Air Traffic Controller: Deprescribing to Avoid the Near Collisions of Too Many Medications

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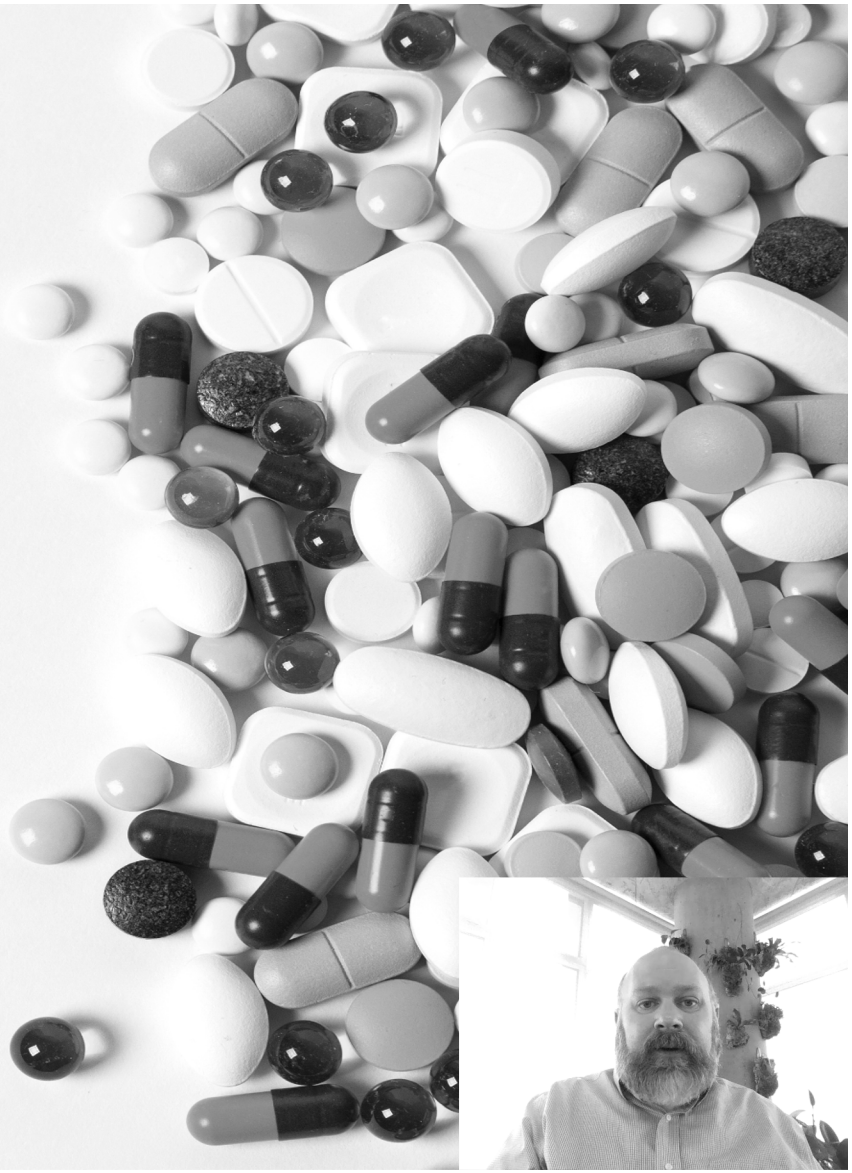
Nothing to Disclose

Objectives

- Describe the prevalence of potentially inappropriate medications in patients
- Define and discuss deprescribing and barriers to its success
- Review existing tools to help deprescribe
- Develop an approach to partnering with our patients and their families to deprescribing

Polypharmacy & Potentially Inappropriate Medications (PIMs)

- Medicare + Choice Patients 44%[1]
- Advance Cancer Patients 22-24%[2]
- Advance Cancer 62% on statins[3]



At the End-of-Life

- In the final year,

  Medications Increase by 50%[4]

