Deprescribing guidelines

Supporting decisions to reduce or stop medications

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Competing interests

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Who pays me

Assistant Professor – Department of Anesthesiology, Pharmacology, and Therapeutics- **UBC** (tenure-track salary)

Pharmacist – Providence Healthcare LTC (**Fraser Health** pays me)

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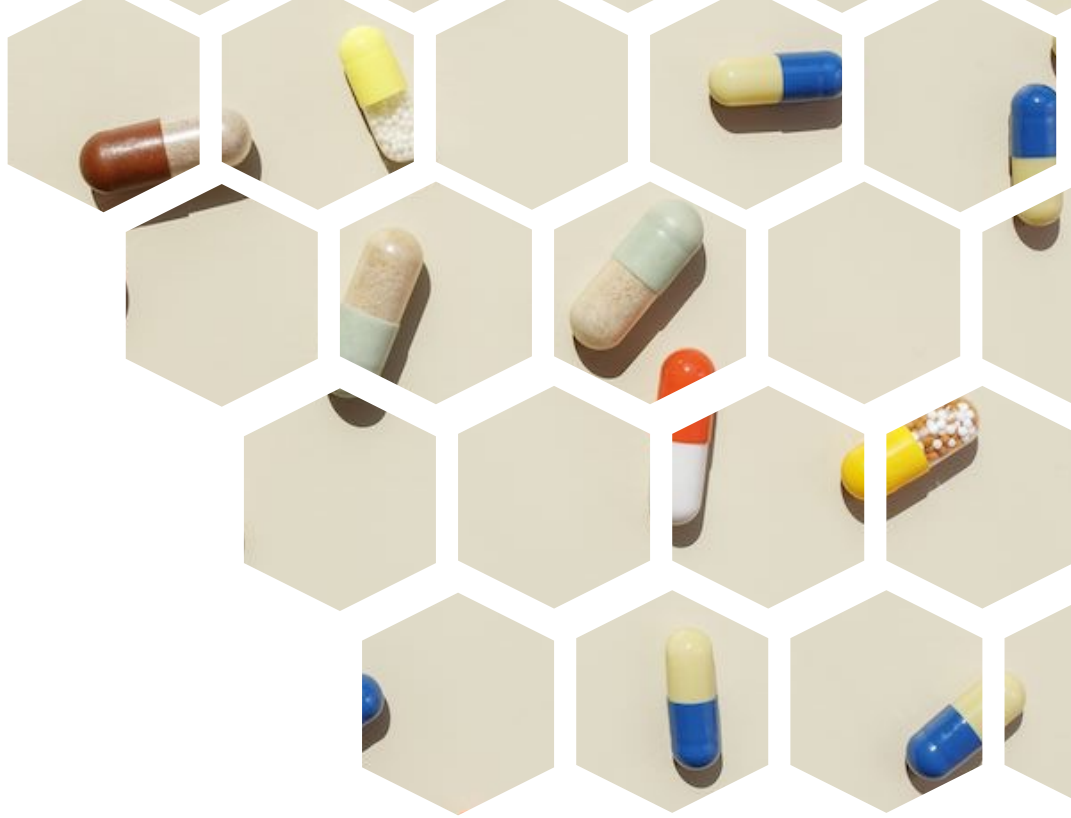
Reducing medications safely to meet life's changes

Moins de médicaments, sécuritairement – pour mieux répondre aux défis de la vie



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Dr. Barb Farrell

Dr. Lisa McCarthy

Today

Why deprescribing guidelines?

Developing deprescribing guidelines

Getting guidelines into practice

Today

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Average # of medications taken by LTC residents in Canada

(Canadian Institute for Health Information)

HOW DOES THIS HAPPEN?

In and out of hospital

Multiple prescribers

Fear of “rocking the boat”

Guidelines

66 years old

84 years old

- More medications
- More chronic diseases
- Change in function, activities
- Change in “what matters most”

LIFE CHANGES

What is necessary, beneficial, and safe can change

Reassessing medications is good practice

Reassessment

“A conversation about options”

“A medication checkup”

”Medication review”

Possible outcomes

Starting a medication

Increasing a dose

Backing off

(deprescribing)

Making sure medications are a good fit an individual person

Backing off

When/if?

How?

