Interprofessional Collaborative Efforts to Deprescribing Medications in LTC

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Disclosures

Dr. Brandt	**Research Support:**	**HRSA GWEP, NIA, PCORI, IMPAQ**
	Consultant:	**IHI, NCQA GMAP, HANYS, Penn State School of Nursing, AGS, ASCP**
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	Consultant:	**NIA, Sanford Health**

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Objectives

1. Describe the 4Ms framework specifically related to "What matters" relating to medication burden and management
2. Identify at least 2 approaches to interprofessional deprescribing in LTC
3. Identify opportunities to improve communication and person-centered outcomes surrounding deprescribing

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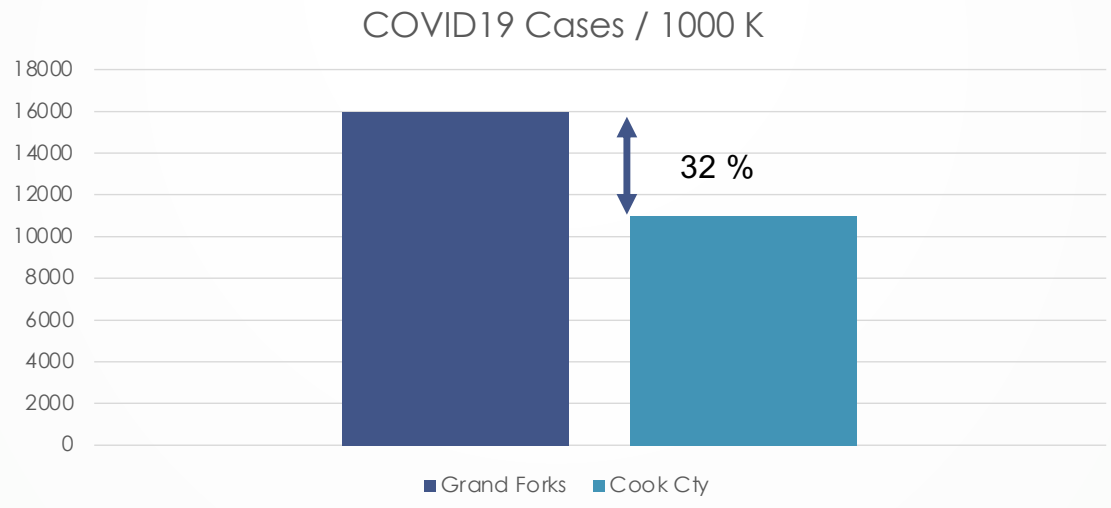
COVID-19 UPDATE: geographic differences



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Framing the Issue and Opportunities

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Too many medications per Nursing Home resident

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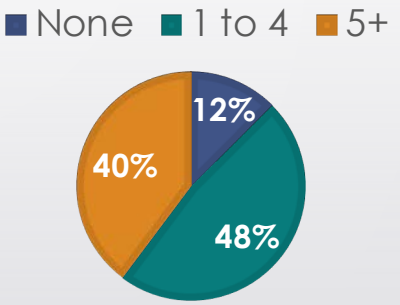
Medication Use Among Older Adults

- Polypharmacy rising
- 4.2 billion prescriptions filled in the U.S. in 2018
- Patients discharged from hospital to SNF with average of 14 medications

PRESCRIPTION DRUG USE IN PAST 30 DAYS AMONG 65+ ADULTS: 2015-2016



Steinman, M. A. (2016). *JAMA Intern Med.* 176: 482-483; Qato, D.M. (2016). *JAMA Intern Med*., 176:473-82.;

Saraf A.A. (2016). *J Hosp Med.* 11:694; CDC (2018). Prescription drug use in past 30 days. Retrieved from: https://www.cdc.gov/nchs/data/hus/2018/fig14.pdf

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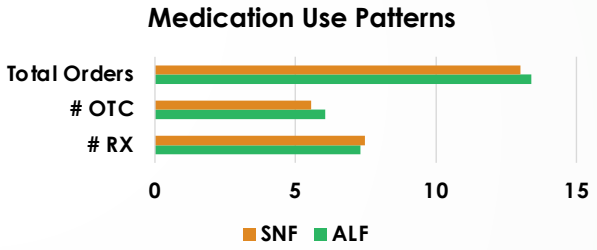
Medication Use in LTC: Evidence to Date

- Increasing rates of medication use despite risk for medication adverse drug events and frailty[1]
- High utilization of medications among dementia patients in the last 2 weeks of life.[2]



[1] Sloane PD, Brandt NJ, Cherubini A et al. (2021) Medications in Post-Acute and Long-Term Care: Challenges and Controversies. JAMDA.