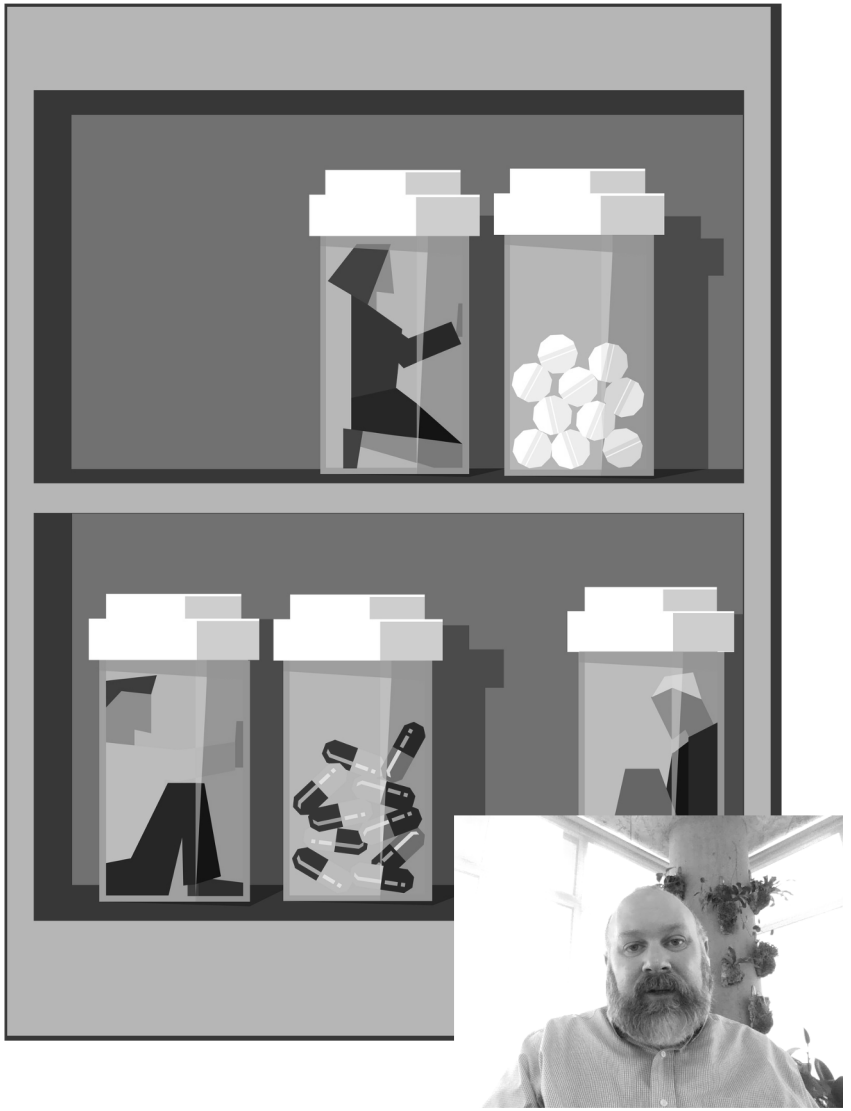
7 Medications

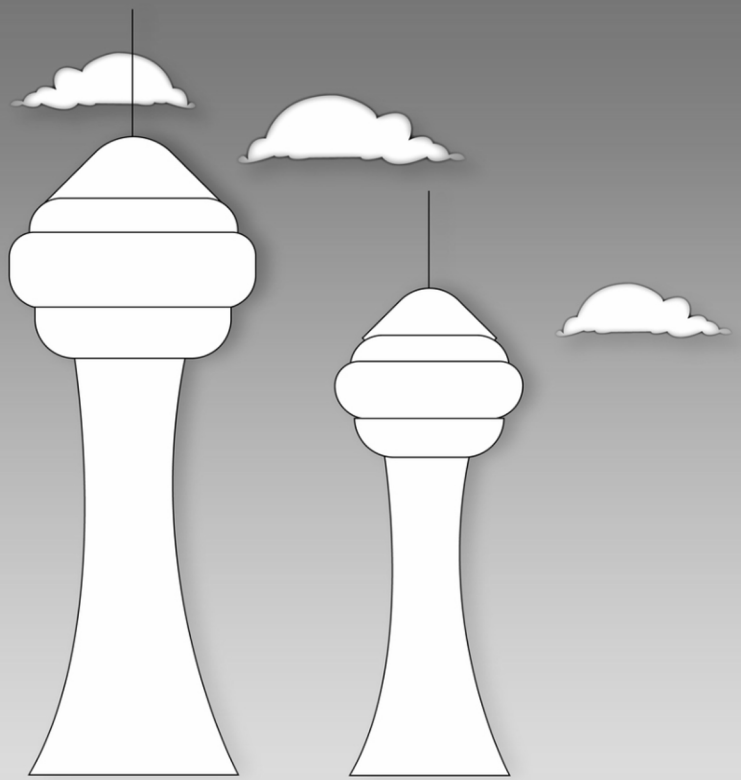
81%

For Prevention[5]

But Don't forget about our Younger Patients

- Patients on Chronic Pain Medications
- Patients with Mental Health
- Patients with Disabilities





How do you manage all the things!

Deprescribing Defined

"…the systematic process of identifying and discontinuing drugs in instances in which existing or potential harms outweigh existing or potential benefits within the context of an individual patient's care goals, life expectancy, values, and preferences."[6]

--Scott IA, Hilmer SN, Reeve E, et al. *JAMA internal medicine.* 2015;175(5):827-834

"Deprescribing is the process of withdrawal of an inappropriate medication, supervised by a health care professional with the goal of managing polypharmacy and improving outcomes."[7]

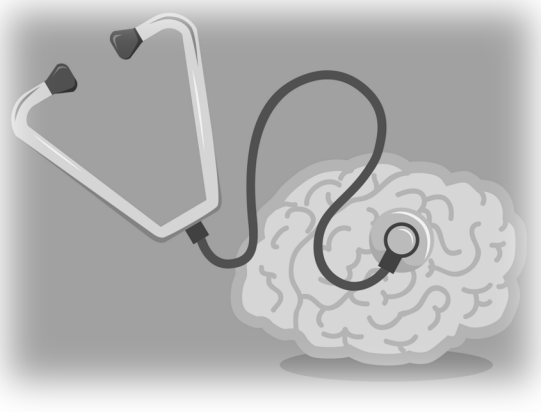
--Reeve E, Gnjidic D, Long J, Hilmer S. *British journal of clinical pharmacology.* 2015;80(6):1254-1268

Deprescribing—When Done Well. . .