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Deprescribing guidelines

Supporting decisions to continue or stop/reduce medications

Today

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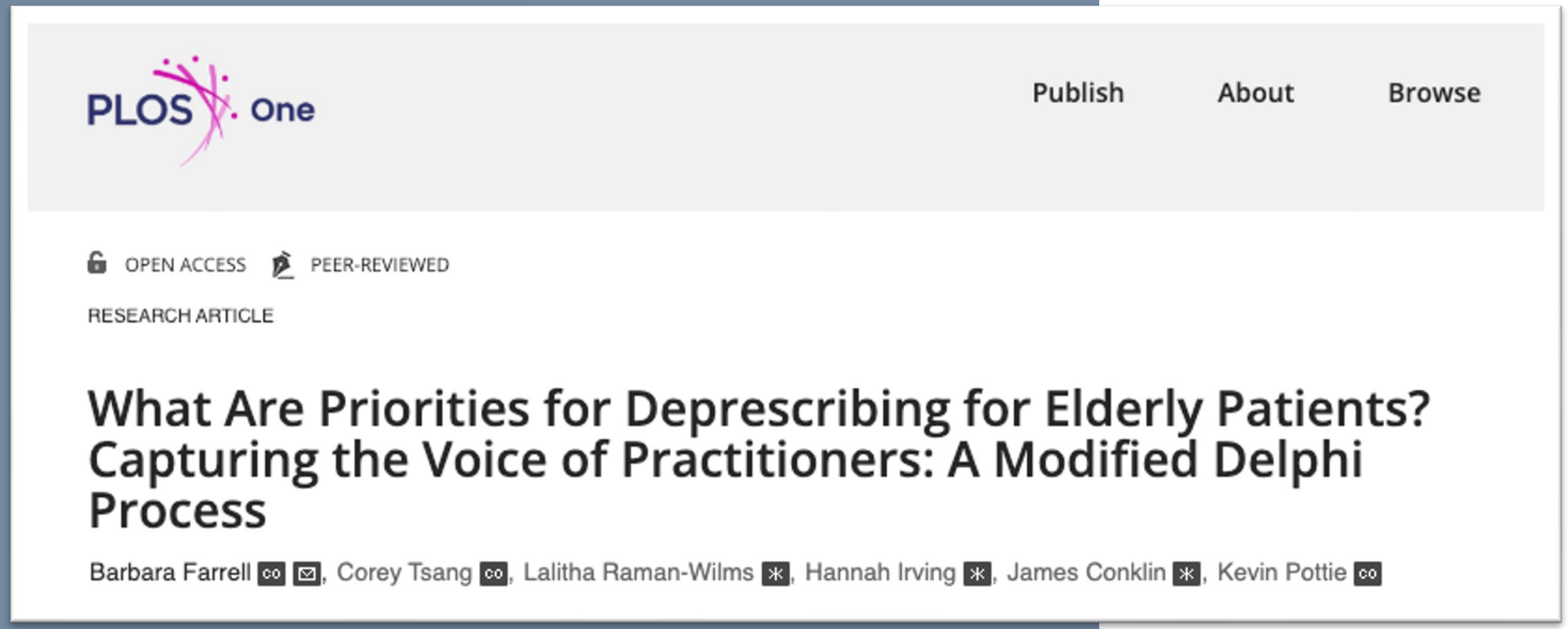
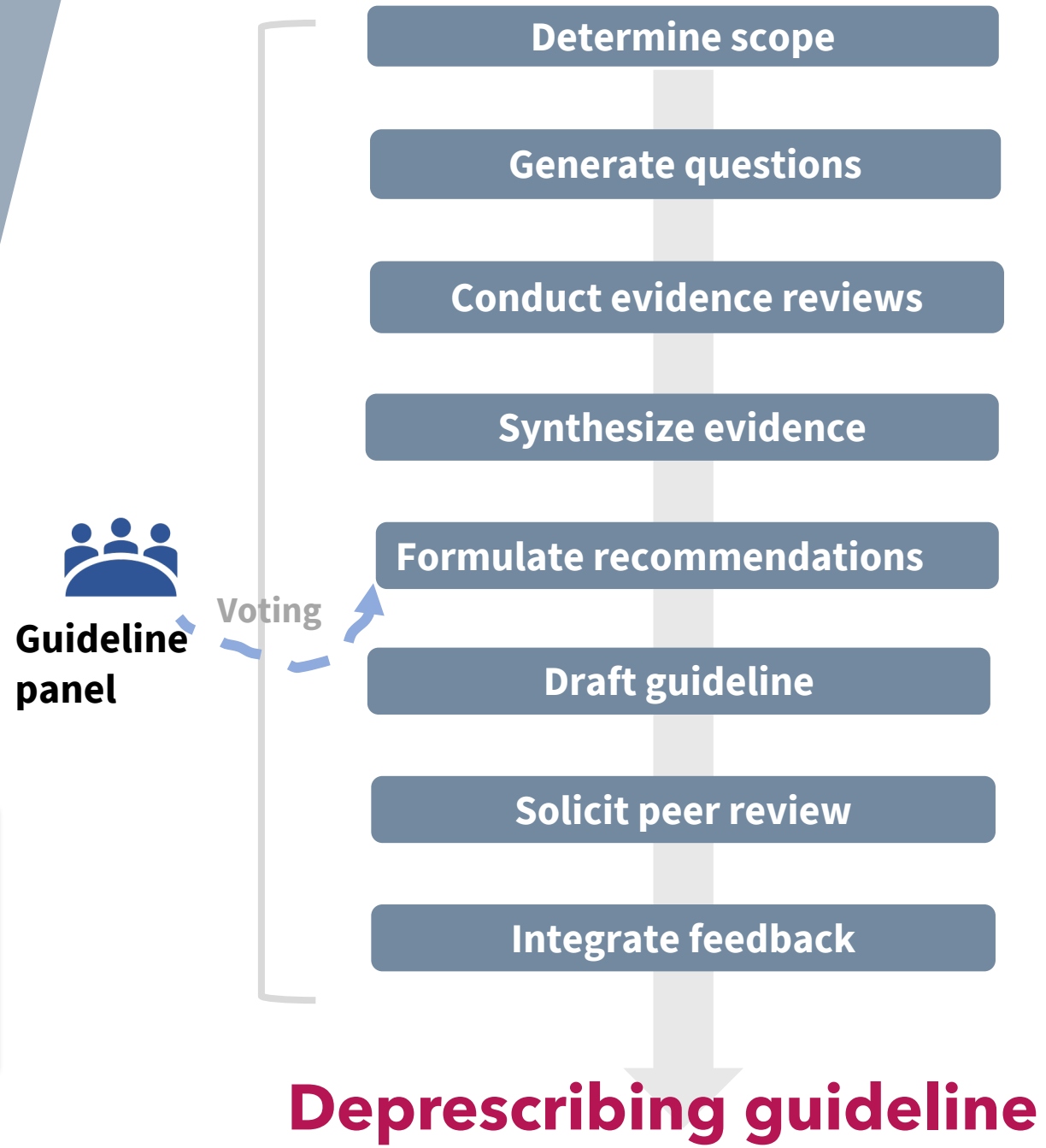