[2] Denholm, R., Morris, R., & Payne, R. (2019). Polypharmacy patterns in the last year of life in patients with dementia. *European Journal of Clinical Pharmacology.*

[3] Dharmarajan, T. S., Choi, H., Hossain, N., Munasinghe, U., Lakhi, F., Lourdusamy, D., Onuoha, S., Murakonda, P., Skokowska-Lebelt, A., Kanagala, M., & Russell, R. O. (2020). Deprescribing as a Clinical Improvement Focus. *JAMDA.*

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Prescription cascade

- Multiple prescribers
- Hospitalization carry over
- Treating drug–induced symptoms
- Persistent prevention medications

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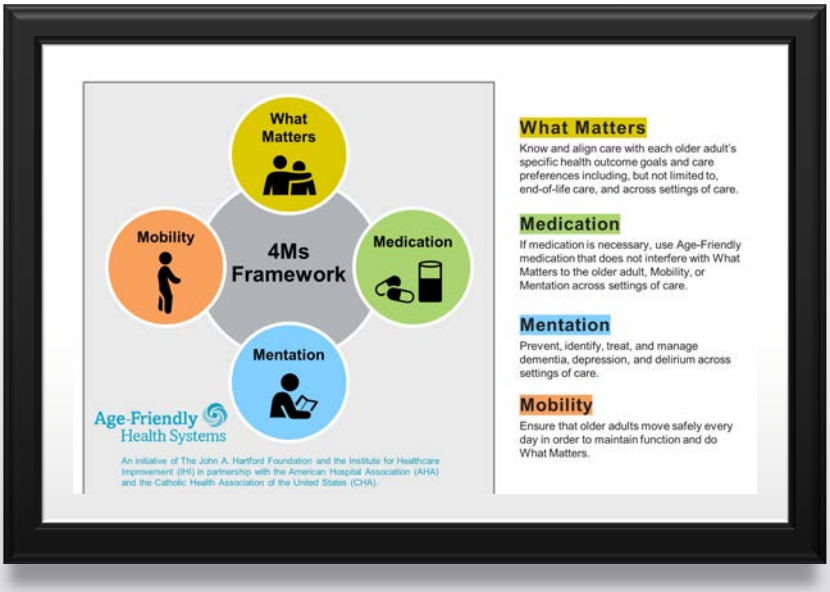
4Ms Framework of an Age-Friendly Health System

The 4Ms are a framework, not a program, to guide all care of older adults.



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Approaches to Deprescribing

Address barriers

Patient–centered

Deprescription Tools

Health Systems approach and QI

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Barriers to Deprescribing

- Patient / family fear or reluctance
- Primary care provider deferral to specialists
- Lack of knowledge about late life efficacy of medications
- Under use of non – pharmacological interventions
- Addiction and dependency

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Deprescribing Process

- Comprehensive patient history
- Identify potentially inappropriate medications (e.g., Beers List)
- Determine whether medication can be discontinued or reduced
- Plan and initiate medication withdrawal
- Monitor, support, and document (e.g., Neuropsych Inventory Scale to monitor behavior changes)

Reeve, E., et al. Review of deprescribing processes and development of an evidence-based, patient-centred deprescribing process. Br J Clin Pharmacol. 2014; 78: 738–747

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DRUGS: Deprescribing Pneumonic

1) **D**iscuss goals of care
2) **R**eview medications
3) **U**se tools and frameworks
4) **G**eriatric medicine approach (functional)
5) **S**top inappropriate medications

- Rochon, PA et al. Polypharmacy, Inappropriate Prescribing, and Deprescribing in Older People: Through a Sex and Gender Lens. Lancet Healthy Longev. 2021 May; 2(5) e290-300. DOI: https://doi.org/10.1016/S2666-7568(21)00054-4

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Implementing Medication Optimization Programs

Determine

Determine your champion(s) and team

Identify

Identify the medication classes or medications that you want to focus on

- e.g., High risk medications or your own data

Employ

Employ existing tools and investigate utility/workflow.

