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Aligning Medications with What Matters Most in Primary Care

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Overview

- Describe the results of a national survey of older adults' preferences regarding deprescribing communication

- Discuss the rationale and design of the Align pilot study – a pragmatic, pharmacist-led deprescribing intervention for people living with dementia (PLWD) and their care partners in primary care

Ms. R

- 93 year old retired crossing guard
- Dementia, COPD, diabetes, low back pain, anxiety, falls
- Unable to answer questions or to stand without assistance
- Mini-mental state exam: 3/30

Story shared with permission of Stephanie Nothelle, MD

Ms. R's daily medications

Sitagliptin 100 mg daily

Insulin glargine 15 u nightly

Hydrochlorothiazide 12.5 mg daily

Albuterol/ipratropium nebulizer q6h PRN

Fluticasone/salmeterol 1 puff BID

Oxybutynin 5 mg daily

Escitalopram 10 mg daily

Lidocaine patch daily

Diclofenac gel q6h PRN

Tramadol 50 mg BID PRN

Gabapentin 300 mg TID

Esomeprazole 40 mg daily

12

Ms. R... 6 months later

Insulin glargine 15 u nightly

Amlodipine 2.5 mg nightly

Escitalopram 10 mg daily

Mirtazapine 7.5 mg daily

4

“They feel like she has ‘woken up’ and is less confused. She set a goal for herself of being able to walk enough that she can attend a Christmas celebration at her son's house.”

Mini-mental: 25/30

Medication stewardship:
A more thoughtful approach to prescribing

- Based on best available evidence of benefit >> harm
- **Goal-aligned**, not guideline-driven
- Occurs in context of other therapies
- Involves ongoing monitoring and re-evaluation
- Involves patients and caregivers in decisions
- Often involves **deprescribing**

Canadian Medical Association, A Prescription for Optimal Prescribing, 2010

Deprescribing: What works best?

- Focus on specific medications or whole regimen?
- What intervention modality?
  - Education/ engagement
  - Decision support
  - Direct intervention
- What should the content be?
- What outcomes matter?
- Which setting?
  - Long-term care
  - Hospital
  - Ambulatory care
  - Transitions

Why focus on people living with dementia (PLWD)?

- High prevalence of polypharmacy and potentially inappropriate medication use among PLWD
- Greater risk of medication-related harm
- Prolonged, variable time course of dementia
- High rates of caregiver strain related to medications
- Caregiver strain associated with increased inappropriate medication use, potentially avoidable hospitalization and burdensome treatments

Ruangritchankul PLOS One 2020; Hukins Eur J Clin Pharmacol 2019; Maust JAMA 2021; Reeve Expert Opin Drug Metab Toxicol 2017; Smith Int J Pharm Pract 2015.

Survey on deprescribing communication preferences

Why do words matter?

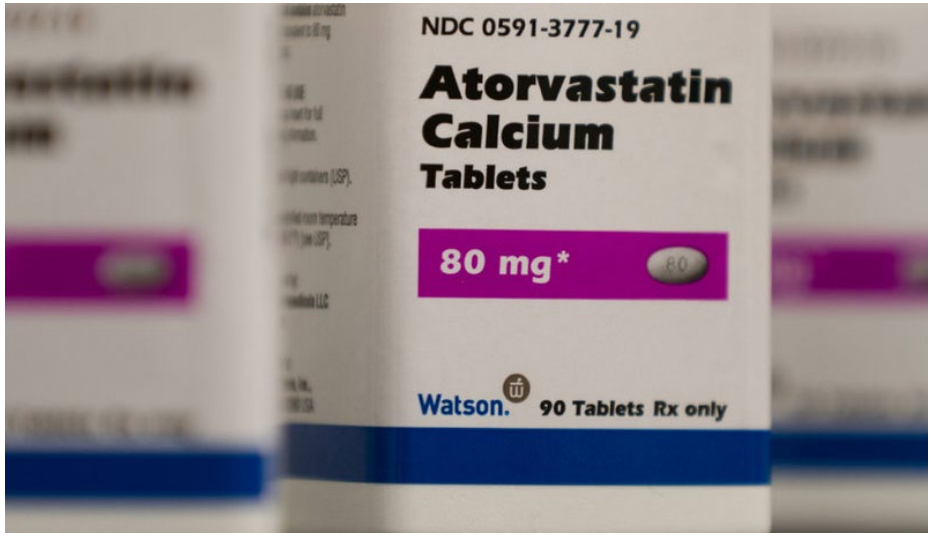
- Patient-centered care linked to higher patient satisfaction, quality of life
- Patients want to deprescribe if their doctor recommends it
- Patients and caregivers may not recognize potential harms of medicines
- Patients who are engaged in decisions tend to choose more conservative treatments and receive less unwanted care

