Deprescribing educational framework: challenges for implementation and educational scholarship

Presented by :

Barb Farrell, Lalitha Raman-Wilms, Cheryl Sadowski



Who is here today?

- 1. In which Canadian province/territory, or country outside Canada, are you located?
- 2. What role(s)/position(s) do you hold? (check all that applies)
- 3. If checked "Other" as role invitation to provide more information.



Session objectives

By the end of this session, participants will demonstrate an understanding of:

- 1. The seven **Interprofessional Deprescribing competencies** and factors that need to be addressed to facilitate deprescribing
- 2. **Steps** for programs who plan **to incorporate deprescribing** into health professional curricula
- 3. Strategies for teaching and assessing relevant knowledge and skills within curricula
- 4. Evaluation of teaching and assessment of deprescribing competencies



Conflict of interest

Faculty: Barbara Farrell

Relationships with financial interests: none

- Speakers Bureau/Honoraria: United States
- Deprescribing Research Network
- Consulting Fees: none
- Patents: N/A

Faculty: Cheryl A. Sadowski

Relationships with financial interests :

- Grants/Research Support: Pfizer Canada ULC
- Speakers Bureau/Honoraria: GSK
- Consulting Fees: N/A
- Patents:N/A



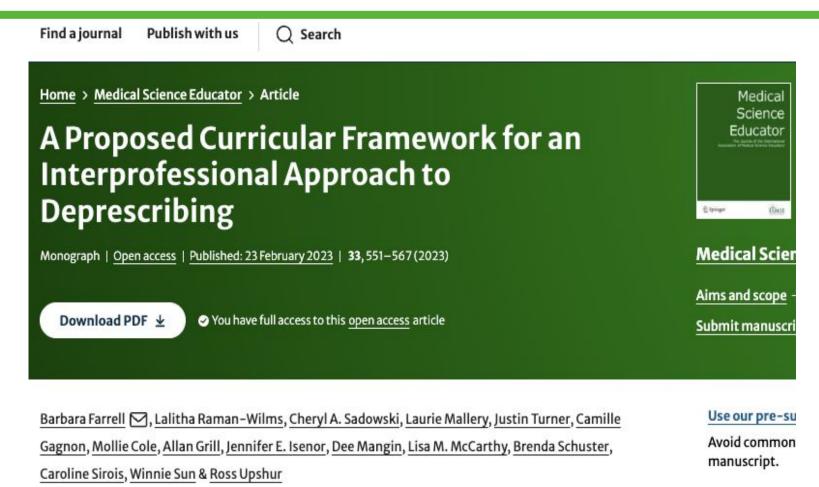
Canadian Medication Appropriateness and Deprescribing Network

Faculty: Lalitha Raman-Wilms

Relationships with financial interests : None

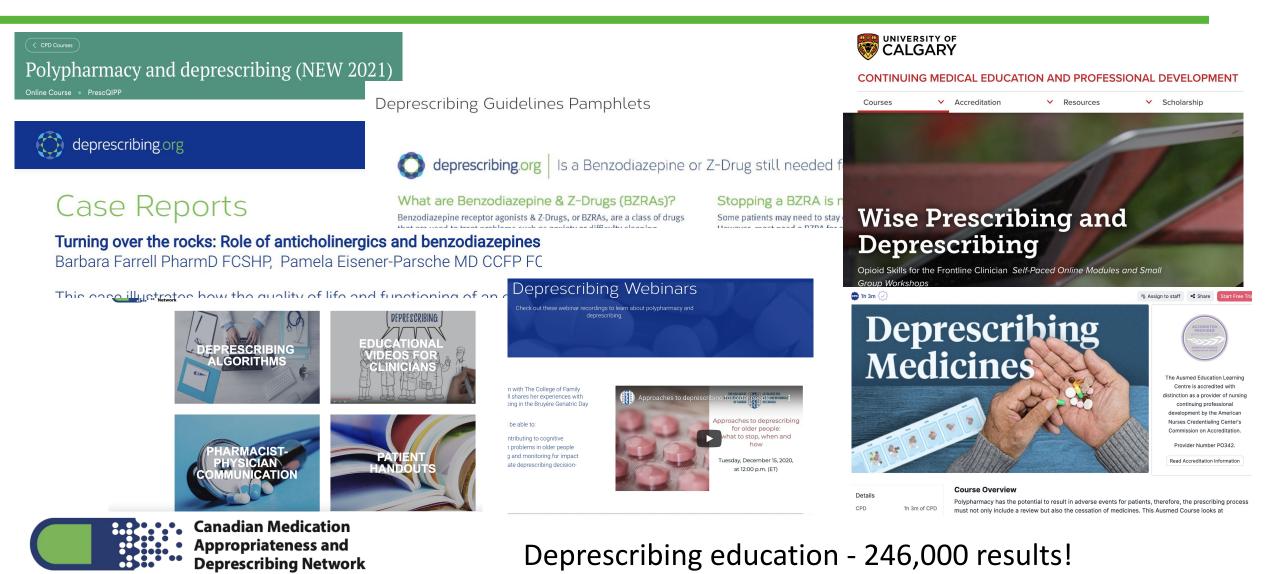
- Grants/Research Support: University of Manitoba;
- Centre for Learning, Research and Innovation in LTC
- Speakers Bureau/Honoraria: N/A
- Consulting Fees and Patents: N/A

