very Often)
- Provides cutoff points
  - "Positive" = score of  $\geq 18$ ; indicates that patient is at high risk for aberrant medication-related behaviors
  - "Negative" = score of  $< 18$ ; indicates that patient is at relatively low risk for aberrant medication-related behaviors

# Opioid Risk Tool (ORT)

- Intended to be administered to patients at initial visit with primary care provider *prior* to beginning opioid therapy
- Can be completed very quickly, roughly a minute
- Take 5 components into account
  - Family history of substance abuse
  - Personal history of substance abuse
  - Age
  - History of preadolescent sexual abuse
  - Psychological disease
- Scoring range – 0 to 26
  - Score of < 3 – indicate low risk for future opioid abuse
  - Score of 4 to 7 – indicates moderate risk for opioid abuse
  - Score  $\geq$  8 – indicates high risk for opioid abuse

# Opioid Risk Tool (ORT)

Mark each box that applies	Female	Male
<b>Family history of substance abuse</b>		
Alcohol	1	3
Illegal drugs	2	3
Rx drugs	4	4
<b>Personal history of substance abuse</b>		
Alcohol	3	3
Illegal drugs	4	4
Rx Drugs	5	5
<b>Age between 16-45 years</b>	1	1
<b>History of preadolescent sexual abuse</b>	3	0
<b>Psychological disease</b>		
ADD, OCD, bipolar, schizophrenia	2	2
Depression	1	1
<b>Scoring total</b>		

# DIRE

- Can be used by clinician to assess patients who are already on opioid therapy or are being considered for opioid therapy
- In non-cancer pain patients, used to predict:
  - Efficacy of analgesia
  - Compliance with long-term opioid regimen
- Four factors are measured and then summed to give the DIRE score
  - Diagnosis
  - Intractability
  - Risk (broken down into psychological, chemical health, reliability, and social support)
  - Efficacy

# DIRE

- Risk score is broken into subcategories:
  - Psychological
  - Chemical health
  - Reliability
  - Social support
- Scoring
  - All factors are rated from 1 to 3 (1 is least compelling or least favorable case for opioid prescribing and 3 is the most compelling or most favorable case for opioid prescribing)
  - Score ranges from 7 to 21
  - Higher scores indicate a more successful prescribing process – patient will be compliant and receive effective treatment

# Overview of Tools

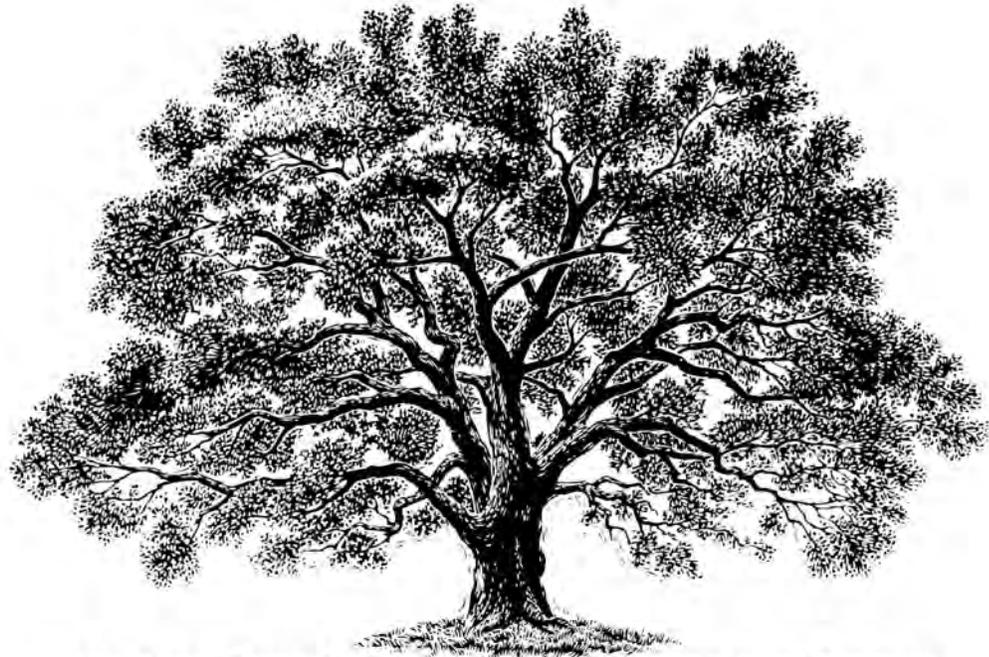
- The SOAPP-R, the DIRE, and ORT were all validated in chronic pain patients in pain clinics
- Easy to administer in a fairly short period of time
- Designed to detect risk of potential abuse and need for monitoring after prescriptions are issued
- Limitations:
  - They do not have the ability to detect whether patients are being truthful
  - Limited to utilization in chronic pain patients, NOT acute pain patients
  - None of the tools mentioned were validated in large numbers of older patients

