
PREMIER
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Virtual Meeting
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OCTOBER 12 – 13, 2020

10/20/20

Reducing Medication Burden in LTC during COVID-19: A Deprescribing Guide

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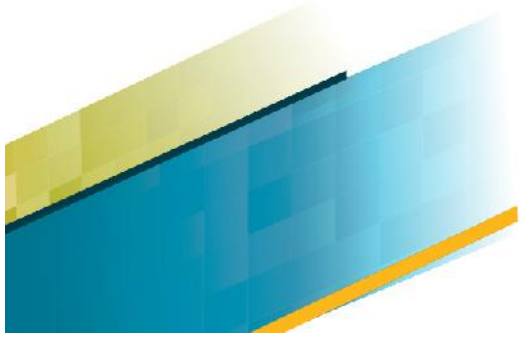

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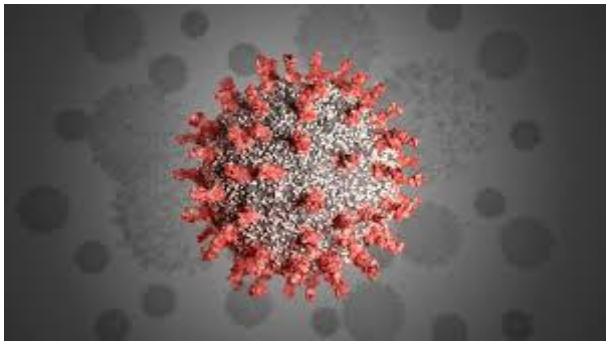
Learning Objectives

At the end of the session, the participants will be able to:

- Define *Deprescribing* and what it includes during medication regimen review.
- Describe the clinical rationale behind pausing, stopping, tapering, or streamlining targeted medications during COVID-19.
- Identify therapeutic classes of medications that need special attention for deprescribing, such as respiratory and CNS agents.
- Enumerate deprescribing strategies to decrease nursing touch points in COVID-19 patients.

COVID-19 Deadly for Nursing Homes

- Nursing home residents comprise less than 1% of the US population
- Account for more than 45% of COVID-19 deaths!



Girvan G. Roy A. https://freopp.org/the-covid-19-nursing-home-crisis-by-the-numbers-3a47433c3f70

RISK FACTORS FOR ADEs

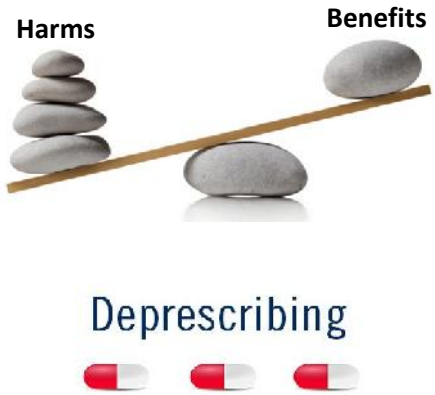
- 6 or more concurrent chronic conditions
- 12 or more doses of drugs/day
- 9 or more medications
- Prior adverse drug event
- Low body weight or low BMI
- Age 85 or older
- Estimated CrCl < 50 mL/min

Deprescribing Definition

"Systematic process of identifying and **discontinuing drugs** in instances in which existing or potential harms outweigh existing or potential benefits."

Consider:

- **patient's care goals**
- **Current level of functioning**
- **life expectancy**
- **Values and preferences**



JAMA Intern Med. 2015;175(5):827-834

When To Consider Deprescribing?

- **Course Complete**
  - No indication
  - Resolution of problem
- **Not Safe!**
  - Prescribing cascade
  - Beers Criteria meds/high risk/PIMs
  - START/STOPP UK criteria
- **Not Effective**
  - Persistent symptoms
  - Unknown benefit
  - Prevention Meds: **TTB?**
- **Not Aligned with Goals**
  - Palliative care
  - End of life care
  - Extreme frailty
  - Personal preferences

PIMs: potentially inappropriate medications
TTB: Time to Benefit

BMJ 2016;353:i2893 doi: 10.1136/bmj.i2893

Question #1

In which scenario should a preventive medication be deprescribed?