PPIs
BZRAs
Antipsychotics
Diabetes medications
Cognitive enhancers
Statins

Dr. Barb Farrell

Guideline methods: GRADE approach



RESEARCH ARTICLE

Methodology for Developing Deprescribing Guidelines: Using Evidence and GRADE to Guide Recommendations for Deprescribing

Barbara Farrell[1,2,3☯*], Kevin Pottie[1,2,4☯], Carlos H. Rojas-Fernandez[3,5‡], Lise M. Bjerre[1,2,4‡], Wade Thompson[1,4‡], Vivian Welch[1,4‡]

Guideline panel

Family physicians

Nurses

Pharmacists

Specialists

Patients

Who does the guideline apply to?

PPI example

Adults (>18 y) taking proton pump inhibitors who have completed a minimum 4-week course of PPI treatment resulting in resolution of upper GI symptoms

Does not apply to people with Barrett esophagus, severe esophagitis, or a history of GI bleeding

Generate questions

Benefits and harms of deprescribing versus continuation?

Benefits and harms of starting/ongoing use?

Acceptability, feasibility of deprescribing?

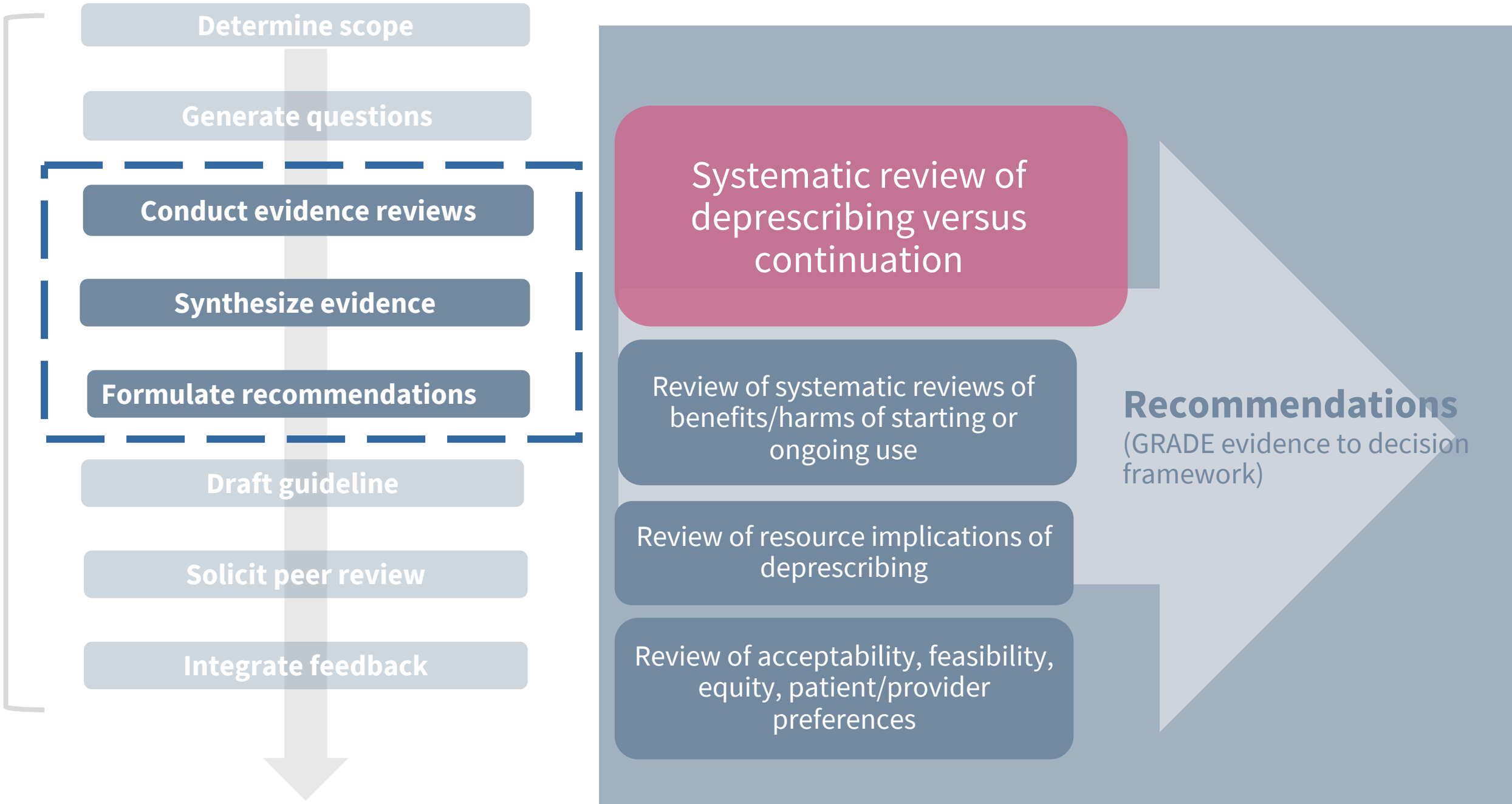
Resource implications

Patient/carer values and preferences?

