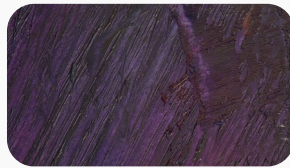


Unpacking Polypharmacy

A Roadmap to Safer Medication Use in Older Adults

Dr. Julie Bekius, APRN, DNP, FNP-BC



Objectives

1

Define deprescribing and explain its importance in reducing polypharmacy and improving health outcomes in older adult patients.

2

Identify the roles of healthcare team members and caregivers in the deprescribing process, including assessment, communication, advocacy, and education.

3

Apply evidence-based tools and strategies (e.g., Beers Criteria, STOPP/START, FRAME model) to support safe and effective deprescribing in clinical and home settings.

4

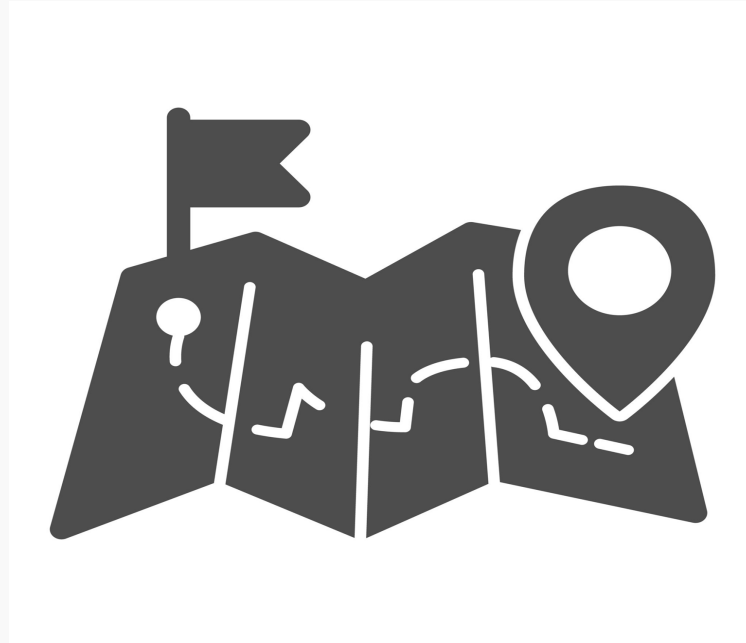
Recognize common barriers to deprescribing and explore practical solutions to overcome resistance from patients, families, and healthcare teams.

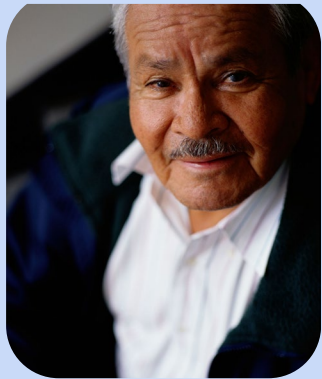
5

Engage in collaborative decision-making that aligns medication use with the goals, values, and preferences of older adults and their support networks.

Format: Case Study

Leo's Story





Mr. Leonard “Leo” Rivera

Age 79



Medical History:

High blood pressure (hypertension), Type 2 diabetes, osteoarthritis, GERD, insomnia, forgetfulness

Social History:

Retired accountant, Army veteran, recently widowed, living independently, 2 adult children, daughter Clara lives in the area

Understanding Polypharmacy



“Polypharmacy”

Poly - many
Pharmacy - medications

5 or more prescription medications

Not always negative!



Prevalence

1 in 5 older adults

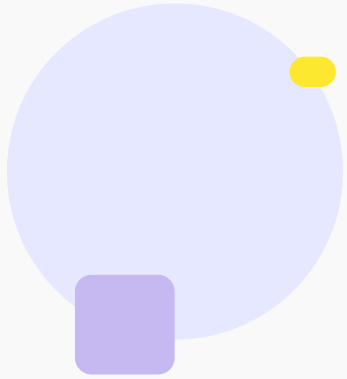
Increased with
comorbid conditions



Priority

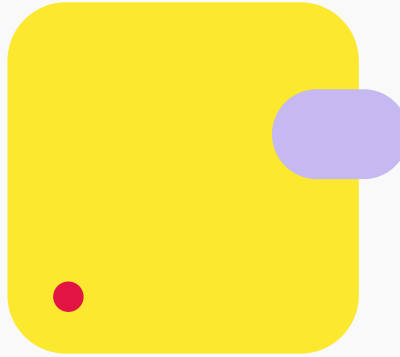
- Fall risk
- Cognitive changes
- Hypotension
- Adverse drug interactions
- Reduced adherence