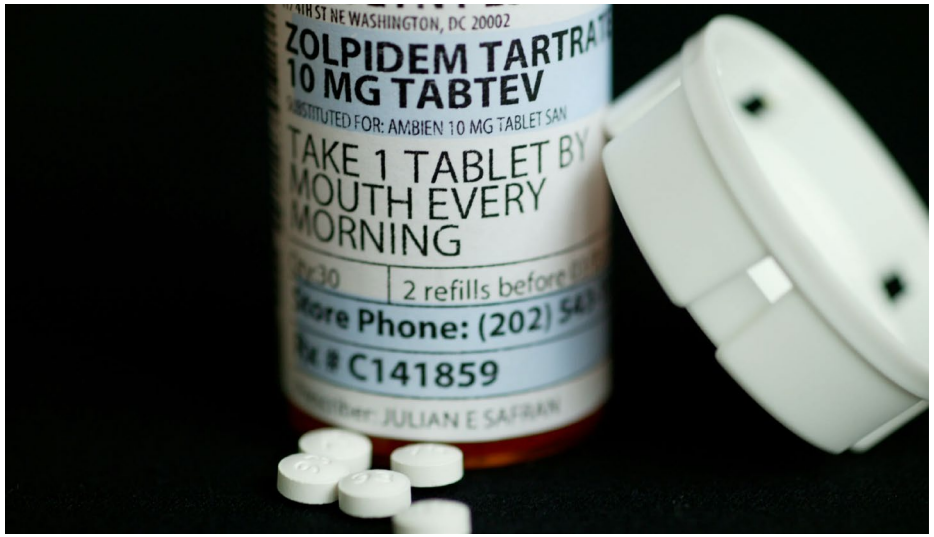
Reeve, JAMA Intern Med 2018. Kerns, Gerontologist 2018. Stacey, Cochrane Database Syst Rev 2017.

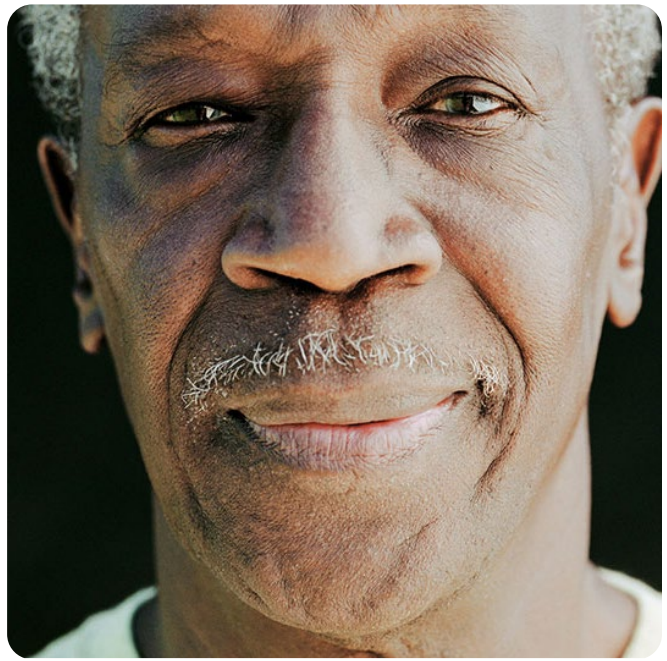
Deprescribing communication survey

- How do older adults want doctors to talk to them about deprescribing?
- Cross-sectional survey using nationally representative online panel (Ipsos KnowledgePanel); 835 (70%) responded
- Preventive: Statin
- Symptom-relief: Zolpidem

In press: Green, et al. JAMA Netw Open 2021







Methods: Preferred rationales

- Statin: Multiple serious health problems, functional impairment, 10 pills/day
- Zolpidem: Good health and functional status, 6 pills/day
- **"Pick the explanation most/ least likely to make you stop the medicine."**
- Tested 7 phrases doctor may use
  - Best-worst scaling method
- Refined based on stakeholder feedback

Pick the explanation most/ least likely to make you stop the statin

Explanations … to explain why someone should reduce/ stop
The benefits of this medicine do not clearly outweigh the risks for people like you.
I do not feel that you need this medicine anymore.
Given your age and other health problems, I do not think this medicine will help you.
Given your age and other health problems, I'm worried that you are at increased risk of side effects from this medicine.

Pick the explanation most/ least likely to make you stop the statin

Explanations … to explain why someone should reduce/ stop
Taking this medicine requires extra effort for you. It's another pill to swallow, costs you money, and requires periodic blood tests.
I think it could be harmful for you to be on this many medicines.
I think we should focus on how you feel now rather than thinking about things that might happen years down the road.