-e.g., EHR based tools and resources

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Quality Improvement Programs

Academia, community, and government collaboration

Two demonstration projects from Maryland and Indiana

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Maryland: Implementation Guide for Post-Acute and Long-Term Care

- Task force convened by the Peter Lamy Center on Drug Therapy and Aging at the University of Maryland School of Pharmacy with Assistance from the US Deprescribing Research Network
- To improve resident-centered health and well-being by:
  - Reducing use of unnecessary medications
  - Simplifying medication management
  - Reducing opportunities for transmission of COVID-19

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Recommendations

- Discontinue vitamins, herbals
- Change meds from 2x/day to once-daily formulations
  - Metoprolol, metformin
- Consolidate bedtime meds with morning meds
  - Statins, urinary alpha-blockers
- Reduce unnecessary monitoring
  - Blood glucose
- Convert nebs to hand-held inhalers

Optimizing Medication Management during the COVID-19 Pandemic
Post-Acute and Long-term Care Facility Checklist

DONE POTENTIAL CHANGE

Discontinue medications

Medications that are often unnecessary, provide no to minimal clinical benefit, e.g.,
- Iron, vitamins including multivitamins, Vitamins A, B1, B3 (Niacin), B6 (Pyridoxine), E, Biotin, Coenzyme Q10
- Herbal medications: e.g., Ginkgo Biloba, Ginseng, Valerian Root, Echinacea, Red Yeast Rice, Garlic, Saw Palmetto, Flaxseed
- Others: Docusate, cranberry tablets, glucosamine, low-dose fish oil, probiotics, appetite stimulants

Medications often discordant with goals of care and potential time to benefit, e.g.,
- Long-term preventive medications (e.g., aspirin, statins) in residents with comfort-oriented care goals or limited life expectancy

Medications appropriate in many residents but safe to temporarily discontinue, e.g.,
- Calcium, magnesium, bisphosphonates, Vitamin B12, Vitamin D

Reduce frequency of medication-associated monitoring
- Reduce frequency of monitoring (e.g. heart rate, finger sticks) to track drug effects especially if resident is stable and prior monitoring values/parameters stable. If appropriate, discontinue medications that require frequent monitoring.

Reduce medication dosing frequency
- Change from short- to long-acting formulations, e.g., metformin, metoprolol, carvedilol, diltiazem, others
- Change analgesic regimens to allow greater spacing between doses, consolidate laxatives
- Switch from short- to long-acting insulins, reduce PPIs from twice daily to daily or discontinue

Change timing of doses
- Move statins (e.g., atorvastatin), alpha blockers (e.g. tamsulosin), levothyroxine to consolidated dosing times

Administer medications differently
- Change medications that require crushing to liquid formulation if possible; consider liquid/powder potassium

Consolidate administration times
- Consolidate dispensing times - e.g., q12 hours to BID, eliminate outlier medication administration times
- Liberalize allowable time period to administer meds

Reduce risks of COVID-19 transmission
- Use hand-held inhalers (with spacer if possible) instead of nebulizers; consider product(s) availability and usability
- Where appropriate, change acetaminophen from regular to as-needed dosing to aid in COVID-19 fever surveillance
- Where possible, avoid directly touching residents when passing meds
- Reduce unnecessarily frequent monitoring; identify alternatives for meds that require frequent administration

