



EDUCATIONAL RESOURCES

PALLIATIVE MEDICATION MANAGEMENT

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OBJECTIVES

- Examine medication appropriateness and rational prescribing.
- Identify medications that are appropriate for cost-effective symptom management.
- Review common classes of nonessential medications and how to safely discontinue them.
- Determine hospice drug coverage when given patient-specific information, including diagnosis codes and terminal prognosis information.

MEDICATION APPROPRIATENESS

- Few guidelines exist for determining how and when to discontinue medications.
- What is medication appropriateness?
 - Medication appropriateness provides a means to evaluate medication need.
 - Medication appropriateness refers to whether a medication is **useful** in an individual clinical situation based on both the attributes of the medication and those of its recipient.

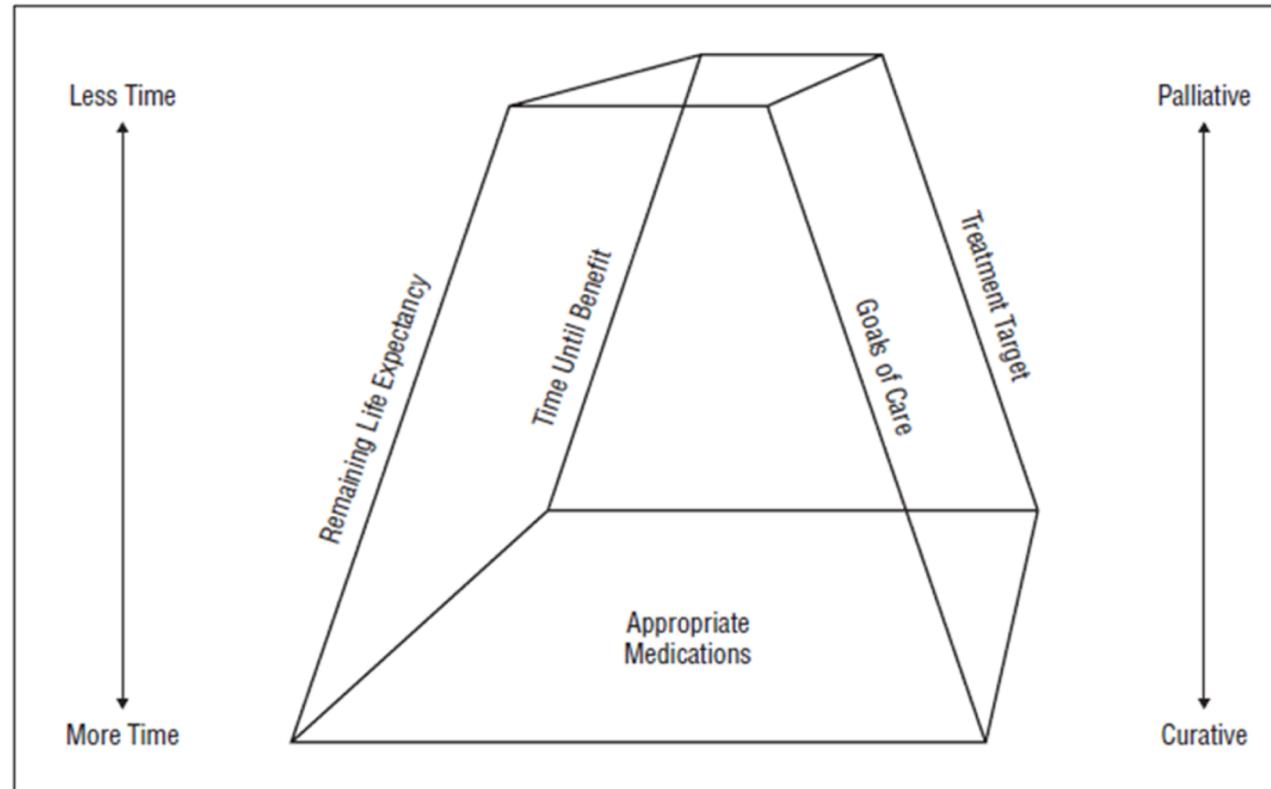


MEDICATION APPROPRIATENESS

- Important factors for determining medication appropriateness:
 - Remaining life expectancy of patient
 - Time until therapeutic benefit of medication
 - Goals of care
 - Treatment target



MEDICATION APPROPRIATENESS & RATIONAL PRESCRIBING



HOW DO YOU MEASURE UP?