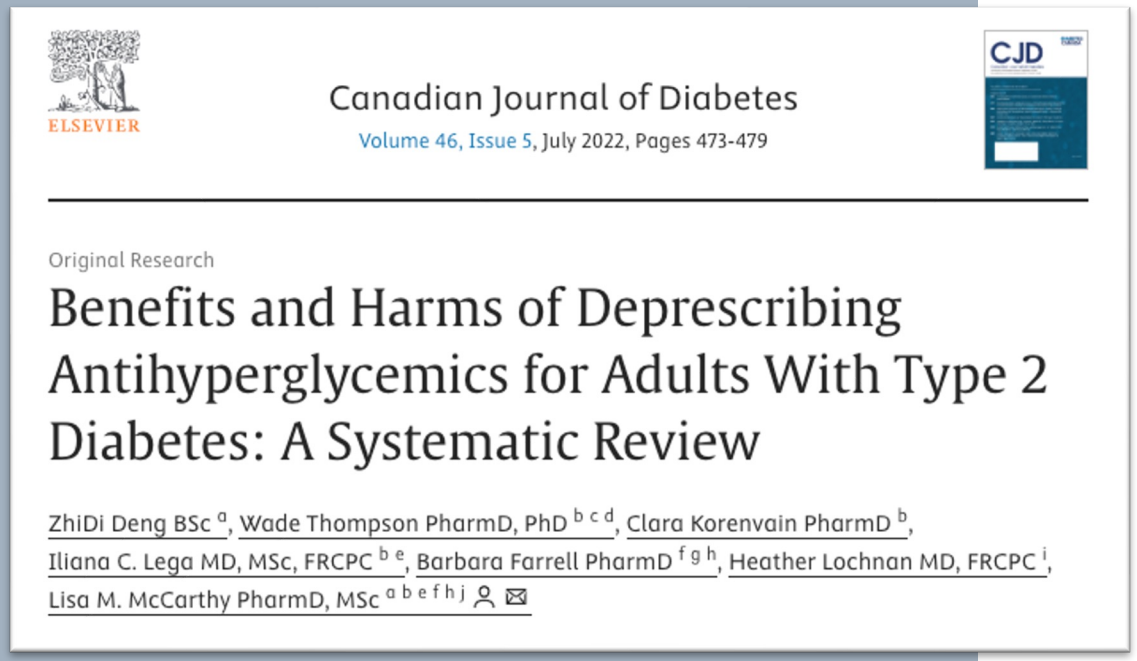
Key question

Benefits and harms of deprescribing versus continuation?

What are the benefits and harms of stopping or reducing antihyperglycemics compared with continuation among older adults?


Determine scope
Generate questions
Conduct evidence reviews
Synthesize evidence
Formulate recommendations
Draft guideline
Solicit peer review
Integrate feedback
Systematic review of deprescribing versus continuation
Review of systematic reviews of benefits/harms of starting or ongoing use
Review of resource implications of deprescribing
Review of acceptability, feasibility, equity, patient/provider preferences
Recommendations
(GRADE evidence to decision framework)

Systematic review of deprescribing versus continuation



ELSEVIER

Canadian Journal of Diabetes

Volume 46, Issue 5, July 2022, Pages 473-479

Original Research

Benefits and Harms of Deprescribing Antihyperglycemics for Adults With Type 2 Diabetes: A Systematic Review

ZhiDi Deng BSc [a], Wade Thompson PharmD, PhD [b c d], Clara Korenvain PharmD [b], Iliana C. Lega MD, MSc, FRCPC [b e], Barbara Farrell PharmD [f g h], Heather Lochnan MD, FRCPC [i], Lisa M. McCarthy PharmD, MSc [a b e f h j]

No clinically important changes in glycemia

Possible reductions in adverse drug events

Very low certainty evidence

Deprescribing antihyperglycemics

Deprescribing antihyperglycemics

Recommendations

Systematic review of deprescribing versus continuation	Feasible, safe
Review of systematic reviews of benefits/harms of starting or ongoing use	Harms > benefits
Review of resource implications of deprescribing	Drug costs, hypoglycemia
Review of acceptability, feasibility, equity, patient/provider preferences	Lower treatment burden, QoL