Deprescribing curriculum publication





Resources to teach & learn deprescribing



Starting points...the building blocks

ROYAL PHARMACEUTICAL SOCIETY

A Competency Framework for all Prescribers

PUBLISHED: SEPTEMBER 2021 EFFECTIVE DATE: SEPTEMBER 2022 REVIEW DATE: SEPTEMBER 2026



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The Prescribing Safely Canada Physician Prescribing Competencies



Susan Brien, MD, MEd, CSPQ, PRCSC Ming-Ka Chan, MD, MHPE, FRCPC Allan Grill, MD, CCP(COE), MPH, FCCP, CCPE Anne Holbrook, MD, PharmD, MSc, FRCPC Angele Landriaut, RN, BScN, M4(cd) Anne Matiow, MD MSc FRCPC





May 2018



BJCP British Journal of Clinical Pharmacology

Review of deprescribing processes and development of an evidence-based, patient-centred deprescribing process

Emily Reeve,^{1,2} Sepehr Shakib,² Ivanka Hendrix,³ Michael S. Roberts^{4,5} & Michael D. Wiese¹

¹Sansom Institute, School of Pharmacy and Medical Sciences, University of South Australia, Adelaide, South Australia, Australia, ²Department of Clinical Pharmacology, Royal Adelaide Hospital, Adelaide, South Australia, Australia, ³Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia, Australia, ⁴School of Pharmacy and Medical Sciences, University of South Australia, Adelaide, South Australia, Australia and ⁵Therapeutics Research Centre, School of Medicine, University of Queensland, Brisbane, Queensland, Australia



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Health Care Provider Committee

Healthcare provider learners

Physicians, Pharmacists and Nurses indicate a clear role in management of polypharmacy; other health professionals indicate a supporting role¹

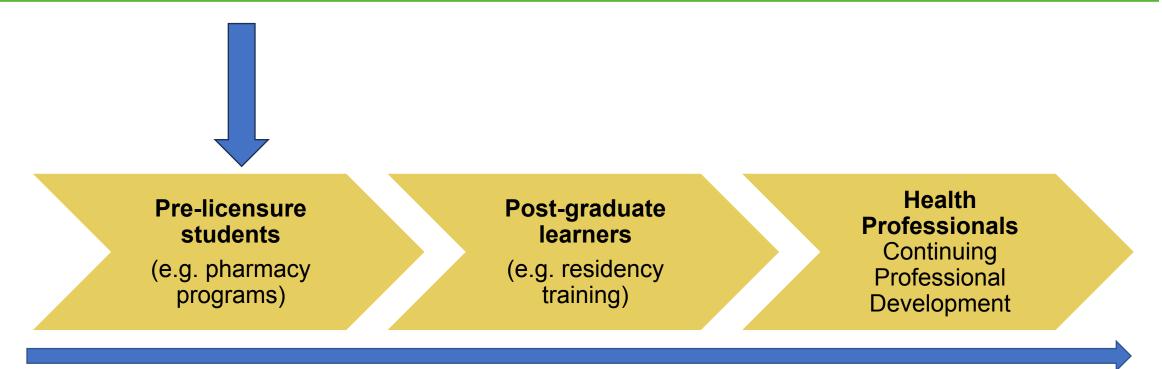


Life-long Learning Learning and practice culture



Canadian Medication Appropriateness and Deprescribing Network Ref: ¹Farrell et al. Canadian Pharmacists Journal. 2018; <u>https://doi.org/10.1177/1715163518804276</u>