- Adult patients, prognosis <12 months
 - Statin for primary cardiovascular disease prevention
 - Followed for one year with all medications recorded at least monthly
- Average medications at enrollment: 11.5
- Average medications at study termination or death: 10.7
- Most common medications prescribed near end of life: antidepressants, antihypertensives, broncholytics/bronchodilators, laxatives, and GI protective agents

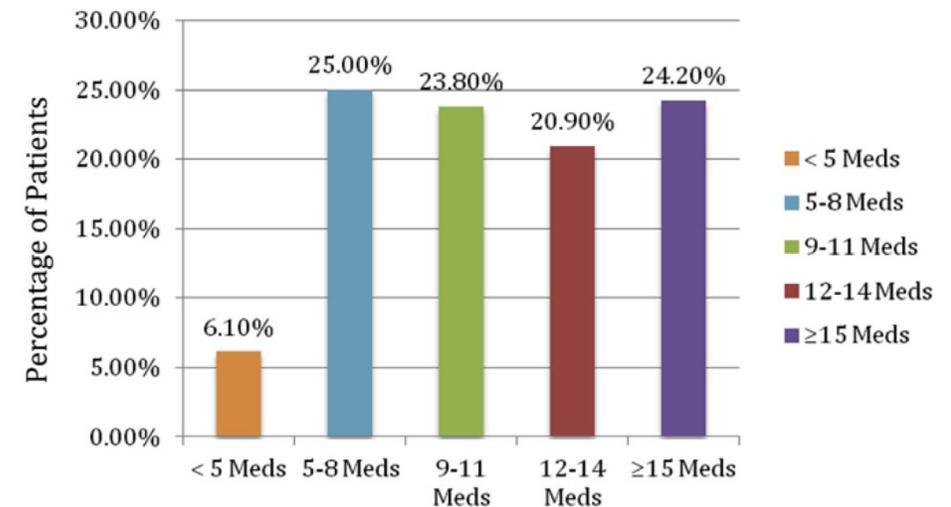


Fig. 1. Medications per patient at baseline.



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SYMPTOM MANAGEMENT

FORMULARY MANAGEMENT

- Formulary: A list of medications used by a hospice to identify preferred medications that offer the greatest value:
 - Brand and Generic medications
 - Prescription and Over-the-Counter (OTC) medications
- Closed Formulary: No open medications without authorization
- Open Formulary: No restricted medications without authorization
- Limited Formulary: Select open medications



PAIN: NOCICEPTIVE

ACETAMINOPHEN

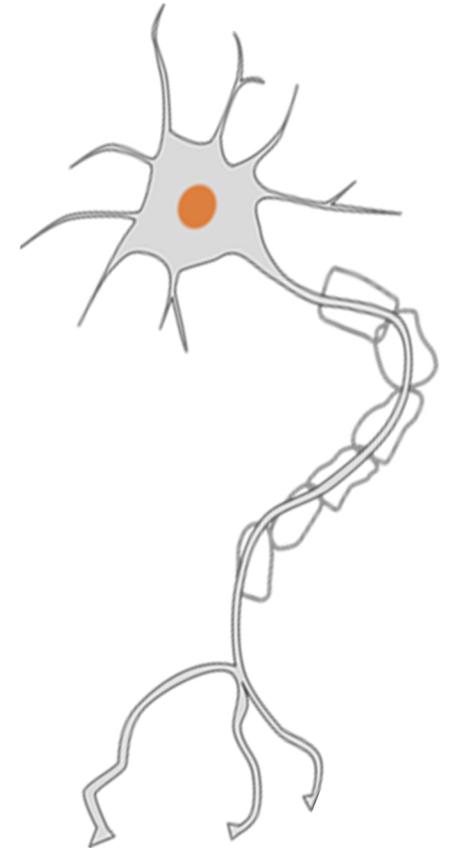
- Mild pain or fever
- Cost-effective formulations:
 - Tablets
 - Capsules
 - Suppositories
 - Oral liquids