Results

Characteristic	Percent
Age, mean (SD), years	73 (6)
Female	50
Non-white race / ethnicity	20
Completed high school or less	36
Fair / poor health status	17
Ever taken statin	59
Ever taken sleep medicine	15

Older adults' preferences for how to explain deprescribing statins

Pick the explanation most/ least likely to make you stop the zolpidem

Explanations … to explain why someone should reduce/ stop
I'm worried that this medicine may cause you more harm than good.
Medical guidelines recommend that we avoid prescribing this medicine for sleeping problems in older adults.
Over the long run, this medicine is unlikely to help you function better.
This medicine has been linked to side effects such as problems with memory, concentration, balance and falls, hospitalizations and death in older adults.

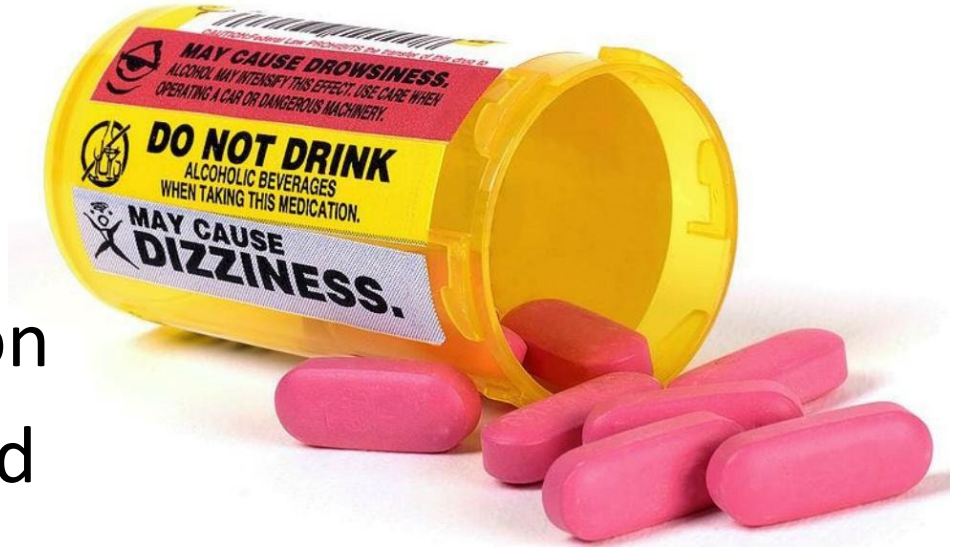
Pick the explanation most/ least likely to make you stop the zolpidem

Explanations … to explain why someone should reduce/ stop
People can become dependent on this medicine, meaning that they cannot fall asleep without it.
We can treat this condition without medicine. It will take time and effort, but you can learn to fall asleep on your own.
This medicine is not good for you in the long run; let's work together to slowly reduce the dose and get you off it over time.

Older adults' preferences for how to explain deprescribing zolpidem

Summary of key findings

- Variability in preferences
- Major driver of willingness to deprescribe: **side effects**
- Preventive: Patients may react negatively to suggestion that they no longer stand to benefit from prevention
- Symptom-relief: Patients also preferred phrase emphasizing **shared decision**, flexibility



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Is willingness to deprescribe associated with health outcome priorities among U.S. older adults?