Healthcare provider learners

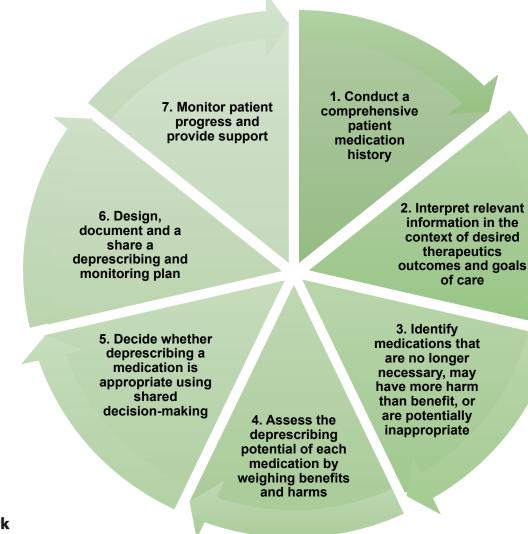


Life-long Learning Learning and practice culture



Canadian Medication Appropriateness and Deprescribing Network Ref: ¹Farrell et al. Canadian Pharmacists Journal. 2018; <u>https://doi.org/10.1177/1715163518804276</u>

Competencies for deprescribing¹



¹Farrell B, Raman-Wilms L, Sadowski C, et al. *Med Sci Educ* 2023



Appropriate use of medications through effective deprescribing

DEPRESCRIBING

COMPETENCIES

Knowledge, Skills, Attitudes, Clinical judgment

- Patient Determinants (clinical, Psychological, Social, Financial, Physical)²
- Medication Information
- Health & medical Information

<u>CIHC¹ Competency Framework</u>

- Communication
- Patient-centred care
- Role clarification
- Team functioning
- Collaborative leadership
- Conflict resolution

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INTERPROFESSIONAL COMPETENCIES

HEALTH SYSTEMS

Time & effort, Resource constraints, Fragmented care, Culture

Barriers & Facillitators³

- Comprehensive approach
- Time consuming process
- Involves many different HPs
- Over multiple consultations
- Access to health records

¹Canadian Interprofessional Health Collaborative ²Todd A et al. BMC Geriatr. 2018; 18: 295.

³Table 1, Raman-Wilms et al. Deprescribing in *Encyclopedia of Evidence in Pharm Public Health and Health Services Research in Pharmacy*, © Springer Nature Switzerland AG 2023. Z.-U.-D. Babar (ed.)

Miller's Framework for assessment of clinical skills

• **Knowledge** e.g. written exams • **Competence** - apply knowledge: clinical patient problems; patient cases **Behaviour** Does • Performance - demonstrate clinical (Action) skills; use of patient actors; Observed Structured Clinical Exam (OSCE) Shows how • Action: provide patient care; direct (Performance) observation; deprescribes during experiential learning Knows how Cognition (Competence) Curriculum Assessment Knows (Knowledge)



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Miller GE. The assessment of clinical skills/ competence/performance. Academic Medicine (Supplement) 1990; 65: S63-S7.

Framework objectives

- To enable healthcare educators to integrate and assess deprescribing knowledge and skills into teaching and clinical practices.
- To provide learning outcomes at different levels, as well as teaching and assessment strategies.



The Framework includes...

A list of **knowledge and skills**

proposed for each competency (Table 1)





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Table 1

Competency 1: Conduct a comprehensive patient medication history

Aligns with:

RCPSC Competency 1: Perform a comprehensive assessment of the patient to identify a therapeutic target

RPS Competency 1: Assess the patient

Knowledge required

- The healthcare professional learner must know the importance of gathering the following:
- 1. Name of each medication and substance (prescription and non-prescription, including vitamins, supplements, natural health products, herbal products and other substances e.g., use of alcohol, caffeine, cannabis) currently used or used in the past
- 2. Name of prescriber, medication indication, dose and frequency, prescribed directions, how actually used, duration of use of each of the above
- 3. Allergies, side effects, intolerances and contraindications to medications and substances
- 4. Relevant medical history including pharmacological and nonpharmacological approaches to management of medical conditions
- Patient's/care partner's reason for medication use and expectations, impression of effectiveness or side effects and reasons for stopping or dose reduction for each of above
- 6. Patient's/care partner's beliefs, values, goals of care and perspectives regarding medication use and medical conditions