ANTI-INFLAMMATORY AGENTS

- **NSAIDs**
 - **First line:** Ibuprofen, Naproxen
 - Alternatives: Meloxicam, Celecoxib, Diclofenac, Sulindac, Oxaprozin, Piroxicam
 - Avoid: Ketorolac, Indomethacin
- **Corticosteroids**
 - **First line:** Dexamethasone, Prednisone
 - Formulations: Oral tablets, oral elixir, oral concentrate

PAIN: NEUROPATHIC

- Anticonvulsants
 - **First line:** Gabapentin
 - Others: Pregabalin, Carbamazepine, Oxcarbazepine
- Antidepressants
 - Tricyclic Antidepressants (TCA)
 - **First Line:** Amitriptyline
 - Others: Nortriptyline, Imipramine, Doxepin
 - Serotonin-Norepinephrine Reuptake Inhibitors (SNRI)
 - **First line:** Duloxetine



MODERATE TO SEVERE PAIN: OPIOIDS

MODERATE PAIN

- Acetaminophen/Opioid Combination
 - APAP/Hydrocodone
 - APAP/Oxycodone
- Tramadol (Ultram®)
- Tapentadol (Nucynta®)
- Buprenorphine (Butrans®)

+/- Adjuvant Therapy

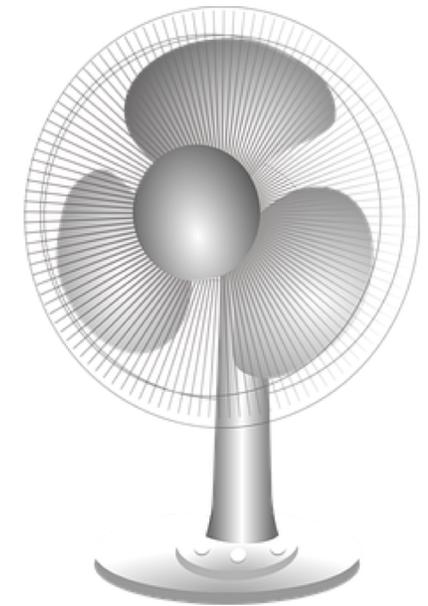
SEVERE PAIN

- Morphine (MS IR, MS Contin®, Kadian®, Avinza®)
- Hydromorphone (Dilaudid®, Exalgo®)
- Oxycodone (OxyContin®, Percodan®, Percocet®)
- Fentanyl (Duragesic®)
- Tapentadol (Nucynta ER®)
- Oxymorphone (Opana®)
- Methadone (Dolophine®)

+/- Adjuvant Therapy

DYSPNEA

- Opioids
 - Systemic
 - Morphine is most widely studied
- Benzodiazepines
 - Patient specific recommendation
 - Use caution when co-prescribing
- Other Medications Include:
 - Bronchodilators
 - Glucocorticoids
 - Underlying causes: COPD, SVC, tumor-related upper airway obstruction
 - Diuretics
 - Underlying causes: Congestive heart failure



SECRETIONS

- Education
- Non-pharmacologic interventions
 - Change position
 - Re-evaluate IV hydration
- Anticholinergics
 - Atropine 1% solution: 1-2 drops SL Q4H PRN
 - Hyoscyamine 0.125mg tablet: 1-2 tablets SL Q4H PRN
 - Scopolamine: 1.5mg transdermal patch applied topically Q72H
 - Glycopyrrolate: 1-2mg PO Q8H PRN



NAUSEA & VOMITING

Medication	Dopamine Antagonist	Histamine Antagonist	Anti-Cholinergic	Serotonin Antagonist
Haloperidol	X ^{***}			
Prochlorperazine	X ^{**}	X [*]		
Promethazine	X [*]	X ^{***}	X ^{**}	
Metoclopramide	X ^{**}			X ^{**}
Ondansetron				X ^{***}
Chlorpromazine	X ^{**}	X ^{**}	X [*]	

Receptor Affinity: * Low affinity, ** Moderate affinity to receptor, ***High affinity

AGITATION

- Non-pharmacologic interventions
- Antipsychotics
 - Haloperidol 0.5mg PO Q4H PRN
 - Atypical agents
 - Examples: Risperidone, Quetiapine