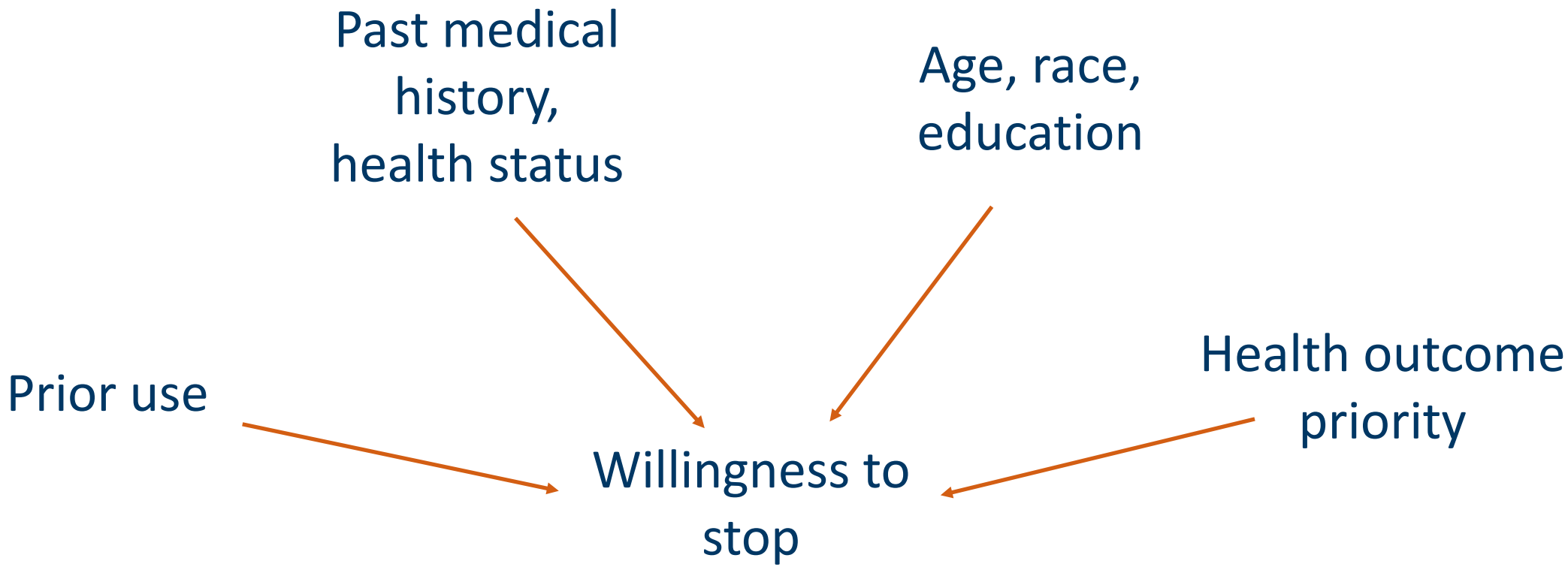
Background

- Linking deprescribing recommendations to patients' overall health outcome priorities could improve uptake
- It is not known whether older adults' willingness to deprescribe is associated with their health outcome priorities

Methods

- **Outcome:** Willingness to stop 1) a preventive medicine (statin); or 2) a symptom-relief medicine (zolpidem)
- **Predictors:** Agreement with 2 health outcome priorities statements:
  - "I am willing to accept the risk of future side effects, such as falls or memory problems, to feel better now" (zolpidem model)
  - "I would prefer to take fewer medicines, even if it meant that I may not live as long or may have bothersome symptoms sometimes" (zolpidem and statin model)

Methods


Past medical history, health status
Age, race, education
Prior use
Health outcome priority
Willingness to stop

Results

Characteristic	Percent
Willing to stop preventive medicine if doctor recommends	61
Willing to stop symptom-relief medicine if doctor recommends	50
Prioritize avoiding future side effects over feeling better now	59
Prioritize taking fewer medicines over not living as long / having symptoms	36

Results

- Respondents who prioritized avoiding future side effects over feeling better now had higher odds of being willing to stop zolpidem: ORadj 1.41 (95% CI 1.06 to 1.89)

- Agreement with statement that prioritized taking fewer medicines vs. living longer or avoiding bothersome symptoms was not associated with willingness to stop either medication
  - Statin: ORadj 1.12 (95% CI 0.83 to 1.52)
  - Zolpidem: ORadj 1.33 (95% CI 0.99 to 1.79)

Results

Health outcome priority	Willing to stop zolpidem	Not willing to stop zolpidem
Prioritize avoiding future side effects	N=265 (32%)	N=223 (27%)
Prioritize feeling better now	N=149 (18%)	N=189 (23%)

Conclusions

- Many older adults are willing to stop medications (preventive > symptom-relief)
- 59% prioritized avoiding future side effects over “feeling better now”; this was associated with higher willingness to stop zolpidem
- Many respondents prioritized taking fewer medicines over not living as long/ having bothersome symptoms sometimes, but this was not associated with higher willingness to stop either medication class
- Linking deprescribing messages to health outcome priorities may increase uptake

Next step:
Test pragmatic approaches to deprescribing in primary care

Optimize intervention

- Low touch: Educational intervention designed with patient, family, clinician stakeholders
- Pragmatic: No change in workflow and no medication management by research team
- Piloted at single clinic summer 2018; full randomized intervention at 18 primary care clinics 2019-2021
- Target population: Patients with dementia-MCC, 5+ medications and upcoming primary care visit