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Skills required

The healthcare professional learner demonstrates that they are able to:

- 1. Establish and maintain a therapeutic relationship with the patient and family/ care partners, demonstrate understanding of patient's values, beliefs and goals of care related to medication use and their medical conditions
- 2. Establish and maintain a relationship with the patient's interprofessional care team
- 3. Gather and document reliable medication and health condition information, which may require obtaining information from the patient, family/care partners, medical record, family physician, specialist consults, nursing notes, and/or pharmacist/pharmacy records
- 4. Use effective communication in accord with patient need, such as consideration being given for language difficulties, sensory impairment, speech issues, cognitive ability and diverse backgrounds to ensure accuracy of information

The Framework includes...

A list of **knowledge and skills**

proposed for each competency (Table 1)

2 Teaching and assessment strategies that evolve with learner level (Table 2)





Table 2

Table 2 Teaching and assessment of knowledge and skills related to deprescribing in pre-licensure healthcare professional curriculum

Proposed learning outcomes

Introductory/early learner

Identify individuals and groups such as older adults who are vulnerable to medication-related problems adults Provide definitions for 'polypharmacy' and 'deprescribing' medications (PIMs) List tools used to identify PIMs Identify high risk medications in a given patient case Demonstrate an understanding of challenges faced by older adults taking multiple medications

Mid-level learner

Discuss the process used to guide prescribing in multimorbid/ complex patients Describe the prevalence of medication-related harm in older Identify patient related factors that increase the risk for medication-related problems, including polypharmacy Apply tools to identify PIMs Describe the criteria used to define potentially inappropriate Describe patient beliefs that may impact on a patient's medication related decisions Describe how the patient's family/care partners may play a role in polypharmacy and deprescribing management Identify and apply tools to make decisions about and implement deprescribing Determine benefits and harms of deprescribing a medication Describe the role of different healthcare professionals in managing polypharmacy and implementing deprescribing Demonstrate appropriate documentation and communication strategies to execute a deprescribing plan Examine the ethics and conflicts of interest for healthcare professionals in deprescribing Evaluate advocacy efforts regarding medication safety, prescribing, and deprescribing efforts in older adults

Advanced learner

Critique tools used to identify PIMs and to deprescribe medications Use a systematic process for deprescribing Identify patients who should be prioritized/targeted for deprescribing Consider the patient's preferences, care goals and life expectancy in deciding whether to continue or deprescribe a medication Using shared decision-making, negotiate a deprescribing plan for

the medication with the patient and his/her caregivers Design care plans and make deprescribing decisions for high-risk

patient groups (including those with dementia, with frailty,

receiving palliative care, with multimorbid conditions)

Identify opportunities for deprescribing in all settings where care is provided (including acute care, primary care, long-term care)

Utilize cognitive dissonance or other communications strategies to promote deprescribing

Appraise public health policy relating to medications and deprescribing in older adults



The Framework includes...

A list of **knowledge and skills**

proposed for each competency (Table 1)

2 Teaching and assessment strategies that evolve with learner level (Table 2)

A toolkit of **practical deprescribing resources** for learning (Table 3)





Table 3

Table 3 Deprescribing Resources Toolkit

General information and resources about deprescribing

- Canadian Deprescribing Network website (resources for health professionals and the public) www.deprescribingnetwork.ca
- Bruyère Deprescribing Research Team website www.deprescribing.org/ and YouTube channel (whiteboard videos about deprescribing guidelines, testimonials, and webinars) www.youtube.com/channel/UCwqOu26_nAMmUyb3fyKxBbw
- Scottish Government Polypharmacy Model of Care Group. Polypharmacy Guidance, Realistic Prescribing 3rd Edition, 2018. Scottish Government website www.managemeds.scot.nhs.uk/ and guide www.therapeutics.scot.nhs.uk/wp-ontent/uploads/2018/04/Polypharmacy-Guidance-2018.pdf
- Deprescribing: A Practical Guide: NHS Derby and North Derbyshire Clinical Commissioning Group Medicines Management Team. www. derbyshiremedicinesmanagement.nhs.uk/assets/Clinical_Guidelines/clinical_guidelines_front_page/Deprescribing.pdf