A. Life expectancy is less than the medication time to benefit (TTB)
B. Life expectancy is equal to the medication time to benefit and the patient would prefer to continue the medication
C. Time to benefit occurs sooner than time to harm
D. Life expectancy is greater than the medication time to benefit

Life Expectancy (LE) > Time to Benefit (TTB) < Time to Harm (TTH)

If Life Expectancy < Time to Benefit

- Medication NOT recommended
- Possible risks of medication without benefit

If Life Expectancy = Time to Benefit

- Defer to patient's values and preferences

If Life Expectancy > Time to Benefit

- Medication may help and generally continued

Drugs Aging 2013; 30 (9): 655-666
JAMA. 2013; 310(24): 2609–2610.

Rationale Driving Deprescribing

- Decreasing medication burden for palliative care/end of life:
  - When **TTB** is discordant with comfort care
    - Aspirin
    - Statins
    - Bisphosphonates
    - cholinesterase inhibitors

TTB is a concept applied to preventive interventions with delayed benefits and immediate risks.

Possible Benefits of Deprescribing in COVID-19 Crisis

Simplifying Medication Regimens

- Decrease nursing "touch points"
  - Reduce infection risk and use of Personal Protection Equipment (PPE) for healthcare workers
- Minimize laboratory tests/blood draws
- Decrease routine medication monitoring
- Consolidate Med-pass
- Reduce medication errors?

General Barriers to Stopping Medications

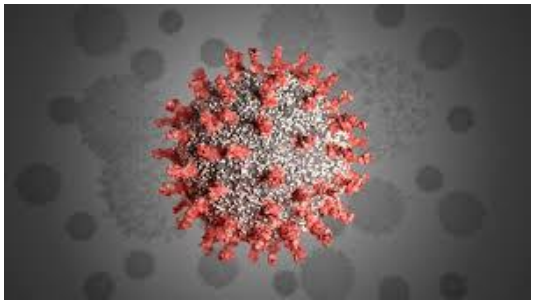
Gnjidic D, et al. Clin Geriatr Med 2012;28:237-253.

Sloane and Zimmerman: JAMDA 2018

- Don't want to stop meds started by someone else
- Perception of inadequate care
- Provider-patient relationship
- Perception of "giving up"
- Concern about adverse withdrawal events

Barriers to Deprescribing in COVID-19?

- Deprescribing is a complex task
  - Challenges when done remotely
- Many moving parts for clear messaging across disciplines
  - Changes require joint (IDT) decision making
- Requires careful assessment and follow-up
  - Taper orders may be cumbersome to follow
  - May need more vigilance and supervision



Phizackerley D. Deprescribing in the time of covid-19 *Drug and Therapeutics Bulletin* 2020;**58:**82.

ASCP COVID-19 FIELD GUIDE DEVELOPMENT TEAM

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About ASCP
Empowering Pharmacists. Transforming Aging. ASCP is a membership association that represents pharmacy professionals and students serving the unique medication needs of older adults. ASCP is an international organization with members located in all 50 states, Puerto Rico, and 12 countries. The society's mission is to promote healthy aging by empowering pharmacists with education, resources, and innovative opportunities.

More information on the COVID-19 Emergency can be found at www.ascp.com/disaster

ASCP Field Guide Rough Objectives

When the medication is being:

- *tolerated well*
- *is considered essential*
- *has not raised any safety issues*

Then it may be continued, if necessary
Use clinical judgement
Only a guide!

ASCP Field Guide Considerations

- Strongly consider avoiding combinations of medications that are CNS depressants (e.g. sedative-hypnotics, opioids, gabapentin, pregabalin)
- CNS medications require reducing dose to gradually deprescribe when no clear indication exists
- Evaluating and deprescribing CNS depressants in general, may reduce the risk of pneumonia in COVID-19 residents (weak evidence)

U.S. Food and Drug Administration
Protecting and Promoting *Your* Health

Drug Safety Communications

FDA warns about serious breathing problems with seizure and nerve pain medicines gabapentin (Neurontin, Gralise, Horizant) and pregabalin (Lyrica, Lyrica CR)