ANXIETY

- Benzodiazepines
 - Lorazepam 0.5mg PO Q4H PRN
- Selective Serotonin Reuptake Inhibitors (SSRI)
 - Citalopram 20mg PO daily
 - Sertraline 25-50mg PO daily
- Selective Norepinephrine Reuptake Inhibitors (SNRI)
 - Duloxetine 30mg PO daily
- Antipsychotics or Anticonvulsants



BOWEL REGIMENS

CONSTIPATION

- Non-pharmacologic
- Formulary medications:
 - Bulk-forming laxatives
 - Enemas
 - Osmotic laxatives
 - Stimulant laxatives
 - Stool softeners
- Alternative medications:
 - Opioid Antagonists
 - Others (Linaclotide, Lubiprostone)

DIARRHEA

- Non-pharmacologic
 - BRAT diet, rehydration, dietary modifications
- Formulary medications:
 - Anti-motility agents
 - Anti-secretory/Absorbent agents
 - Bulk-forming agents
- Alternative medications
 - Antibiotics - *C. difficile*
 - Octreotide
 - Pancrelipase



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MEDICATIONS TO RECONSIDER

NONESSENTIAL MEDICATIONS

Indications for discontinuation

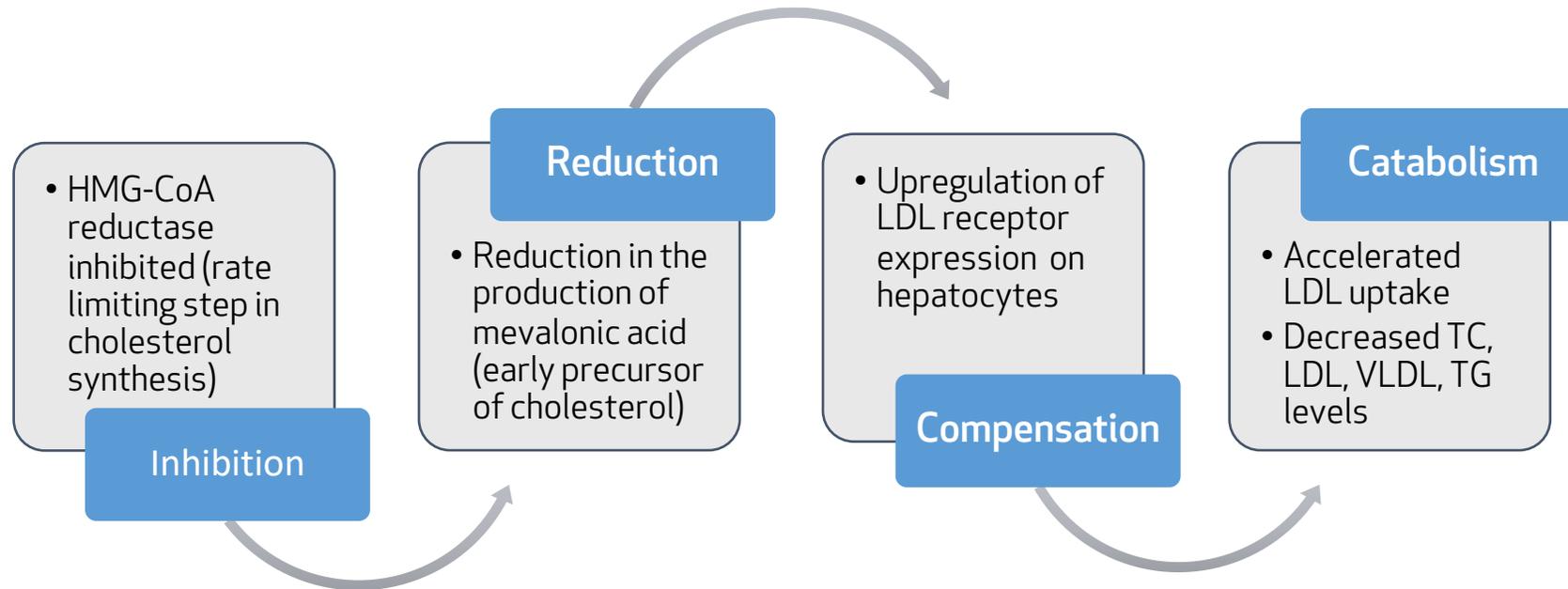
- Diminished benefit:
 - Clinical improvement
 - Stabilization
 - Lack of clinical response
- Increased risk:
 - Medication-related adverse effects
 - Drug interactions
 - Unsafe utilization
(e.g., high-risk medications for an age group)