- Reduces Adverse Effects
- Reduce Falls
- Reduces use of health care (ED visits, clinic visits, phone calls)[10,11]
- Increase Quality of Life[8]

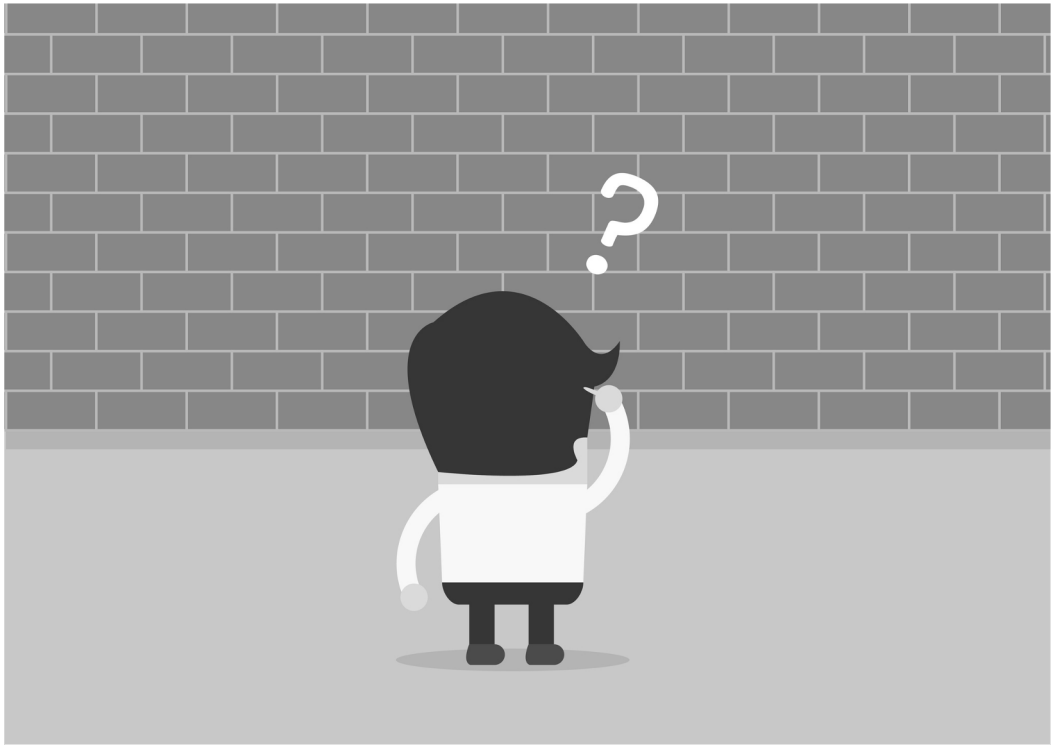
- Among Palliative Care Patients, 63% had a 2.8 medication decrease[9]

Deprescribing:
Most Common Medications Needing to Go



Barriers to Deprescribing

Prescriber



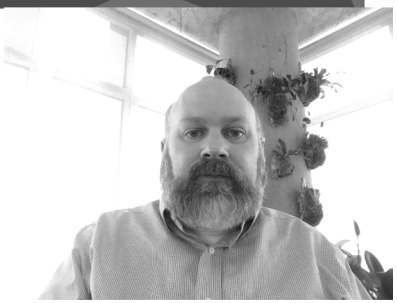
Patient &
Family

System

Deprescribing: The Process

FIVE STEPS[6]

1) Medication List
2) Evaluate for Potential Harm
3) Determine what can be Discontinued
4) Prioritize
5) Discontinue, Monitor, Document



Deprescribing: The Medications

Group the Medicines

Quality of Life

Prevention

Deprescribing: Potential Harm

- Beers List[12]
- STOPP/START[13, 14]
- New Zealand Practical Guide to Stopping Medications in Older People[15]

Deprescribing: Potential Harm

- Beers List[12]

Deprescribing: Potential Harm

- STOPP/START[13, 14]

Deprescribing: Potential Harm

- New Zealand Practical Guide to Stopping Medications in Older People[15]

Deprescribing: Should they Go?