When used with CNS depressants or in patients with lung problems

12-19-2019

"Reports of gabapentinoid abuse alone, and with opioids, have emerged and there are serious consequences of this co-use, including respiratory depression and increased risk of opioid overdose death. FDA 12/19/2019

ASCP Field Guide
Respiratory Agents

Transition	Discontinue	**Continue**
Transition scheduled short acting respiratory agents (i.e. albuterol/ipratropium) to long acting agents	Discontinue, or change to PRN, scheduled short acting agents if on scheduled long-acting agents	Continue inhaled (or oral) corticosteroids in COPD • Not first line for COPD • Was controversial in beginning • Now dexamethasone approved for treatment in COVID-19*

* Approved as agent for COVID 19 patients

ASCP Field Guide Respiratory Agents

- GOLD Guidance:
- COPD patients should maintain their regular therapy

https://goldcopd.org/gold-covid-19-guidance/

GLOBAL INITIATIVE FOR CHRONIC OBSTRUCTIVE LUNG DISEASE

- Consider:
  - Changing to hand-held inhaler in highly suspect or COVID + patients only
  - Add holding chamber or spacer when applicable
  - Assess ability to administer or use the device properly
    - Older, cognitively impaired, frail

Current CDC Stance on Use of Aerosol-Generating Procedures (AGP) in COVID

Based on limited available data, it is uncertain whether aerosols generated from some procedures may be infectious, such as:

-nebulizer administration

-high flow O2 delivery

Aerosols generated by nebulizers are derived from medication in the nebulizer, not from contents of the patient's airways.

Current UK guidance on infection prevention for COVID-19 does not list nebulizers as a potential transmission risk, due to the fact that the aerosol generated by the device is derived from the medication fluid within the nebulizer chamber and not the patient.

https://www.health.state.mn.us/diseases/coronavirus/hcp/aerosol.pdf

https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control

Minnesota Department of Health Guidance

AGPs In suspected or confirmed COVID-19

- If patient can tolerate, switch to metered-dose inhalers with a dedicated spacer
  - HCWs should wear a facemask (as well as eye protection, gloves and a gown) during treatment if a respirator is unavailable
  - Close patient's door when providing nebulizer treatment
  - Upon set-up of nebulizer, have HCWs maintain a safe distance (6 feet or greater), possibly outside the door

https://www.health.state.mn.us/diseases/coronavirus/hcp/aerosol.pdf

Nuances in Nebulization

- COVID-19 is transmitted primarily by aerosolized respiratory droplets
- Some AGPs may increase risk of exposure, although risk in use of nebulizers is uncertain
- Nebulizers are preferred in older COPD patients with physical and cognitive impairments
- Decision to use should be made by weighing individual patient needs and exposure risk

ASCP Field Guide
Dietary Supplements

Continue	Continue only OTC vitamins/minerals used to treat an active acute deficiency diagnosis (Vitamin D, vitamin B12, iron deficiency anemia)
Discontinue	Discontinue all other non-essential herbals/supplements
Decrease	If OTC vitamins indicated, decrease to minimum effective dosing frequency
Discontinue	Discontinue medications for appetite stimulation

ASCP Field Guide
Cardiovascular Medications

Reconsider	Reconsider statins (age 76 and older) and/or aspirin (age 70 and older) for primary prevention
Re-evaluate	Re-evaluate clopidogrel and NOAC/warfarin duration of therapy and indication
Reassess	Reassess aspirin concurrently with blood thinners
Evaluate	Evaluate antihypertensive polypharmacy •consolidate agents where possible