Educational resources for teaching of deprescribing competencies

- Polypharmacy and Deprescribing online module (Bruyère Continuing Care) www.bruyere.org/en/polypharmacy-deprescribing
- Case reports with worksheets and instructions for interprofessional case discussions about polypharmacy and deprescribing:
 - Farrell B, Eisener-Parsche P, Dalton D. Turning over the rocks The role of anticholinergics and benzodiazepines in cognitive decline and falls. Can Fam Physician. 2014;60:345–350. www.cfp.ca/content/60/4/345
 - Farrell B, Monahan A, Thompson W. Revisiting ongoing medication use in a frail 93 year old experiencing possible adverse effects. CMAJ. 2014;186:445–449. www.cmaj.ca/content/186/6/445
 - Farrell B, Shamji S, Dalton D. Managing chronic disease in the frail elderly More than just adhering to clinical guidelines. Can Pharm J. 2014;147:89–96. www.ncbi.nlm.nih.gov/pmc/articles/PMC3962056/
 - Farrell B, Monahan A, Ingar N. Identifying and managing drug-related causes of common geriatric symptoms. Can Fam Phys. 2014;60:147– 153. www.cfp.ca/content/60/2/147



The Framework includes...

A list of **knowledge and skills**

proposed for each competency (Table 1)

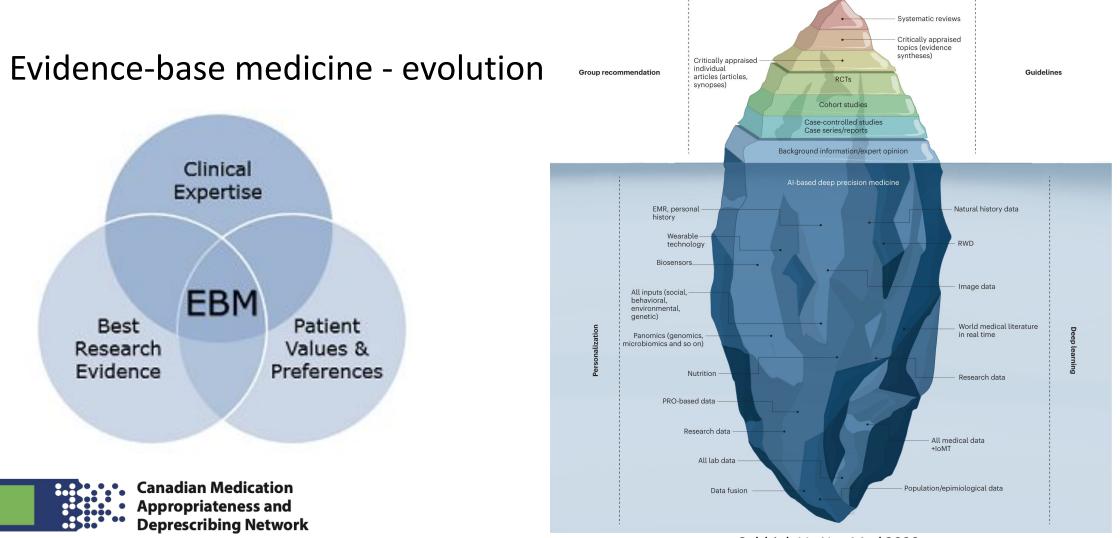
2 Teaching and assessment strategies that evolve with learner level (Table 2)

A toolkit of **practical deprescribing resources** for learning (Table 3)

4 **A mapping exercise** to help **assess** consistencies and **gaps** in curricula







Subbiah V. Nat Med 2023

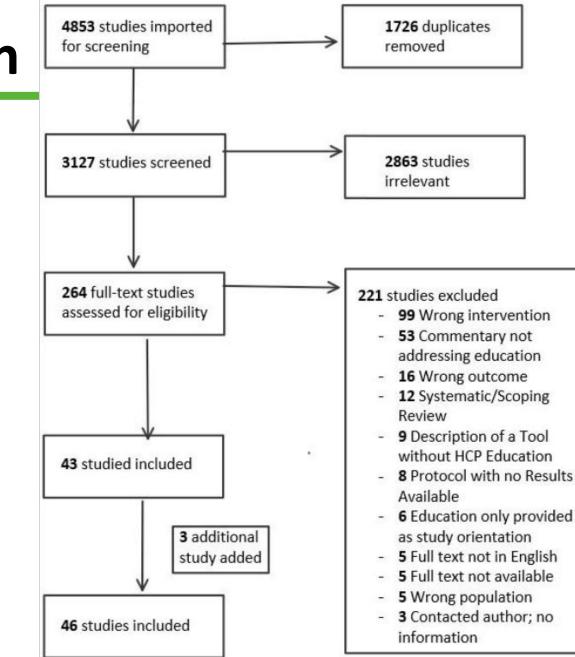
Evidence-based practice vs Evidence-based education