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Optimize

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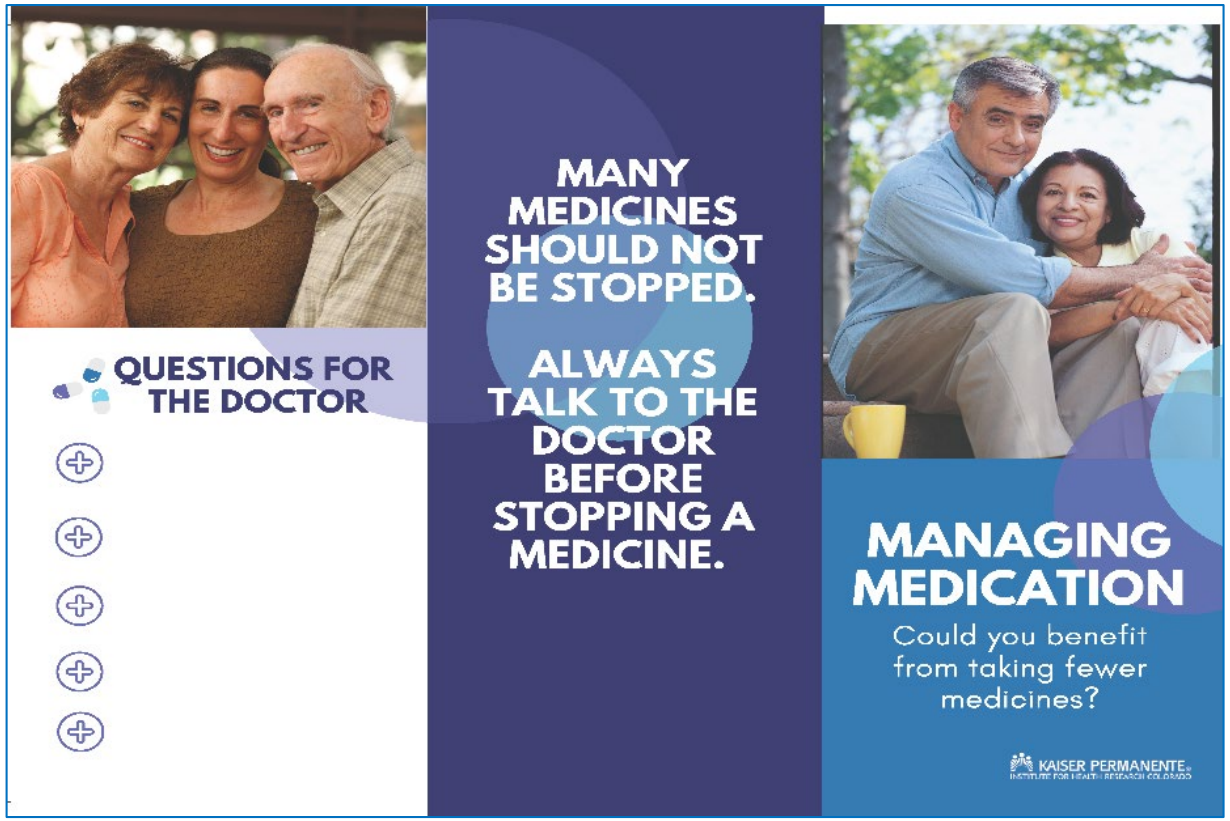
Optimize: Patient and caregiver education