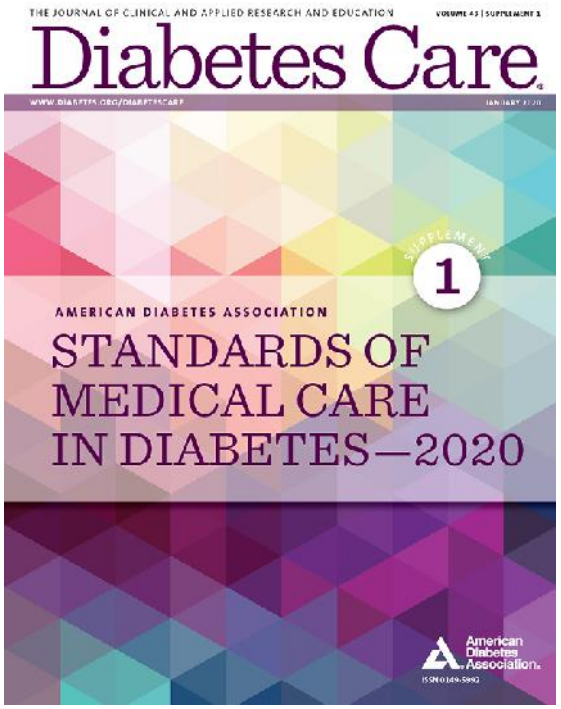
ASCP Field Guide Gastrointestinal Medications

- PPI and H2 receptor antagonists:
  - appropriate indication?
  - No, then decrease dosing frequency, and/or dose to promote use of lowest effective dose
  - **PPIs and increased COVID-19 risk?***
- Discontinue docusate and unused PRN antacids
- Simplify bowel regimens (i.e. changing polyethylene glycol 3350 and psyllium fiber to Senna to reduce time spent in room)

*https://www.mdedge.com/gihepnews/article/225571/upper-gi-tract/proton-pump-inhibitors-tied-covid-19-risk
https://gut.bmj.com/content/early/2020/07/30/gutjnl-2020-322248

ASCP Field Guide
Diabetes Medications

- Eliminate sliding scale insulin orders!!
- Ensure A1C goals align with goals of therapy
- If getting long-acting insulin twice daily, consolidate to once daily administration
- Discontinue bedtime sliding scale insulin and snacks
- Optimize oral hypoglycemics to de-intensify insulin regimen
- Loosen glycemic control; target higher HbA1c goals



Management of Diabetes in Long-Term Care and Skilled Nursing Facilities: A Position Statement of the American Diabetes Association

- Emphasis on avoidance of hypoglycemia
- Avoid prolonged use of sliding scale insulin
- Aim for optimal control for community-dwelling SNF patients undergoing rehabilitation (avoid relying on A1C, BG target 100-200 mg/dL)
- For patients residing in LTC, focus on QOL (A1C<8.5%, and fasting BG 100-200 mg/dL)
- For patients at end of life,
  - avoid symptomatic hyperglycemia
  - no role of A1C

Diabetes Care 2016 Feb; 39(2): 308-318. https://doi.org/10.2337/dc15-2512

Question #2

Which of the following medications should be assessed for discontinuation in a 78 year old COVID-19 patient?

A. NSAID for osteoarthritis pain management
B. Losartan for hypertension
C. Warfarin for stroke prevention in atrial fibrillation
D. Simvastatin for primary prevention of CVD

ASCP Field Guide Analgesics

- When NSAID is used for pain management, it may be continued as there is no current evidence to support discontinuation related to COVID-19 status.
- Scheduled doses of acetaminophen are first line for nonopioid pain management

https://www.who.int/news-room/commentaries/detail/the-use-of-non-steroidal-anti-inflammatory-drugs-(nsaids)-in-patients-with-covid-19
https://www.fda.gov/drugs/drug-safety-and-availability/fda-advises-patients-use-non-steroidal-anti-inflammatory-drugs-nsaids-covid-19

ASCP Field Guide
Allergy Medications

1

Evaluate continued need of nasal corticosteroids

2

Consider second generation antihistamine alternatives

3

Suggest converting scheduled antihistamines to PRN

ASCP Field Guide
Antibiotics: Stewardship Crucial!