# Opportunities for the Future in Opioid Screening

- Investigators are researching ways to shorten opioid screening tools for the future
- Some investigators are studying how a computer-based administration of the tools such as the SOAPP-R could be shortened and customized based on how patients answer each question
- Goal would be to design valid tools that are less time-consuming for both patients and providers

# Links to Screening Tools

- SOAPP-R
  - [http://nationalpaincentre.mcmaster.ca/documents/soapp\\_r\\_sample\\_watermark.pdf](http://nationalpaincentre.mcmaster.ca/documents/soapp_r_sample_watermark.pdf)
- ORT
  - <https://www.mdcalc.com/opioid-risk-tool-ort-narcotic-abuse>
- DIRE
  - [http://www.emergingsolutionsinpain.com/content/tools/esp\\_9\\_instruments/pdf/DIRE\\_Score.pdf](http://www.emergingsolutionsinpain.com/content/tools/esp_9_instruments/pdf/DIRE_Score.pdf)
  - <https://www.mdcalc.com/dire-score-opioid-treatment>



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# Utilizing the Texas Prescription Monitoring Program in Your Practice

**Help end the  
opioid crisis.**



Mandatory 3/1/20

[Register / Sign In](#)

# Texas Prescription Monitoring Program (PMP)

- Developed to help prevent drug diversion
- Can help to provide history as well as verify previous controlled substance utilization and prescribing
- Collects and monitors all outpatient prescription data for all Scheduled II, III, IV, and V controlled substances that are dispensed from a pharmacy in the state of Texas or dispensed to a Texas resident from pharmacies in another state (shared with 30 other states)
- Intended to be used by prescribers and pharmacists
- Effective September 1, 2017, Texas-licensed pharmacies are required to report all dispensed controlled substances records to the Texas PMP no later than the next business day after the prescription is completely filled

# Legal Responsibility

Effective **March 1, 2020**, all pharmacies AND prescribers (with the exception of veterinarians) will be required to check the patient's PMP history before dispensing or prescribing opioids, benzodiazepines, barbiturates, or carisoprodol.



Pharmacies/pharmacist, it is your legal responsibility to:

Report all dispensed controlled substances records to the Texas PMP no later than the next business day after the prescription is completely filled

Take an active effort to reduce/eliminate duplication of therapy and overprescribing of controlled substances

# Accessing the PMP



Once a provider has a registered DEA number or a pharmacist is licensed in the state of Texas, they will receive an email with login information for the Texas PMP.



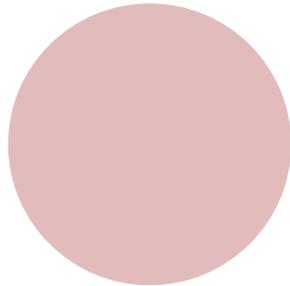
If access is needed for the Texas PMP, practitioners can also watch this video to learn how to gain access.



Logging in:

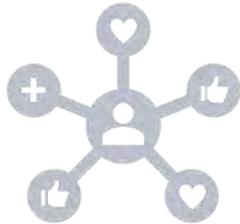
<https://texas.pmpaware.net/login>

# Helpful Resources for PMP Utilization

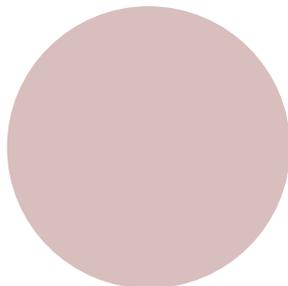


Texas State Board of Pharmacy

<https://www.pharmacy.texas.gov/PMP>  
<https://www.pharmacy.texas.gov/PMP/Cllforms.asp/>