MEDICATIONS TO RECONSIDER

Medication Classes	
Anticoagulants	Cholinesterase Inhibitors
Statins	Oral Diabetes Medications
Antiplatelets	Vitamins & Supplements
Diuretics	Antihypertensives
Bisphosphonates	Psychogenic Agents

HMG-COA REDUCTASE INHIBITORS (STATINS)



ORAL BISPHOSPHONATES

Binds to hydroxyapatite sites in bone

Inhibits osteoclast mediated bone resorption

Reduced bone turnover, increased bone mass, indirect increase in bone mineral density

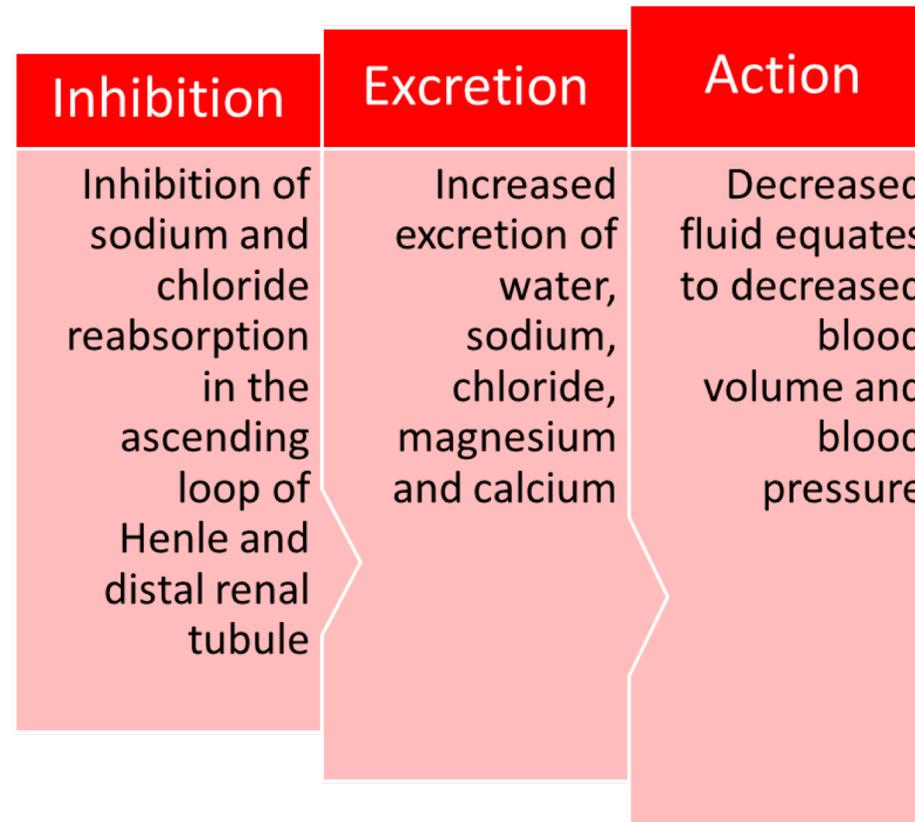
CLOPIDOGREL

Irreversible inhibition of the P2Y₁₂ receptors on platelets

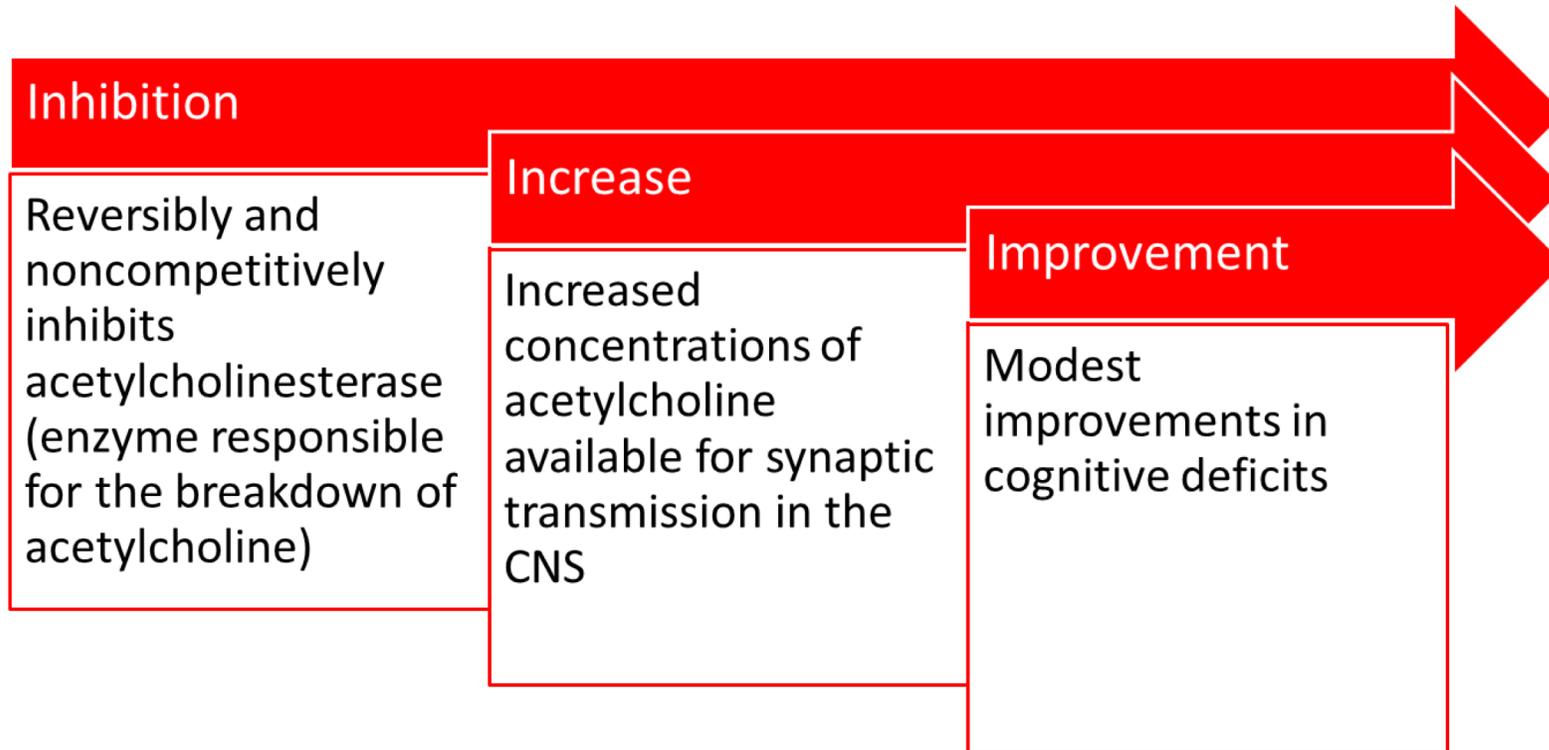
Inhibition of activation of the platelet glycoprotein complex

Inhibition of platelet aggregation for the life of the platelet (typically 7 to 10 days)

LOOP DIURETICS



DONEPEZIL



DRY POWDER INHALERS

1. Remove cap and load capsule (if single dose).
2. Breathe out slowly and completely.
3. Place mouthpiece between front lips and form seal with lips.
4. Breathe in through the mouth quickly and deeply over 2-3 seconds.
5. Remove the inhaler from mouth and hold breath for as long as possible (at least 4-10 seconds).
6. Breathe out slowly.



MEDICATION DISCONTINUATION



- Recognizing an indication for discontinuing a medication:
 - Lack of clinical benefit
 - Adverse effects
 - Clinical improvement
- Prioritize medications to be targeted for discontinuation.
- Document approval of discontinuation recommendation.
- Discontinue the medication(s) appropriately, coordinating with the patient, caregivers and other providers.
- Monitor the patient for beneficial and harmful effects of discontinuation.