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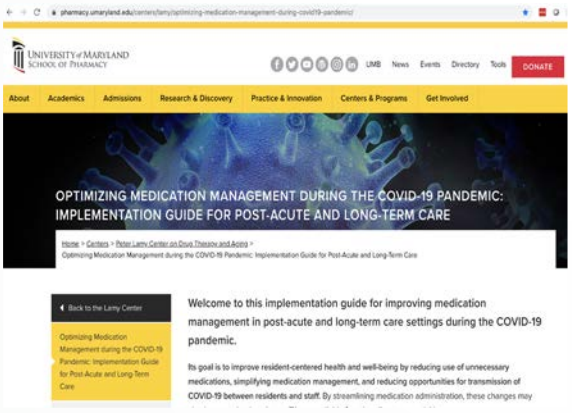
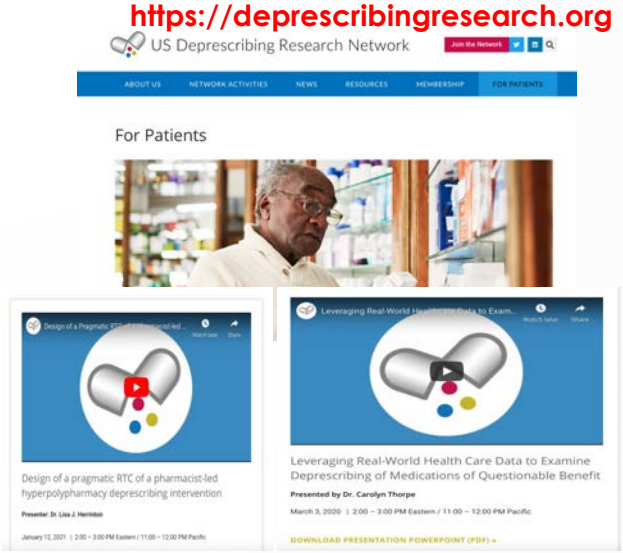
Power of Partnerships



https://www.pharmacy.umaryland.edu/PALTC-COVID19-MedOpt

https://deprescribingresearch.org



Funded by NIA R24 AG064025-1

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Indiana: SMART campaign

- Indiana State Department of Health pilot program
- Safer Medication Regimens and Treatment
- Goals
  - Reduce number of medications / resident
  - Reduce anti-psychotics, anxiolytics and hypnotics
  - Reduce Rx costs

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SMART is also the acronym for QAPI improvement projects

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SMART campaign

- Coalition of academia, nursing homes, State DOH, & professional organizations
  - Physician → physician collaborations
    - Interprofessional teams
      - QI - based

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Communication and Tools

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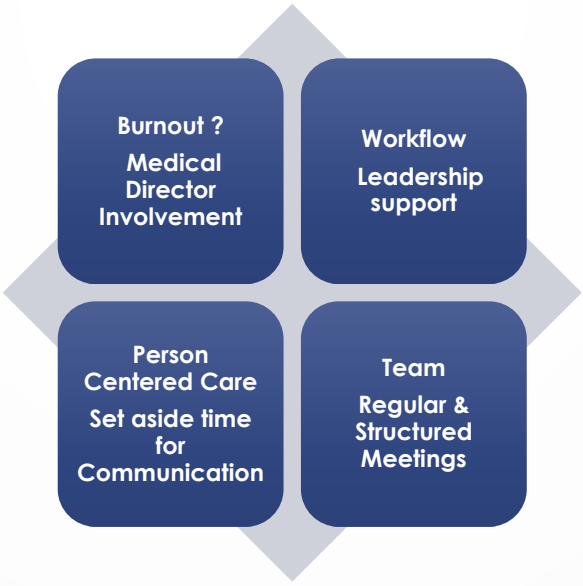
Key issues in implementation- Interdisciplinary Team



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Attention to potential harm and communication

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Medication Conversation Strategies to Deprescribing

- **Introduce deprescribing**
  - Frame deprescribing as positive, routine part of care
  - "Our bodies change over time. Certain medicines may cause new side effects"
  - "Reducing your medicines may help you feel better"
- **Link to current health problems**
  - "You're having [symptom], which may be worsened by [medication]"
- **Establish partnership**
  - "Let's work together on minimizing your medications"

Credit: Dr. Ariel Green, Johns Hopkins University

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Medication Conversation Strategies to Deprescribing

- **Introduce prescribing cascades**
  - "If we stop this medicine, you may no longer need that medicine"
- **Emphasize that you will not withdraw appropriate care**
  - "I want to treat your symptoms but we need to do so without causing you other problems"
- **Reassure that you will monitor closely for symptom recurrence**
  - "We'll reduce the medicine very slowly and will stay in close contact to watch for returning symptoms"

Credit: Dr. Ariel Green, Johns Hopkins University

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Patient Story

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Patient Story

72M evaluated by Geriatric team.