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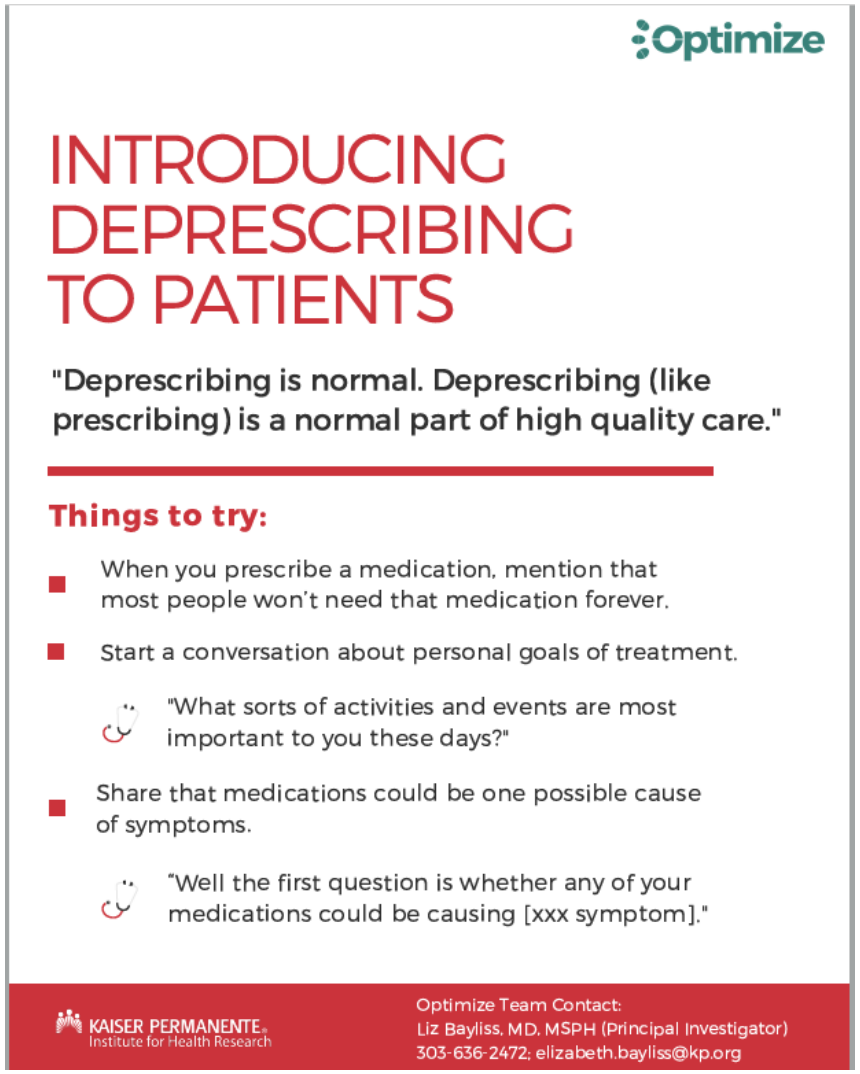
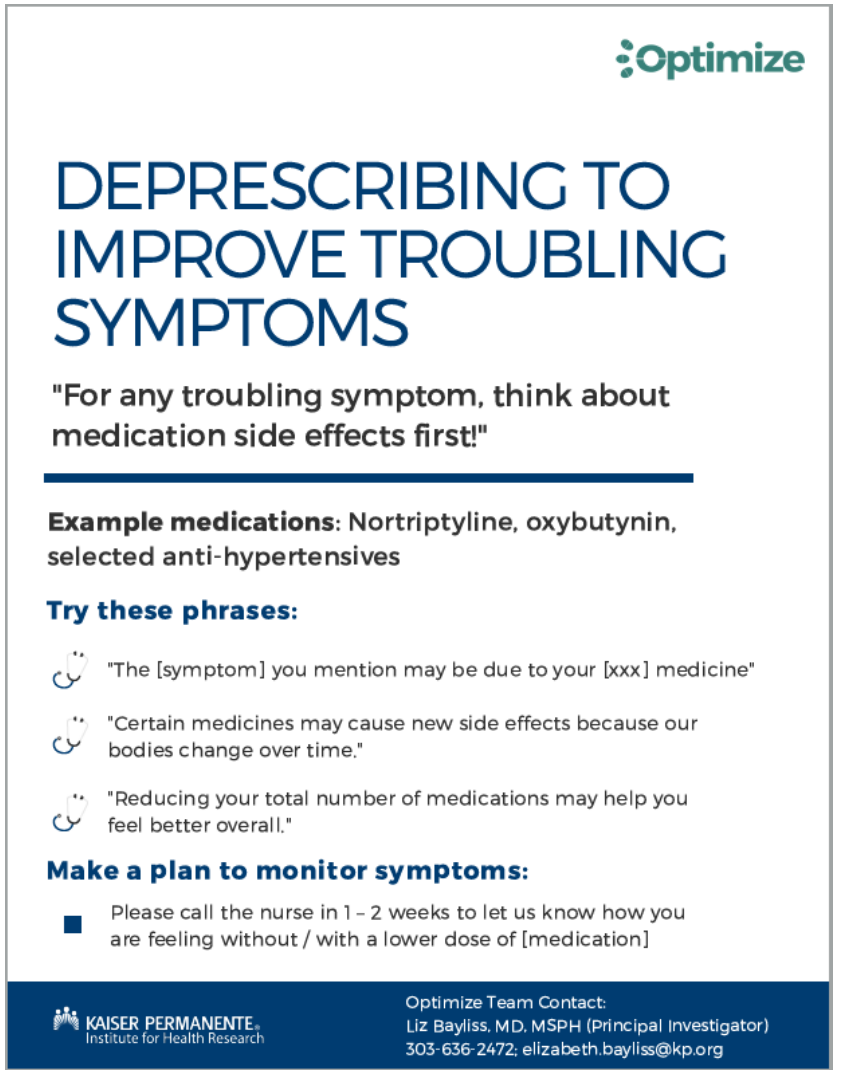
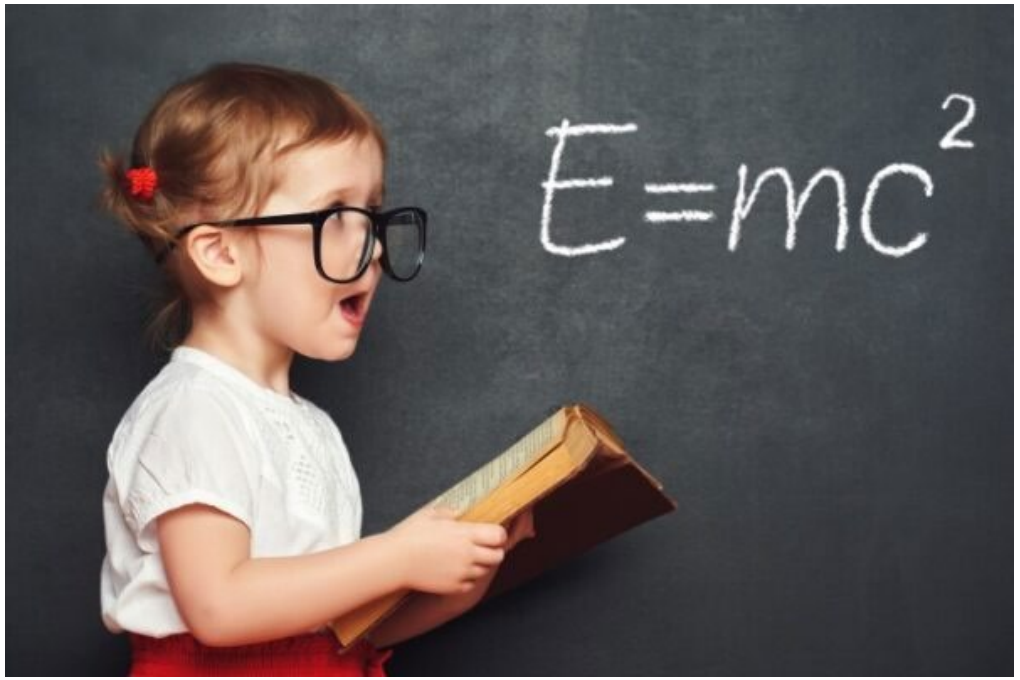
Optimize: Clinician education