Discontinue	Discontinue unnecessary prophylactic antibiotics
Transition	Transition IV to PO as soon as clinically appropriate
Ensure	Ensure ordered shortest effective duration for indication

Clinical Infectious Diseases, ciaa1239, https://doi.org/10.1093/cid/ciaa1239

ASCP Field Guide
Anticholinergic Burden: Always a Target

- Reduce anticholinergic burden
  - reduce fall risk
  - possibly decrease risk of pneumonia?
  - Maintain cognition
    - first- generation antihistamines
    - muscarinic receptor blockers for overactive bladder
    - paroxetine as SSRI

ASCP Field Guide
Topical Preparations

Evaluate and discontinue	Evaluate and discontinue topicals/treatments when duration of therapy is complete
Evaluate and discontinue	Evaluate and discontinue eye drops/artificial tears
Change	Change eye drops to manage symptoms (i.e. artificial tears) to PRN Simplify glaucoma regimens

ASCP Field Guide
Routine Medication Monitoring and Labs

- Identify any labs that can be discontinued, held or made less frequent
- Consolidate lab orders on one day to decrease frequency of blood draws
- Order therapeutic drug levels only when indicated (i.e. suspect toxicity)
- Extend INR interval for warfarin dosing as clinically appropriate
- Decrease vital sign monitoring to 1-2x per week, or less frequently, if resident stable
- Evaluate BP goals of therapy and avoid tight control if not indicated

ASCP Field Guide
Consolidating and Streamlining Nursing Med-Pass

Streamline	Streamline medication administration times
Switch	switch to equivalent once daily dosing of agents within same therapeutic class
Ensure	Ensure that narrow therapeutic index (NTI) medications continue to be evaluated, especially antiseizure medications (ASM)
Reduce	Reduce dose or frequency of renally-eliminated medications based on renal function
Administer	Administer crushed oral medications together if appropriate

COVID-19 & antiepileptic drugs: Should we pay attention?. *Seizure*. 2020;80:240-241. doi:10.1016/j.seizure.2020.07.005
The Liverpool Drug Interaction Group https://www.covid19-druginteractions.org

ASCP Field Guide
Consolidating and Streamlining Nursing Med-Pass

- Consider switching thyroid supplement from early morning to bedtime if it is their only early morning medication
- Consider switching therapies targeting specific symptoms from scheduled to PRN
- Discontinuing unused and unneeded PRNs
- Ensure appropriate stop dates are in place (i.e. anticoagulants, antibiotics, PPIs, probiotics, PRN psychotropics)
- Adding a hold order during COVID-19, but not have a finite discontinuation

ASCP Field Guide
A Deeper Dive into Deprescribing

- Consider conversion of warfarin to direct oral anticoagulants (DOACs)*
  - Considerations may include renal dosing and history of mechanical prosthetic valves or moderate-severe mitral stenosis
  - Emerging evidence on risks and benefits for COVID patients
- Assess for prescribing cascade:
  - diuretic to treat edema caused by calcium channel blockers**
  - antihypertensives to treat hypertension caused by NSAIDs
  - overactive bladder medications to treat incontinence from cholinesterase inhibitors

**JAMA Intern Med. 2020 Feb 24;e197087.doi10.1001/jamainternmed.2019.7087.

**New Data on Benefit, Risk for Anticoagulation in COVID-19 - Medscape - Aug 31, 2020*

Possible Therapeutic Classes For Scrutiny: Medication Burden

- Benzodiazepines
- Antipsychotics
- Anticholinergics (Table 7, Beers Update 2019)
- Daily NSAIDs
- Opioids
- Bisphosphonates
- Antibiotics

ASCP Field Guide
Hospice and Palliative Care Considerations

Consider	Consider time to benefit (TTB) in residents with limited life expectancy
Discontinue	Discontinue all non-essential medications (cholinesterase inhibitors, memantine, statins, bisphosphonates)
Continue	Continue only those used for symptom management/quality of life

Select Online Resources

- Field Guide to Reduce Medication Burden During COVID-19
  - https://cdn.ymaws.com/www.ascp.com/resource/resmgr/docs/disaster/field_guide_to_reduce_medica.pdf
- Lamy Center Guide
  - https://www.pharmacy.umaryland.edu/centers/lamy/optimizing-medication-management-during-covid19-pandemic/
- Canadian Deprescribing Network
  - https://www.deprescribingnetwork.ca

Deprescribing rainbow

A rainbow…..symbolizes that deprescribing should be recognized as a **positive intervention** aimed at **improving outcomes** important to the patient, and that the relationship between these factors is fluent and may change over time.

BMC Geriatrics 2018;18:295.

Thank You!