Consider These Tools:

- Lindsay *et al.*[8]

Medication class	Medication	Considerations for limited benefit	Explanation
Blood and blood-forming organs	Aspirin	For primary prevention only.	Long-term benefits at population level. Little short or intermediate term risk of stopping (1). Drugs for primary prevention have, in general, no place in the treatment of end-of-life patients since the time-to-benefit usually exceeds life expectancy (2).
Cardiovascular system	Dyslipidaemia medications Statins Fibrates Ezetimibe	All indications.	Long-term benefits at population level. Little short or intermediate term risk of stopping (1).
	Antihypertensives ACE inhibitors Sartans Beta blockers Calcium channel blockers Thiazide Diuretics	If sole use is to reduce mild to moderate hypertension for secondary prevention of cardiovascular events or as management of stable coronary artery disease.[ab]	Long-term benefits at population level. Ongoing therapy unnecessary in most shortened life expectancy (1).
Musculo-skeletal system	Osteoporosis medications Bisphosphonates Raloxifene Strontium Denosumab	Except if used for the treatment of hypercalcaemia secondary to bone metastases.	Except if used for the treatment of hypercalcaemia secondary to bone metastases. Long-term benefits at population level. Little short or intermediate term risk of stopping (1).
Alimentary tract and metabolism	Peptic ulcer prophylaxis Proton pump inhibitors H2 antagonists	Lack of any medical history of gastrointestinal bleeding, peptic ulcer, gastritis, GORD or the concomitant use of anti-inflammatory agents including NSAIDs and steroids (3).	Ongoing therapy unnecessary in most shortened life expectancy (1).
Oral Hypoglycaemics Metformin Sulfonylureas Thiazolidinediones DPP-4 inhibitors GLP-1 analogues Acarbose	If sole use is to reduce mild hyperglycaemia for secondary prevention of diabetic associated events.[c]	Potential short-term complications outweigh benefit (1).	
Vitamins Minerals Complementary—alternative medicines	If not indicated to treat a low blood plasma concentration.	No evidence for effectiveness (4, 5).[d]	

Lindsay J, Dooley M, Martin J, et al. The development and evaluation of an oncological palliative care deprescribing guideline: the 'OncPal deprescribing guideline'. *Support Care Cancer.* 2015;23(1):71-78.

Deprescribing: Should they Go?

Consider These Tools:

- Lindsay *et al.*[8]
- Fede *et al.*[2]

Table 1 Criteria to classify unnecessary medications

Medication	Considered unnecessary if	Explanation for being classified as unnecessary
Statins	Lack of any cardiovascular event in the prior 12 months	The long-term benefit of stains is not likely to be seen within 6 months of expected survival [7]
Gastric protectors (H1 Blockers, proton pump inhibitors, antacids)	Lack of any medical history of gastrointestinal bleeding, peptic ulcer, gastritis or known chronic use (more than 30 days) of anti-inflammatory agents (steroids and non-steroid)	Use of a gastric protector without any widely accepted indication
Anti-hypertensive agent	Patient was taking an anti-hypertensive agent and presented with arterial blood pressure<90×60 mmHg at the time of last consultation and symptoms of hypotension	Use of anti-hypertensive agents for patients with low blood pressure and related symptoms was considered dangerous
Anti-diabetic agent	Patient who was taking an anti-diabetic agent and presented with either a single measure of fast glucose <50 mg/dl within 4 weeks of consultation or reported symptoms of hypoglycemia and had a fast glucose test below lower normal limit	Use of antidiabetic agents by patients with hypoglycemia was considered dangerous
Any other medication	No clear medical indication identified	No clear medical indication identi

Fede A, Miranda M, Antonangelo D, et al. Use of unnecessary medications by patients with advanced cancer: cross-sectional survey. *Support Care Cancer.* 2011;19(9):1313-1318.

Deprescribing: Should they Go?

Consider These Tools:

- Lindsay *et al.*[8]
- Fede *et al.*[2]
- Fried *et al.* [10]

- Regimens that are not feasible for the patient to manage
- Regimens that include Medications lacking benefit
- Regimens that place the patient at more than minimal risk of suffering an unintended medication adverse effect
- Regimens that are not consistent with the patient's goals of care, when the patient is able to articulate

Deprescribing: Should they Go?

Consider These Tools:

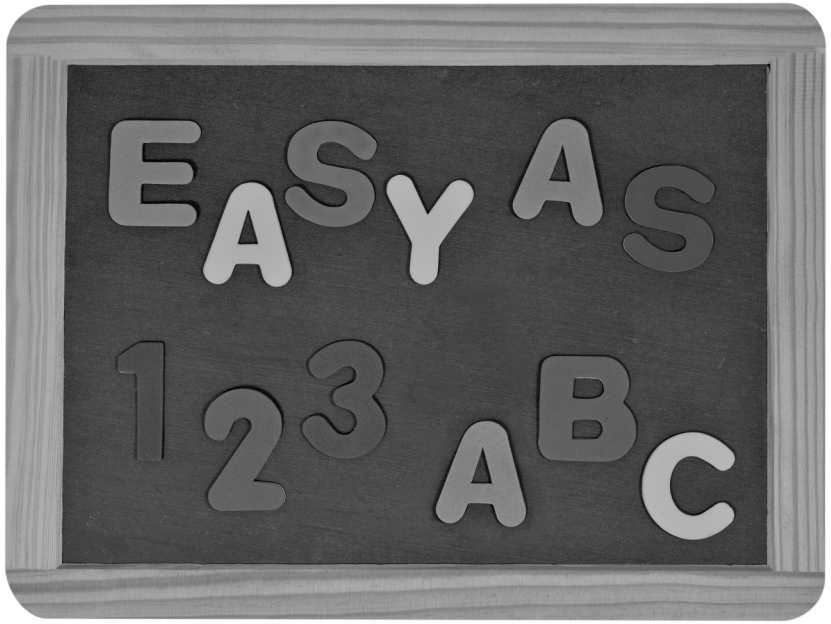
- Lindsay *et al.*[8]
- Fede *et al.*[2]
- Fried *et al.* [10]
- deprescribing.org

Deprescribing: Communication

- Patient Experience

- Patient Expectations

Deprescribing: Let's Go!



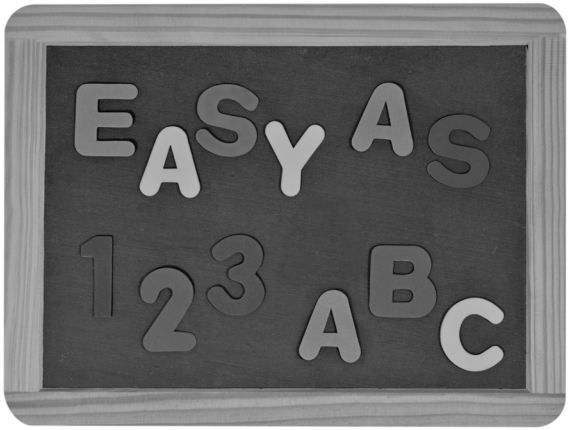
1. Purpose of Medication
2. How is the patient Using
3. "How's it working for you?"

A. Adverse Effects
B. Benefits/Burdens
C. Conversations[17]

Case #1

Case #1

- Medications: --lisinopril, atorvastatin, aspirin, donezepil, memantine, vit D, calcium, ferrex, acetaminophen



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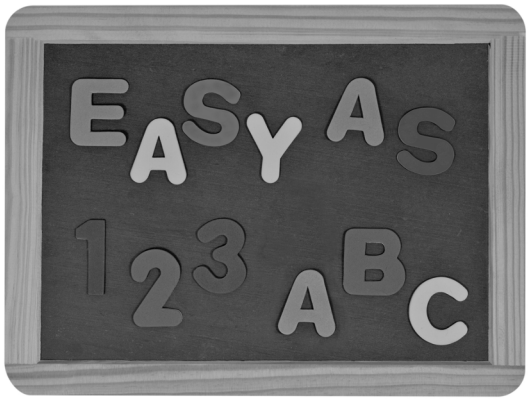
Case #1

- Quality of Life, & Disease Treating—lisinopril, acetaminophen

- Prevention—atorvastatin, donezepil, aspirin, memantine, vit D, calcium, ferrex

Case #1

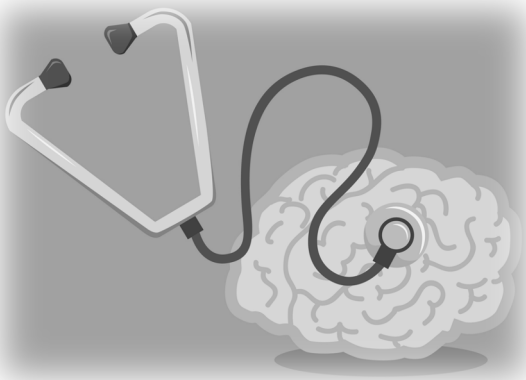


1. Focus on Quality of Life
2. Receiving medications daily
3. Beginning to have difficulty swallowing

A. Difficulty Swallowing, aspiration
B. Pill burden, benefits are not likely to be seen from anti-dementia mediations and supplements, family ok with continuing statin
C. Goals of family are comfort, accepting of signs of end-stage dementia

Case #1

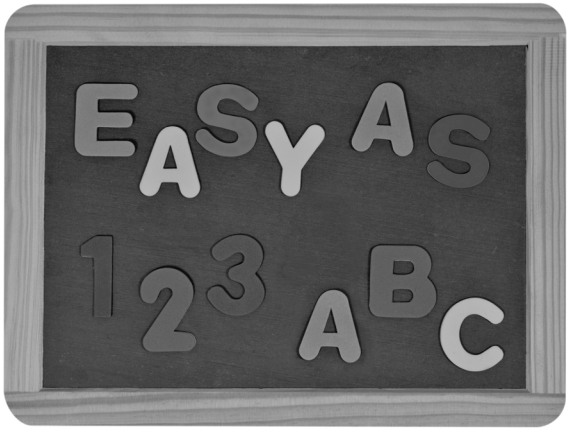
Discontinuing plan:



Case #2

Case #2

- Medications: lisinopril/hctz, metformin, escitalopram, omeprazole, daily multivitamin, occasional acetaminophen



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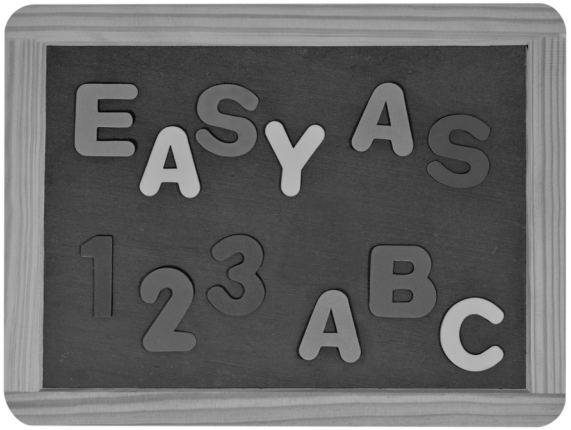
Case #2

- Quality of Life, & Disease Treating—Escitalopram, omeprazole ?, Tyelnol prn

- Prevention—lisinopril/hctz, metformin, multivitamin

Case #2

- Medications: lisinopril/hctz, metformin, escitalopram, omeprazole, daily multivitamin, occasional acetaminophen

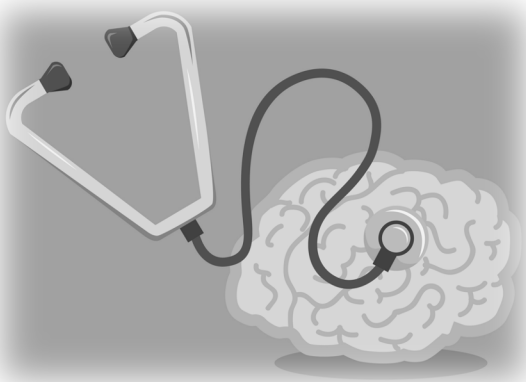


1. Treatment & Symptoms
2. Is Omeprazole Serving a purpose
3. Pretty minimal depression/anxiety

A. Long-term AE of PPIs, AE of SSRI?
B. Pill Burden
C. Is She Comfortable stopping?

Case #2

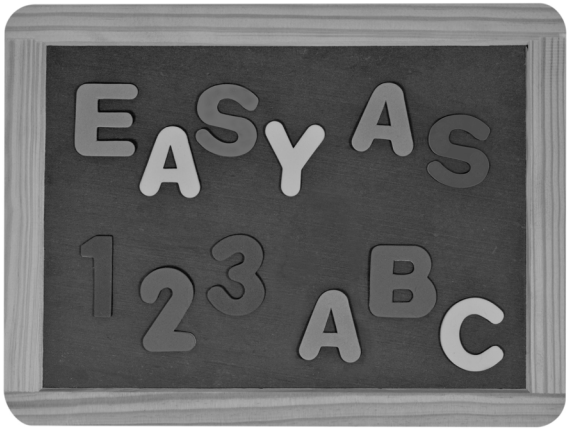
Discontinuing plan:



Case #3

Case #3

- Medications: cabozantinib, lisinopril/hctz, metformin, glipizide, simvastatin, omeprazole, zofran, oxycodone, bisacodyl, senna



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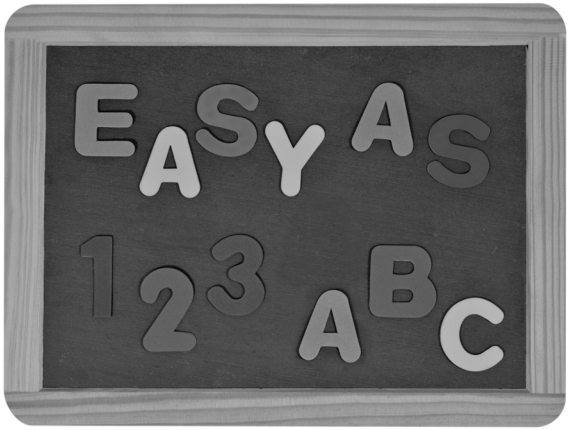
Case #3

- Quality of Life, & Disease Treating—cabozantinib, lisinopril/hctz, zofran, oxycodone, ,omeprazole, bisacodyl, senna

- Prevention—metformin, glipizide, simvastatin

Case #3

- Medications: cabozantinib, lisinopril/hctz, metformin, glipizide, simvastatin, omeprazole, zofran, oxycodone, bisacodyl, senna