Stay tuned…

Lessons about implementation from Optimize



- Patients and caregivers want to discuss deprescribing
- Caregivers have unique decisional needs/ conflicts
- Providers prefer tailored recommendations
- Barriers to implementation:
  - Time limitations
  - Need for intervisit care

Green et al. J Gen Intern Med 2020

Potential solution: Pharmacist-led deprescribing

- Does not add to time pressures
- Provides tailored, evidence-based guidance for PCPs
- Helps elicit goals and facilitate shared decision making
- Supports patients and caregivers between visits
- Patients, caregivers, PCPs in OPTIMIZE had high degree of trust in embedded clinical pharmacists

Green et al. J Gen Intern Med 2020

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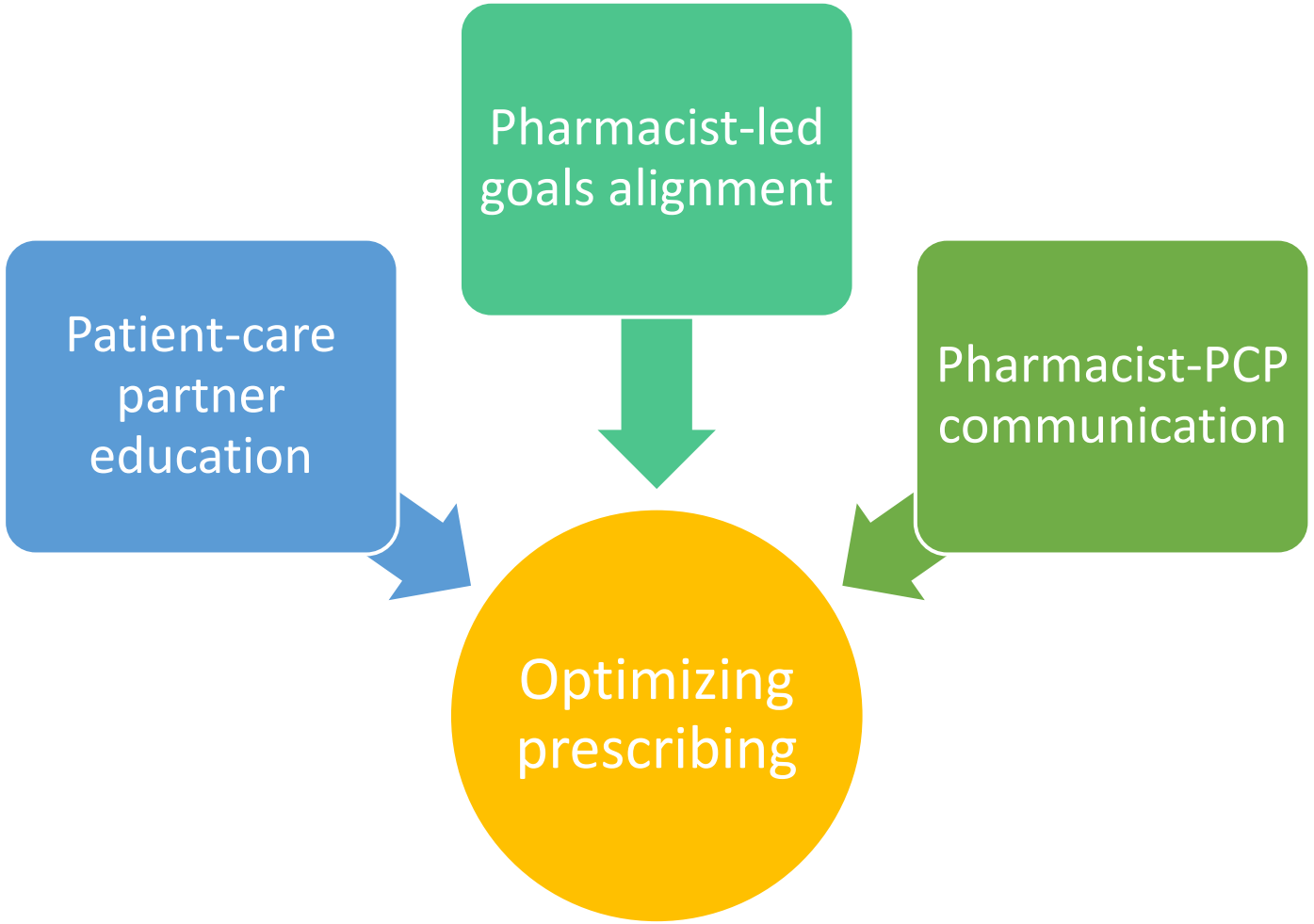
ALIGN: Aligning Medications with What Matters Most



Align caregiver education

Our bodies change over time. Medicines that helped control symptoms and prevent disease at one stage in life may no longer be needed – or may even cause harm at a later stage in life.