- Hospitalize 2 months ago with urinary tract infection and developed delirium
- Discharged to a skilled nursing facility (SNF) for rehab.
- Both adult children moved closer to support his own home living with his wife.

PMH: Chronic pain, hypertension, anxiety, depression, dyslipidemia

SH: Born in Vietnam; Lives with his wife in their own home. Son (pharmacist) and daughter (teacher). He fought in the Vietnam War and primarily speaks Vietnamese. Denies alcohol or illicit substance use. Smoked but quit 5 years ago.

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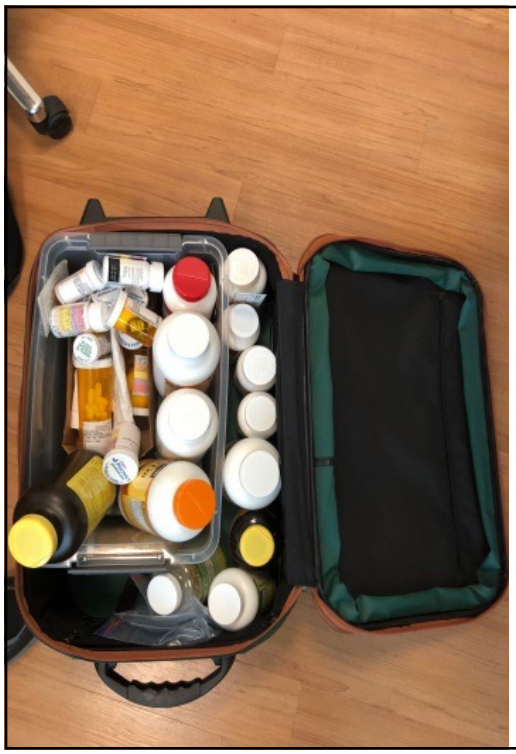

Medication History

- **Medication taking behaviors**: did not take meds until son started setting up and family reminds. Still is missing doses but less often. Does NOT like to take meds.
- **Medication List**
  - Acetaminophen 500mg 1 tablet threes times daily for chronic pain
  - Gabapentin 300mg in the evening for pain
  - Amlodipine 2.5mg 1 tablet daily for blood pressure
  - Losartan 100mg daily for blood pressure
  - Metoprolol succinate 100mg daily for blood pressure
  - Atorvastatin 40mg 1 tablet daily for cholesterol
  - Vascepa 1gm twice daily with meals for cholesterol
  - Escitalopram 20mg daily for depression/anxiety
  - Lorazepam 0.5mg at bedtime for anxiety
  - Quetiapine 25mg in the morning and 50mg at bedtime for irritability
  - Tamsulosin 0.4mg 1 capsule daily for BPH
  - Centrum Silver tablets for health.
  - Previously on tramadol and oxycodone per son but recently discontinued

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Audience Response Question

What medication would you recommend deprescribing?

A) Lorazepam
B) Amlodipine
C) Atorvastatin
D) Quetiapine

CHAT IN YOUR RATIONALE

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Audience Response Question

What medication would you recommend deprescribing?

A) Lorazepam
B) Amlodipine
C) Atorvastatin
D) Quetiapine

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Case Study 2

APEX Rehabilitation Center conducted a PDSA cycle for QAPI on resident safety.

Their Root Cause Analysis for unsafe medications in the facility revealed that 18.7% of their residents were prescribed anti – psychotics relative to the national average of 13%.

The QAPI team launched a PIP to deprescribe antipsychotics

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Safety PIP: reduce antipsychotic use among residents

What additional information is needed in the root cause analysis ?