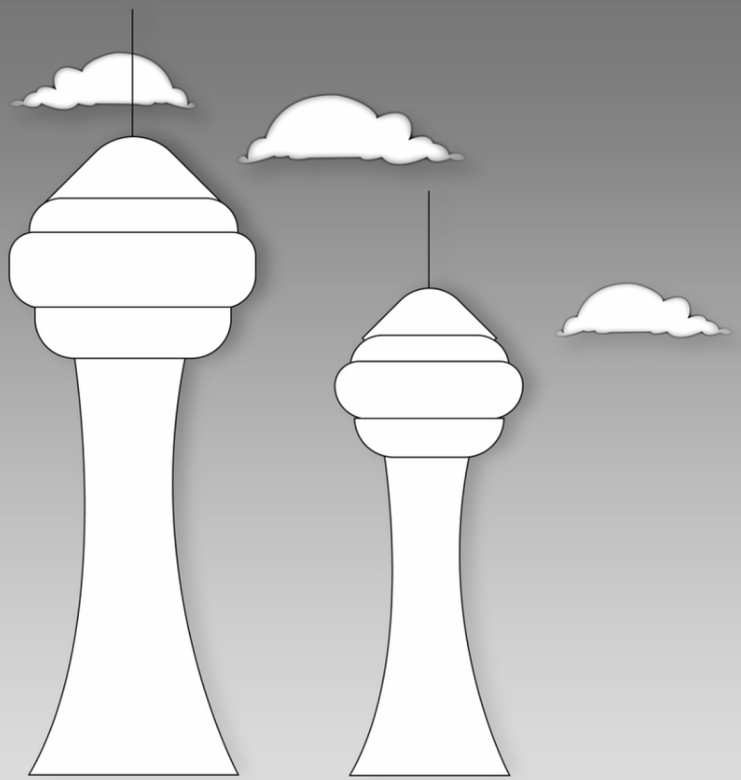


1. Treatment & Symptoms
2. Becoming more difficult to use
3. Getting harder, changing goals?

A. Nausea, Hypoglycemia, Pain
B. Pill Burden
C. Rethinking next steps, but scared

Case #3

Discontinuing plan:



How do you manage all the things!

Deprescribing: The Process

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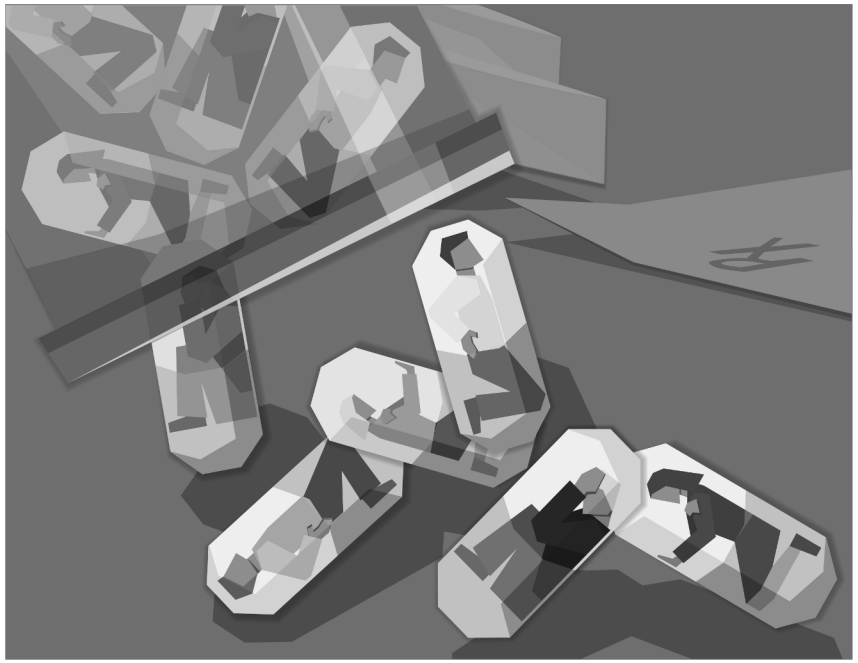
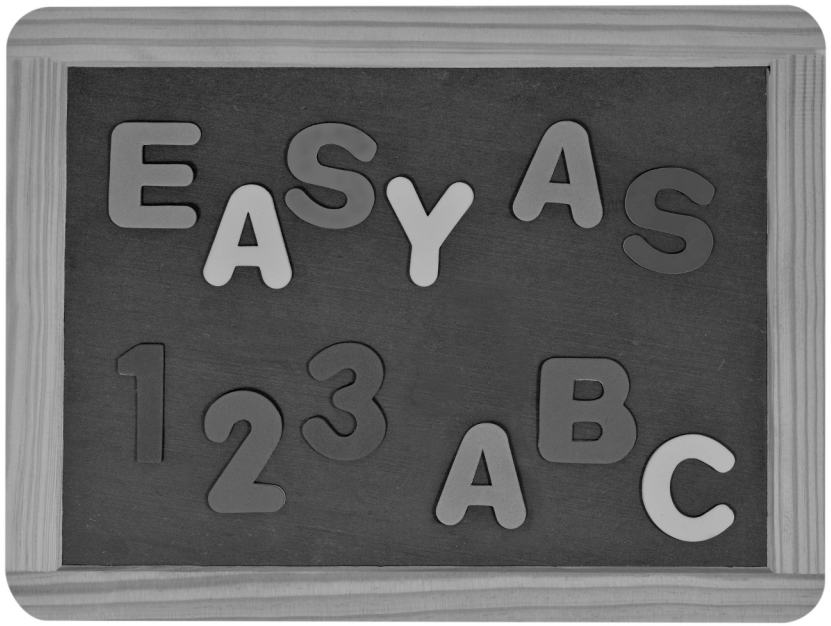