Deprescribing antihyperglycemics recommendations

People >65 y taking ≥1 antihyperglycemic for T2DM meeting ≥1 of the following

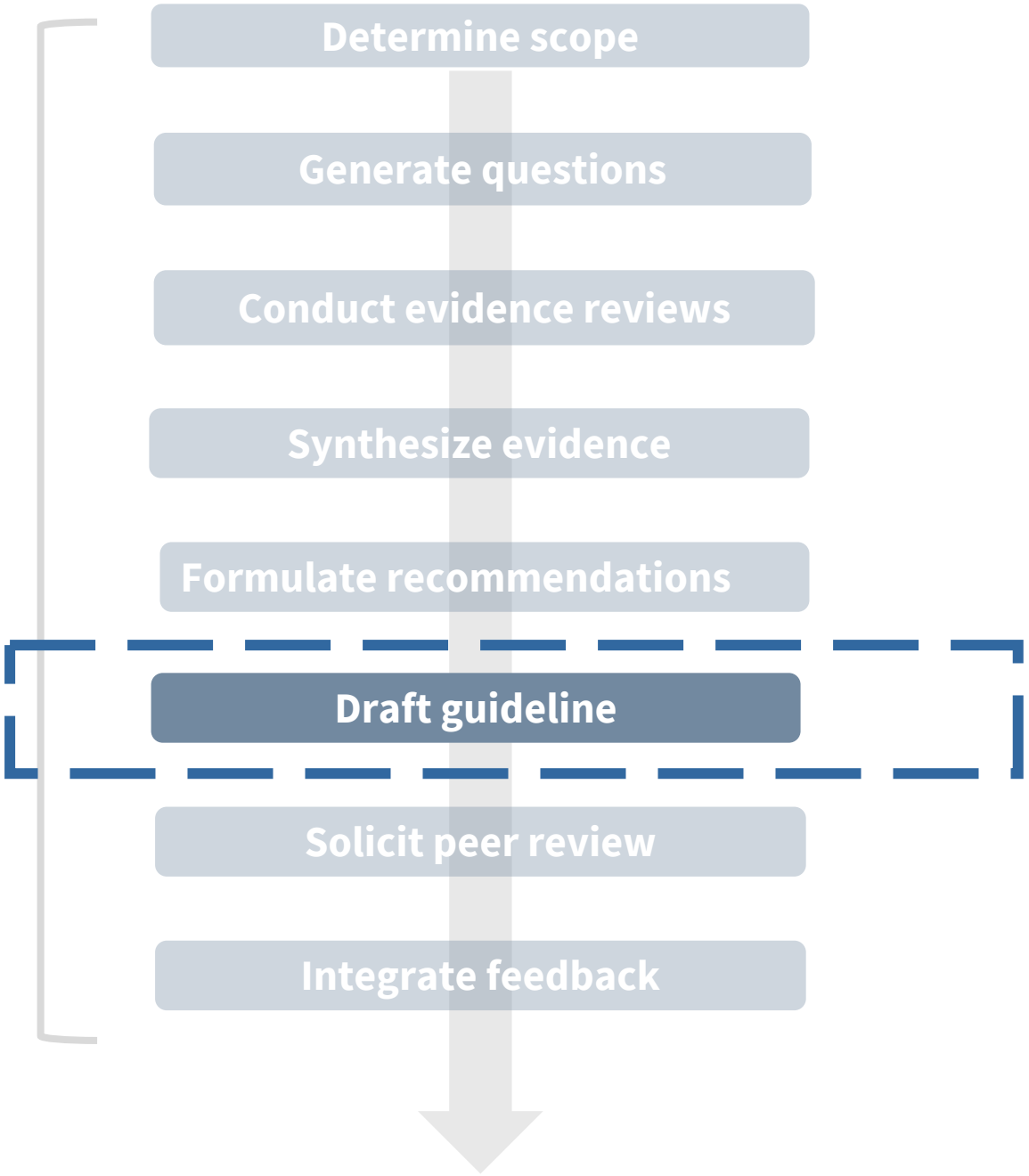
- Elevated risk of hypoglycemia (e.g. due to advanced age, intensive glycemic control, taking SU/insulin)
- Elevated risk of other adverse effects
- Benefit uncertain (frail, living with dementia, limited life expectancy)

We recommend

- Deprescribing antihyperglycemic agents that are known to contribute to hypoglycemia (STRONG, VERY LOW CERTAINTY EVIDENCE)

- Deprescribing antihyperglycemic agents in patients that are experiencing or at risk of adverse effects (GOOD PRACTICE)

- Individualizing glycemic targets to goals of care and time to benefit according to the Diabetes Canada guidelines (STRONG, VERY LOW CERTAINTY EVIDENCE)



Draft guideline

Clinical considerations

Stop abruptly or taper

Monitoring

Talking to patients/carers

Incorporating frailty, life expectancy into decisions

When to re-start?

Today

Why deprescribing guidelines?