- Would you describe yourself as an evidence-based clinician?
- How does this apply to your teaching activities?
 - Are you an evidence-based preceptor?
 - Are you an evidence-based presenter or lecturer?
 - Are you an evidence-based lesson planner?
 - Have you generated evidence related to your education?



Evidence-based

- Education is an intervention
- How can we study this intervention?
- Scoping review (preliminary)
 - n=25 full text papers
 - n=15 conference abstracts
 - n=6 white papers





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Sadowski, et al. AGS 2022

Delivery

- n=25 full text
- n=20 group teaching
- n=19 case based teaching
- n=3 one-on-one teaching
- n=5 self-directed learning

Design

n=9 studies had a control group

Participants

- n=12 MD
- most studies interprofessional

Outcomes

- learner experience
- self-efficacy
- post-tests
- n=4 had long-term follow-up
- n=22 examined medications



Areas for growth

- Are you valuing education as an intervention?
- Can you measure the outcomes of your educational intervention?
- Could others learn from your educational interventions?
- Can we make space in our deprescribing publications, meetings, and presentations to discuss education?



Challenges and Successes

The writing and publication process:

- managing ++author input
- targeting a journal
- responding to reviewers

Next: Knowledge mobilization!



Mapping processes (Supplementary File)

RCPSC Prescribing competency	Relevant Deprescribing competency	Examples where relevant knowledge and skills are <u>taught</u> within the curriculum	Examples where knowledge and skills related to the competency are <u>assessed</u>	Are knowledge and skills for deprescribing taught at an <u>appropriate level</u> for learners?	Gaps or opportunities
1.Perform a comprehensive assessment of the patient to identify a therapeutic target	1.Conduct a comprehensive patient medication history				
2.Consider optimal pharmacological and nonpharmacological options	2.Interpret relevant information in the context of desired therapeutic outcomes and goals of care 4.Assess deprescribing potential of each medication by weighing benefits and harms				
3.Prescribe medications appropriate to the patient's diagnoses, considering cost and risk of benefit and harm.	2.Interpret relevant information in the context of desired therapeutic outcomes and goals of care 4.Assess deprescribing potential of each medication by weighing benefits and harms				



Where are we now?

What is needed?

- Programs address deprescribing within clinical therapeutics or medication management courses
- Topics are taught using didactic, case-based, problem-based approaches and through seminars
- Limited by faculty with experience in geriatrics
- Students engage in deprescribing during their experiential education
- Within Geriatrics course or integrated into other courses
- Not consistently taught; variability between programs

What needs to be taught

- Complex task; need to develop critical thinking
- A continuum of **prescribing; integrate** teaching of both
- Non-drug options
- How to engage patients in decision-making
- Communication, collaborative, team-skills

Teaching / Learning strategies

- Interprofessional learning; following professional specific foundational concepts
- To include patient partners in education
- Integration of knowledge and skills; case scenarios, debates, role-playing

What is needed

- Assessment is important
- National licensing exams / program accreditation
- Need to build capacity
- Continuing professional development workshops
- Health system common health record; access
- Research is needed; Evaluation of strategies



Where to start

In the next year:

 Examine what needs to happen within your profession, your program, and across interprofessional curricula

In the next 2 years:

- \circ Map the curriculum
- o Develop a plan
- Create opportunities within curricula to implement deprescribing competencies and determine how these will be taught and assessed
- Utilize practical tools (Table <u>3</u>) throughout

In the next 4–6 years:

 Evaluate the core deprescribing competencies of graduates to determine the effectiveness of curricular changes

Annually:

 \circ $\,$ Share learnings and outputs $\,$

A Proposed Curricular Framework for an Interprofessional Approach to Deprescribing | Medical Science Educator (springer.com)



Discussion

- 1. What are learnings from incorporating deprescribing within your curricula?
- 2. What are challenges to assessment of deprescribing in programs?
- 3. How can we determine best practices in teaching and assessment of deprescribing competencies?