Polypharmacy **D**ecreasing the Risk



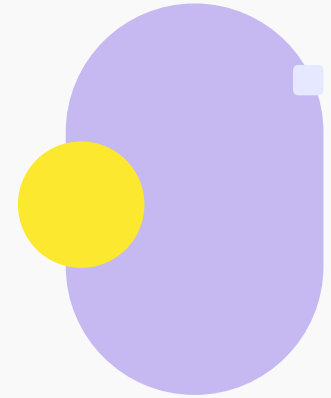
Health Care Team:

- Regular Medication Reviews
- Tailored Pharmacotherapy
- Patient and Caregiver Education



Prescribers:

- Screening Tools
- Deprescribing Protocols



Patient, Caregivers:

- Monitor for (and report) Adverse Effects

Consider DePrescribing

1

Deprescribing is:

Supervised
process of
medication
reduction

2

Triggers

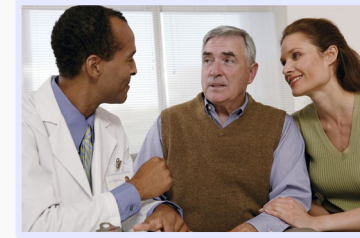
- No longer indicated
- misaligned with goals of care
- Adverse effects
- Prescribing cascades

3

Barriers

- Fear of withdrawal effects
- Time constraints
- Lack of training or tools
- Resistance or satisfaction with current regimens

Deprescribing: Role of Shared Decision Making



Patient

Share goals, values, preferences

Report symptoms, functional changes

Verbalize what matters most for QOL

Monitor and provide feedback

Caregiver/Family Member

Provide observation

Support communication

Advocate for patient priorities

Assist with follow-through

Prescriber

Lead clinical decision-making

Review guidelines and identify potentially inappropriate medications

Explain options, risks, outcomes

Create and oversee plan

Significant Event



The Fall

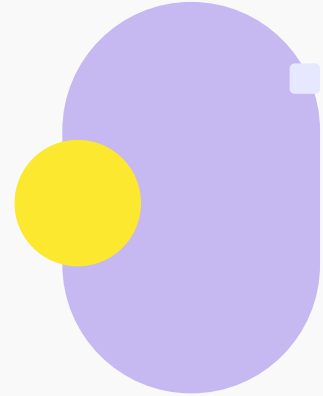
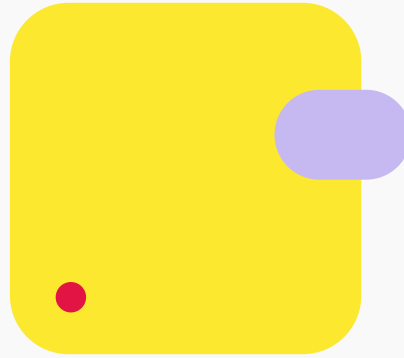