Developing deprescribing guidelines

Getting guidelines into practice

deprescribing.org | Antihyperglycemics Deprescribing Algorithm

August 2018

Does your elderly (>65 years of age) patient with type 2 diabetes meet one or more of the following criteria:

- At risk of hypoglycemia (e.g. due to advancing age, tight glycemic control, multiple comorbidities, drug interactions, hypoglycemia history or unawareness, impaired renal function, or on sulfonylurea or insulin)
- Experiencing, or at risk of, adverse effects from antihyperglycemic
- Uncertainty of clinical benefit (due to: frailty, dementia or limited life-expectancy)

Yes → Set individualized A1C and blood glucose (BG) targets (otherwise healthy with 10+ years life expectancy, A1C < 7% appropriate; considering advancing age, frailty, comorbidities and time-to-benefit, A1C < 8.5% and BG < 12mmol/L may be acceptable; at end-of life, BG < 15mmol/L may be acceptable) (good practice recommendation)

Yes → Address potential contributors to hypoglycemia (e.g. not eating, drug interactions such as trimethoprim/sulfamethoxazole and sulfonylurea, recent cessation of drugs causing hyperglycemia – see reverse)

No → Continue Antihyperglycemic(s)

Still at risk? → **No** → Continue Antihyperglycemic(s)

Still at risk? → **Yes** → Recommend Deprescribing

Recommend Deprescribing

- **Reduce dose(s) or stop agent(s)**
  - most likely to contribute to hypoglycemia (e.g. sulfonylurea, insulin; strong recommendation from systematic review and GRADE approach) or other adverse effects (good practice recommendation)
- **Switch to an agent**
  - with lower risk of hypoglycemia (e.g. switch from glyburide to gliclazide or non-sulfonylurea; change NPH or mixed insulin to detemir or glargine insulin to reduce nocturnal hypoglycemia; strong recommendation from systematic review and GRADE approach)
- **Reduce doses**
  - of renally eliminated antihyperglycemics (e.g. metformin, sitagliptin; good practice recommendation) – See guideline for recommended dosing

Monitor daily for 1-2 weeks after each change (TZD – up to 12 weeks):

- For signs of hyperglycemia (excessive thirst or urination, fatigue)
- For signs of hypoglycemia and/or resolution of adverse effects related to antihyperglycemic(s)

Increase frequency of blood glucose monitoring if needed
A1C changes may not be seen for several months

If hypoglycemia continues and/or adverse effects do not resolve:
- Reduce dose further or try another deprescribing strategy

If symptomatic hyperglycemia or blood glucose exceeds individual target:
- Return to previous dose or consider alternate drug with lower risk of hypoglycemia

Farrell B, Black C, Thompson W, McCarthy L, Rojas-Fernandez C, Lochnan H, et al. Deprescribing antihyperglycemic agents in older persons. Evidence-based clinical practice guideline. Can Fam Physician 2017;63:832-43 (Eng), e452-65 (Fr).