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HOSPICE RELATEDNESS

Regulatory Focus

TERMINAL PROGNOSIS & MEDICATION COVERAGE

- Hospice prognosis: Prognosis of six months or less life expectancy
 - “Terminal Diagnosis”: Primary diagnosis that contributes to the limited life expectancy
 - “Related Diagnoses”: Any diagnosis that is related to the terminal diagnosis or contributes to the limited life expectancy
 - Symptoms caused by or exacerbated by the primary diagnosis

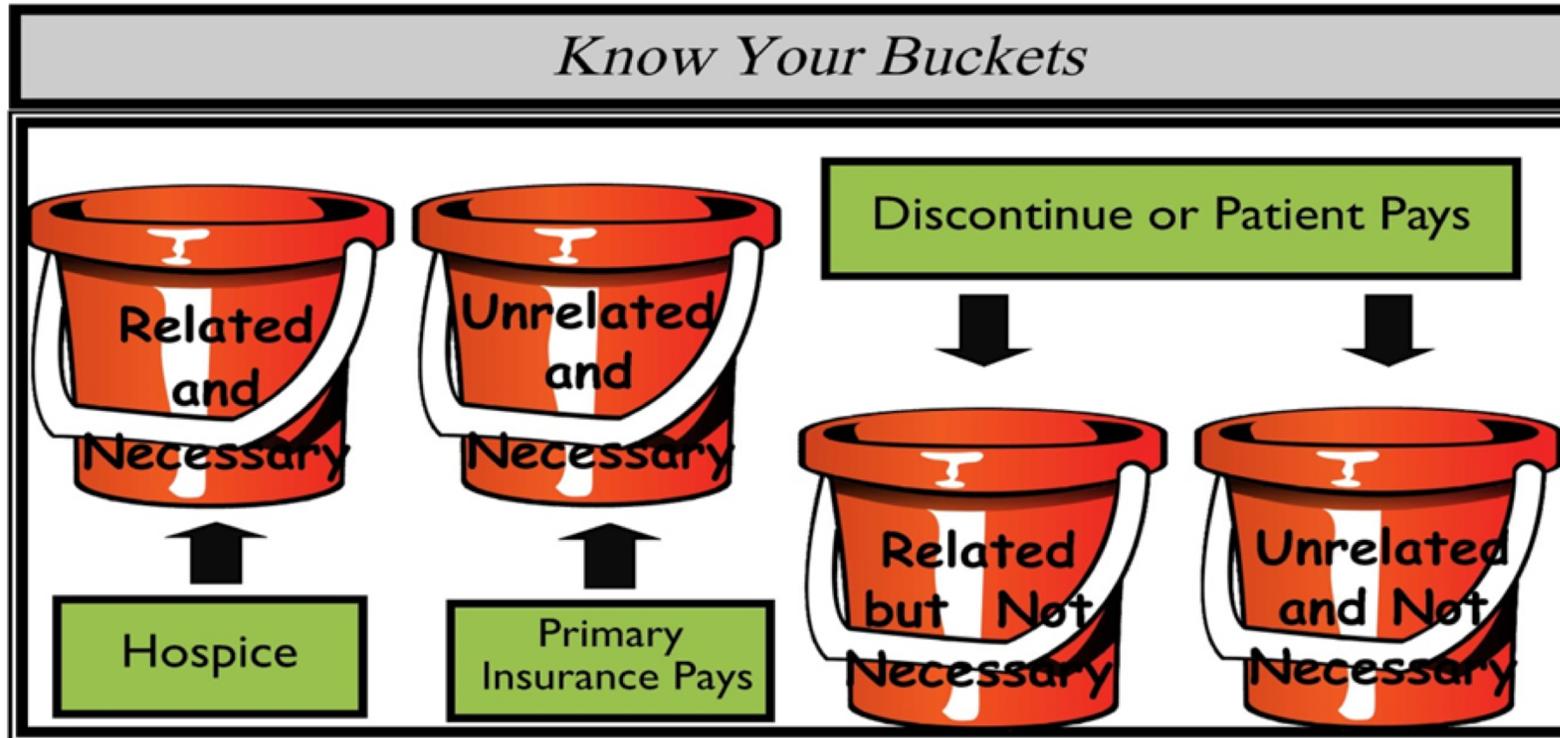


TERMINAL PROGNOSIS & MEDICATION COVERAGE

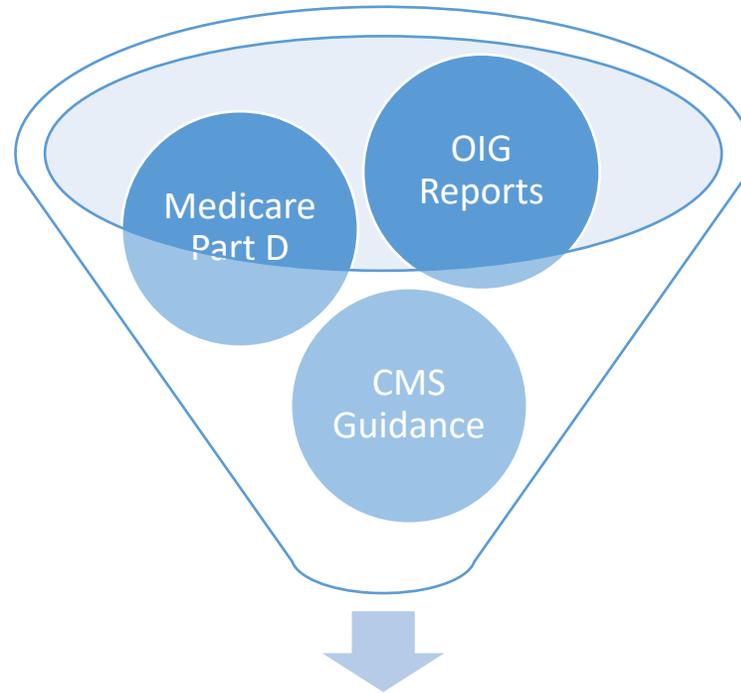
- Related Medications
 - Appropriate and clinically necessary
 - No longer appropriate or clinically necessary
- Non-Related Medications
 - Appropriate and clinically necessary
 - No longer appropriate or clinically necessary
- Who is financially responsible?
 - Hospice, Patient, Non-Hospice payor
 - Discontinued medication

Who's Paying?
Hospice
Patient
Non-Hospice Payor
Discontinued Medication

TERMINAL PROGNOSIS & MEDICATION COVERAGE



REGULATORY ISSUES



Relatedness and Coverage Concerns

REFERENCES

- Holmes HM. Rational prescribing for patients with a reduced life expectancy. *Clin Pharmacol Ther.* 2009 Jan;85(1):103-7.
- Bain KT, et al., Discontinuing medications: a novel approach for revising the prescribing stage of the medication-use process. *J Am Geriatr Soc.* 2008 Oct;56(10):1946-52.
- Last AR, et al., Pharmacologic treatment of hyperlipidemia. *Am Fam Physician.* 2011; 84(5): 551-558.