NarxCare



Pill Mill Series

<https://www.pharmacy.texas.gov/videos.asp>

# NarxCare

- Software used to do advanced analytics on patient's controlled substance prescription use
- Provides four main sections of a report
  - Header
  - Scores and indicators
  - Graphs
  - Detailed prescribing history
- Assignment: Watch the NarxCare tutorial: [Navigate NarxCare](#)

# NarxCare Interpretation

- Scores range from 000 -999
- Last digit of the score indicates how many active prescriptions the patient has
  - Eg. 494 ---- means the patient has 4 active prescriptions
  - Eg – 000 – means the patient has not used anything before
- The scores correspond to the number of risk factors the patients have
  - Risk factors include: number of scripts, prescribers, pharmacies, amount of meds, number of times similar scripts from different prescribers were received
- Narx scores - low scores correspond with lower risk and higher scores correspond with higher risk patients
- 50% weighting is for the morphine equivalency; 50% weight is given to other risk factors

# Narx Scores

- Remember that no single Narx score is normal – you MUST look at the complete clinical picture
- Patient distribution
  - 75% of patients score < 200
  - 5% of patients score > 500
  - 1% of patients score > 650
- Scores should spark a discussion with a patient, NOT a decision
- Overdose risk score – calculated risk of unintentional overdose death
  - Risk of death doubles for every 100 point increase in the score
  - The score can help decide whether a patient is a candidate for naloxone and/or de-escalated medication regimen

# Narx Care Interpretation

- Watch this 15 minute video for further information:
  - [NarxCare interpretation](#)
- Remember to look at ALL data before making any decisions on a patient's pain management regimen

# Some Red Flags on Controlled Substance Prescriptions

- Forged prescriptions
- Early refill requests – resulting in cash payment
- Prescriptions from emergency rooms/urgent care centers
- Multiple controlled substances on PMP profile
- Multiple renditions of patient name in PMP
- Multiple addresses on the PMP profile
- Multiple prescribers on PMP profile (Eg. > 5 providers in 1 year)
- Multiple pharmacies dispensing (Eg. > 4 pharmacies within a year)
- Prescribers prescribing outside of their practice expertise
- High doses, quantities, or no diagnosis or detail

# Questions to Ask Before Making a Therapeutic Plan

- What is conventional practice for this type of patient and pain?
- Is there an equivalent alternative therapy?
- What comorbidities does the patient have that may exacerbate opioid-related side effects?
- Does the patient exhibit behaviors that would lead you to believe they manage medications responsibly?
- Is this a candidate who may need a specialist?
  - Does the patient have access to such specialists?
  - Are there behavioral components that might warrant treatment or specialist?

# Alternatives When Opioids Are Not an Option

- Corticosteroids
- Muscle relaxants
- Benzodiazepines
- Calcitonin and bisphosphonates
- Topical analgesics
- Cannabinoids
- Anticonvulsants
- Antidepressants

# Patient-Prescriber Agreements

- All patients who receive chronic pain medication must have a written patient-physician pain treatment agreement
- Informs patient of expectations for patient compliance and long-term treatment requirements
- Key elements include:
  - Informed consent
  - Written treatment plan
  - Designated primary prescriber information
  - Designated pharmacy where all prescriptions will be filled
  - Reasons to discontinue treatment (eg. Violations of agreement)

# Expectations of Prescribers



Periodic scheduled review of pain management plan



Appropriate referral to a specialist if deemed necessary (eg. may use PMDP indicates reason)



Good documentation in medical records of all discussion/assessments

# Summary

- Pharmacists and prescribers have the unique duty to ensure that medication management of pain is carefully selected to give the patient the most benefit with the least risk
- As providers, we have a responsibility to help mitigate and prevent worsening of the current opioid crisis
- A wholistic approach needs to be taken when assessing a patient and their risk of potential abuse
- There are many resources that can provide more information for practitioners as they make decisions regarding pain management in patients
- Documentation is an expectation of providers involved in pain management

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# Pain Management and Opioid Use in Older Adults

- Thank you for joining us today for this educational activity, which deals with Pain Management and Opioid Use in Older Adults. We understand that your time is valuable, and appreciate your commitment to providing age friendly care for older adults.
- We welcome your feedback in our continuing effort to improve our content. Please see the content description for further information on the course, a link to our course evaluation, and information on how to claim Continuing Education credit for this activity after the course evaluation is complete