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Guidelines and algorithms

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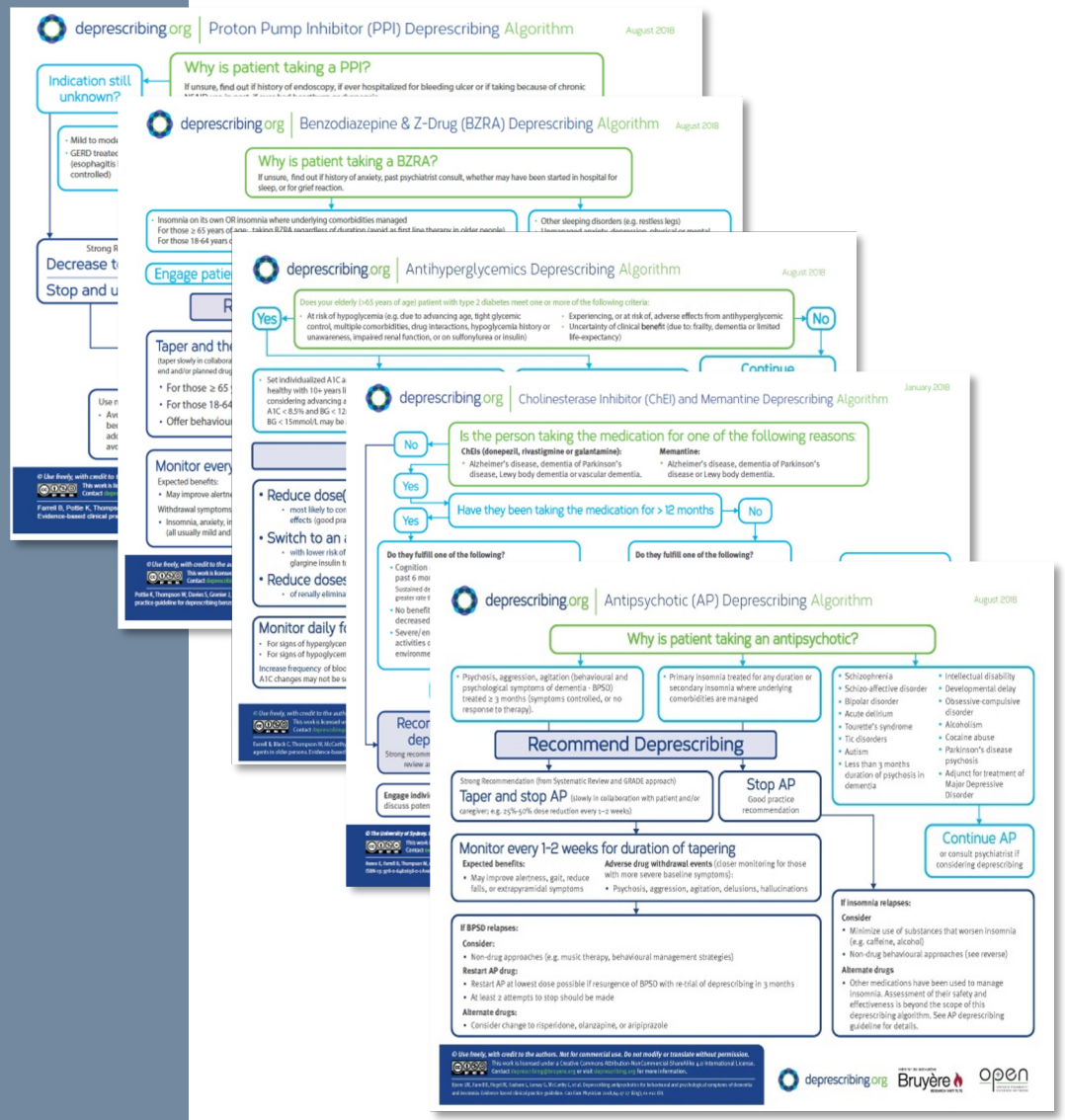
Guidelines and Algorithms



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Website

Clinician resources

Patient education

Social media

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Spreading the word

Our Digital Reach

11,800
X/Twitter Followers

1,917
Newsletter Subscribers

>3 million
Total Page Views

1,190
YouTube Subscribers
> 78 K Total Views

~85,000
Unique Website Users
Annually

2,992
LinkedIn Followers
* Since June 2023

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Translations and modifications to date

Implementation projects

Community pharmacies

Long-term care

Hospital

Kaiser Permanente, IHI, Choosing Wisely, others

Upcoming work

Statin deprescribing guideline

Updating guidelines

Supporting others

Diuretics, antihypertensives

Treatment guidelines

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QUESTIONS

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Grade	Definition
High ⨁⨁⨁⨁	We are very confident that the true effect of statin discontinuation lies close to our estimate of the effect
Moderate ⨁⨁⨁O	We believe the true effect is probably close to our estimate of the effect
Low ⨁⨁OO	The true effect might be markedly different from our estimate of the effect
Very low ⨁OOO	We have very little confidence in our estimate of the effect, the true effect is probably markedly different from our estimate of the effect

Certainty of evidence

Strength of recommendation

	Strong Recommendation	Weak/Conditional Recommendation
For patients	Most would want the recommended course of action	Many individuals would want the recommended course of action, but some may not. People will want to talk to a healthcare professional to make the decision
For clinicians	Most individuals should receive this course of action	Different choices will be appropriate for different patients, and you must help each patient arrive at a management decision consistent with their values and preferences.
Example Wording	“We recommend” “Clinicians should”	“We suggest” “Clinicians might” “We conditionally recommend”