- Abernethy AP, et al., Managing comorbidities in oncology: A multisite randomized controlled trial of continuing versus discontinuing statins in the setting of life-limiting illness. *J Clin Oncol.* 32:52, 2014 (suppl; abstr LBA9514).
- Guallar E, et al., Enough is enough: stop wasting money on vitamin and mineral supplements. *Ann Intern Med.* 2013 Dec 17;159(12):850-1.
- ACCORD Study Group. Effects of intensive blood-pressure control in type 2 diabetes mellitus. *N Engl J Med.* 2010 Apr 29;362(17):1575-85.
- American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society updated Beers Criteria for potentially inappropriate medication use in older adults. *J Am Geriatr Soc.* 2012 Apr;60(4):616-31.
- McPherson, Mary Lynn. "Demystifying Opioid Conversion Calculations: A Guide for Effective Dosing." Second Ed. American Society of Health-System Pharmacists, Inc. ©2018.
- Hallenbeck, James L. "Palliative Care Perspectives." Oxford University Press. 2003.
- Medicare Program; FY2020 Hospice Wage Index and Payment Rate Update and Hospice Quality Reporting Requirements. 42 CFR Part 418 [CMS-1716-F]. Federal Register. 84 FR 38484. August 6, 2019. Final Rules.
- Baily, FA, Harman, SM. Palliative care: The last hours and days of life. In: UpToDate, Bruera, E (Section Ed), UpToDate, Waltham, MA.
- Rosenstein, DL., Park E. Challenging interactions with patients and families in palliative care. In: UpToDate. Block, SD (Section Ed), UpToDate, Waltham, MA.



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QUESTIONS?