Deprescribing: Let's Go!



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Deprescribing: Lessons for Practice

- Make deprescribing part of your normal prescribing process
- Use a process
- Use the tools
- Listen to the patient and family
- Communication is key

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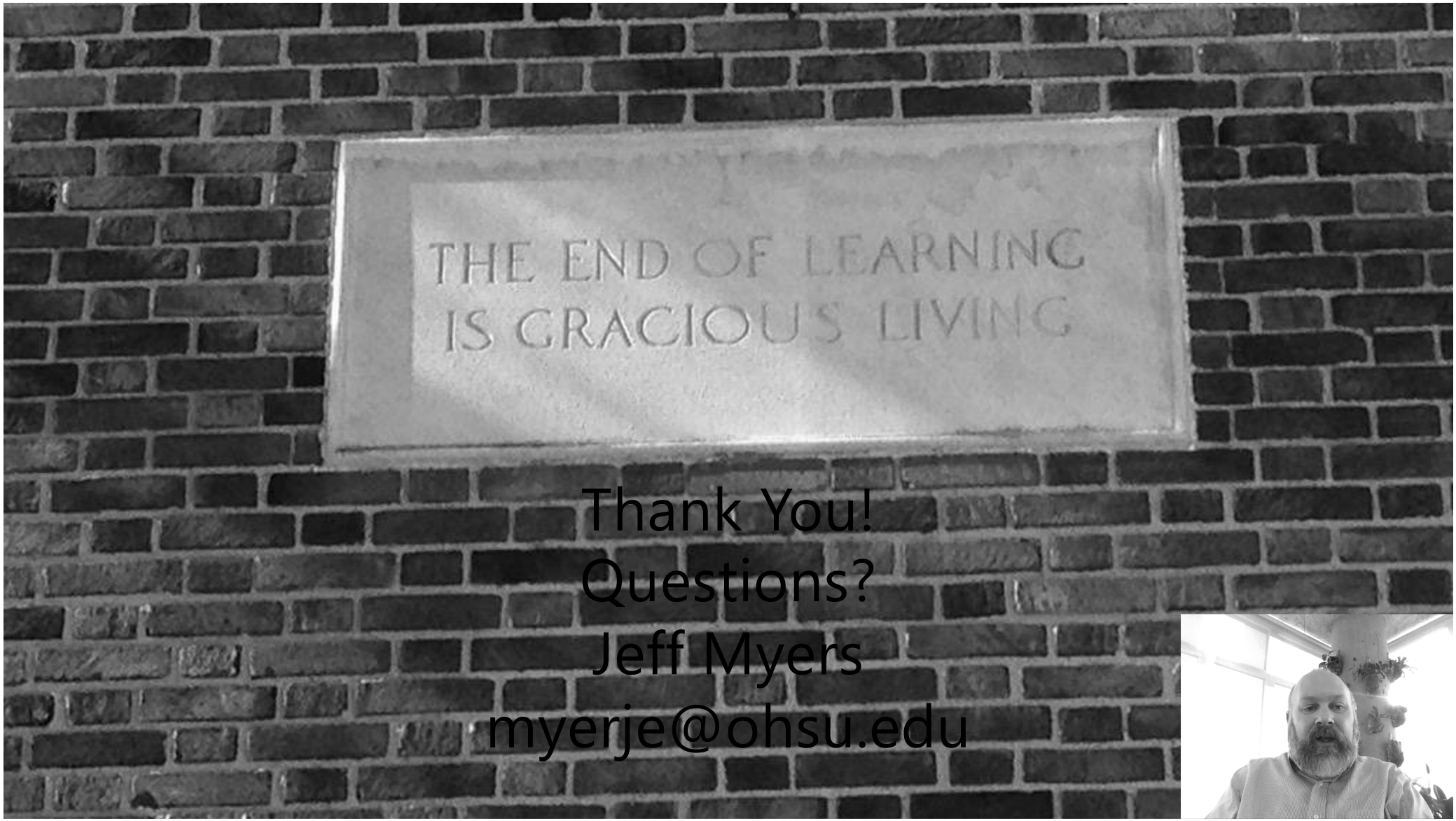

Thank You!
Questions?

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