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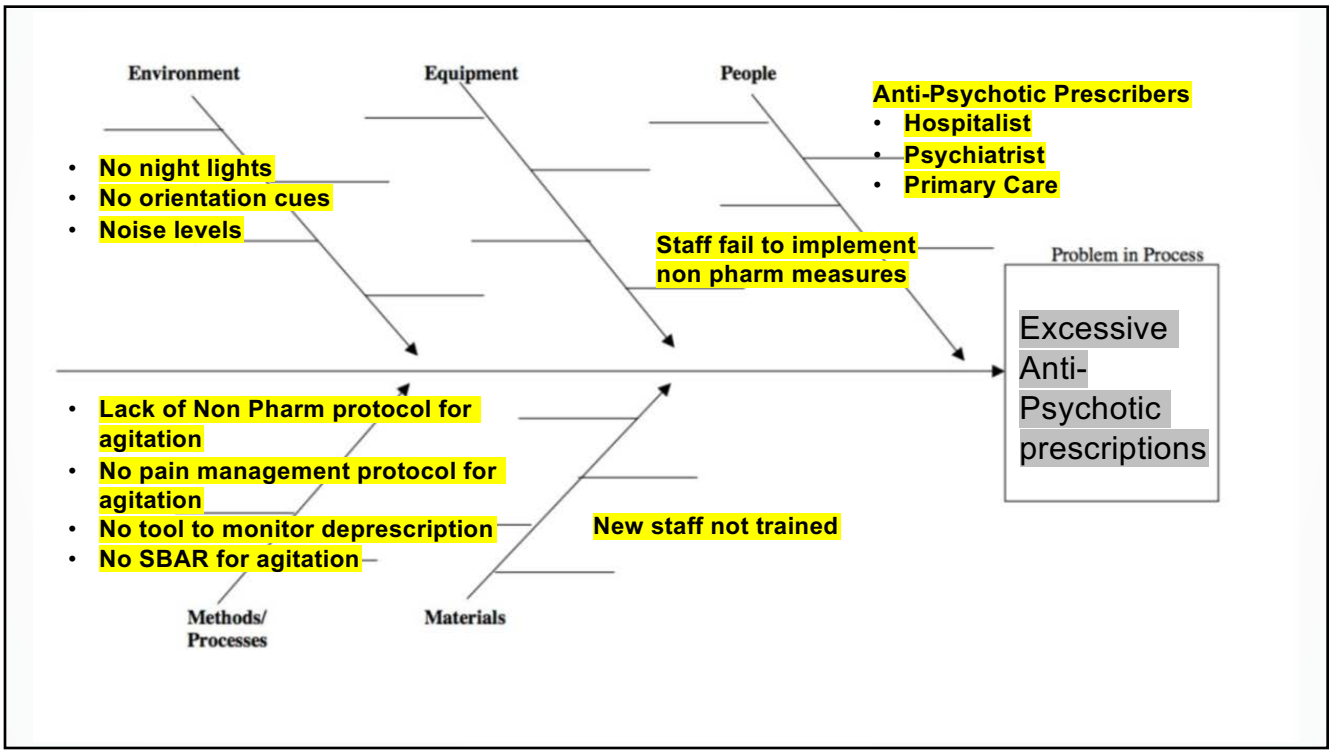

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What do you propose as an intervention to reduce antipsychotic use ?

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Take Home Points

Deprescribing is a tool to optimizing medications

Interprofessional opportunities and teamwork is needed

Pharmacists are a critical part of this team and effective communication is essential.

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For More Information, Check out the Dakota Geriatrics Website

- AHRQ ECHO National Nursing Home COVID-19 Action Network
  - Recordings and Materials
- Education
  - Online Curriculum
- Resources
  - For Public and Health Professionals
- Events
  - Webinars
  - Annual Conference

Dakota GERIATRICS

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Medication Resources

Tactics	Tools	Additional Information
Comprehensive and Targeted Medication Reviews	Medicare Part D Medication Therapy Management Program Annual Wellness Visits	https://go.cms.gov/3g0Eoi2 https://go.cms.gov/2E3x480
Identifying High Risk and Potentially Inappropriate Medications	AGS Beers	https://bit.ly/2E9eWJL
	STOPP/START	https://bit.ly/3kMFnGb
	US-FORTA	https://bit.ly/2FiRgDp
Assessing Treatment Burden and What Matters to Patients	AGS Managing Multimorbidity	https://bit.ly/2E9eWJL
Deprescribing	US Deprescribing Research Network	https://bit.ly/344tghU

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