Many people feel better when they take fewer medicines.

Write down any questions or concerns about your family member's medicines that you would like to discuss with the pharmacist below.

QUESTIONS FOR THE PHARMACIST:

ARE YOU HELPING A LOVED ONE MANAGE THEIR MEDICINES?

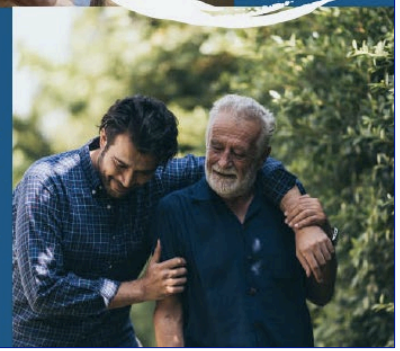
Have you ever wondered if there is a way to safely reduce the number of medicines they take?

ALIGN is a new program for family members and friends who care for someone who needs help managing their medicines.

Talking with a pharmacist who works closely with your family member's primary care doctor can help prevent over-medication and related problems.

Some medicines should not be stopped. Always talk to the pharmacist or doctor before stopping a medicine.

The pharmacist will address questions and concerns that you may have about your family member's medicines.



Sample questions: Goals-alignment visit

- What is your understanding of the major conditions affecting [PATIENT]'s health and how their health will change over the next few years?
- What are your most important goals for [PATIENT]'s health care for the next 6 months to a year?
- Some people say they want to do everything they can to prevent future illness, such as heart attacks and strokes, even if it means taking additional medicines or experiencing side effects. Others say they want to focus more on comfort than prevention of things that may happen down the road. In general, which would you say is more important for [PATIENT] right now?
- If we changed [PATIENT]'s medicines, what do you wish we could help with?

Medication Regimen Complexity Index

- Dosage form
- Dosage frequency
- Additional directions: Take at specified time, break/crush, etc.

George, et al. Ann Pharmacother 2004;
Linnebur, et al. Clin Ther 2014

Two patients taking 7 medications

Sample Regimen for Patient on 7 Medications, with MRCI = 20

Medication	Dose	Route	Frequency
PHENYTOIN SODIUM	CAPSULE	ORAL	EVERY 6 HOURS
GLIMEPIRIDE 2 MG	TABLET	ORAL	ONCE A DAY
SEREVENT DISKUS 50 MCG/DO	DISK W/DEV	INHALATION	TWICE A DAY
FAMOTIDINE 20 MG	TABLET	ORAL	TWICE A DAY
DEXAMETHASONE 4 MG	TABLET	ORAL	EVERY 6 HOURS
AVANDIA 4 MG	TABLET	ORAL	ONCE A DAY
BENICAR 20 MG	TABLET	ORAL	ONCE A DAY

Sample Regimen for Patient on 7 Medications, with MRCI = 10

Medication	Dose	Route	Frequency
PROTONIX 40 MG	TABLET DR	ORAL	ONCE A DAY
TOPROL XL 100 MG	TAB.SR 24H	ORAL	ONCE A DAY
CITALOPRAM 10 MG	TABLET	ORAL	ONCE A DAY
NORVASC 5 MG	TABLET	ORAL	ONCE A DAY
SLOW FE 160 MG	TABLET SA	ORAL	TWICE A DAY
ARICEPT 5 MG	TABLET	ORAL	ONCE A DAY
FUROSEMIDE 20 MG	TABLET	ORAL	TWICE A DAY

McDonald, et al. J Am Med Inform Assoc 2013.

Family Caregiver Medication Administration Hassles Scale

- Information seeking / information sharing about medications
  - Having someone available to ask questions, knowing what to ask
- Scheduling logistics
  - Scheduling multiple medications throughout day
  - Arguing with care recipient about when to take medications
- Safety
  - Knowing how to give medication safely, recognizing side effects
- Polypharmacy
  - Managing prescriptions written by multiple providers

Travis, et al. Gerontologist 2003

Questions for discussion

- Would this be implementable in your primary care setting?
- Are the outcomes both pragmatic and relevant to PLWD and their caregivers?
- How can the pharmacist facilitate deprescribing of medications prescribed by specialists?

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