Hospitalized for confusion
and acute kidney injury



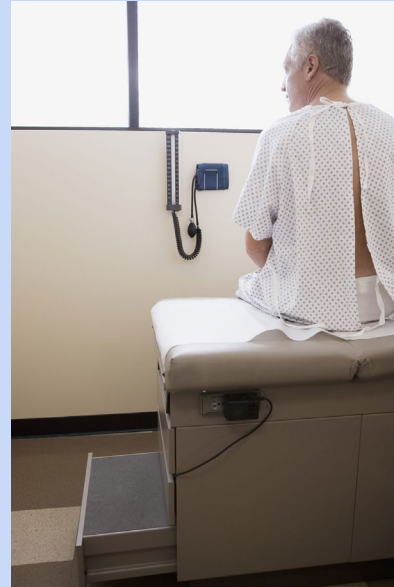
Unclear medication
adherence at home

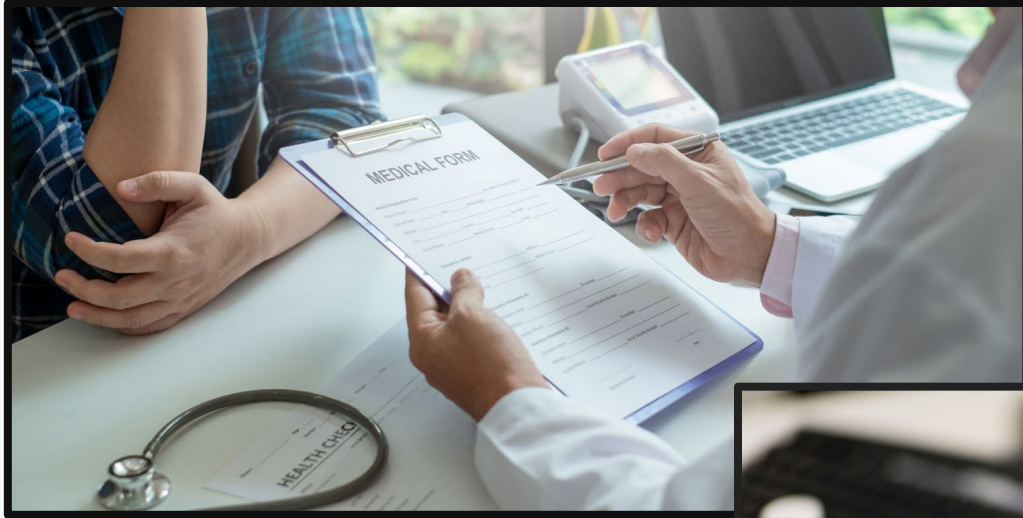
What Factors Could Have Led to Leo's Fall?





Follow Up Visit





Medication Reconciliation



Prevention of medication errors



Supports safe
deprescribing



Improves patient outcomes



Enhances
Communication



Aligns medications with patient
goals

Medication Reconciliation Process

1

Compare

- Bring medication list and medication bottles
- Check patient medication list with those listed in medical record as current
- Confirm with patient how they are taking each medication

2

Align Records

- Healthcare team: assess recent care transitions and medication changes
- Remove/add medications

3

Medication Safety Education

- Dispose of other medications in the home
 - Use of pill minders/pill boxes

Mr. Rivera Medication List

Medication	Reason	Medication	Reason
Lisinopril 20 mg daily	Blood pressure	Benadryl 50 mg nightly as needed	Allergies and Sleep
Prilosec OTC daily	Heartburn	Multivitamin daily	Supplement
Hydrochlorothiazide 25 mg daily	Blood pressure	Tylenol P.M. 1 tablet nightly	Sleep
Metformin 500 mg 2x/d	Diabetes	Colace as needed	Constipation
Omeprazole 20 mg daily	GERD	Claritin 1 tablet daily	Allergies
Ibuprofen 400 mg 3x/d as needed	Arthritis/pain	Metoprolol 50 mg 2x/d	Blood pressure
Sertraline 25 mg daily	Depression	Melatonin 3 mg nightly	Sleep

FRAME: Technique for Deprescribing Conversations

F

Fortify trust

R

Recognize
willingness/barriers

A

Align with goals

M

Manage emotion

E

Empower patients and
caregivers

Medication List - Assess for Duplication

Medication	Reason			Medication	Reason
Lisinopril 20 mg daily	Blood pressure	Duplicate reason	Duplicate reason	Benadryl 50 mg nightly as needed	Allergies and Sleep
Prilosec OTC 20 mg daily	Heartburn	Duplicate medication		Multivitamin daily	Supplement
Hydrochlorothiazide 25 mg daily	Blood pressure	Duplicate reason	Duplicate reason	Tylenol P.M. 1 tablet nightly	Sleep
Metformin 500 mg 2x/d	Diabetes			Colace as needed	Constipation
Omeprazole 20 mg daily	GERD	Duplicate Med	Duplicate reason	Claritin 1 tablet daily	Allergies
Ibuprofen 400 mg 3x/d as needed	Arthritis/pain		Duplicate reason	Metoprolol 50 mg 2x/d	Blood pressure
Sertraline 25 mg daily	Depression		Duplicate reason	Melatonin 3 mg nightly	Sleep

Medication List Duplicates (con't)

Medication	Reason		Medication	Reason
Lisinopril 20 mg daily	Blood pressure		Benadryl 50 mg nightly as needed	Allergies and Sleep
Prilosec OTC daily	Heartburn	Duplicate medication	Multivitamin daily	Supplement
Hydrochlorothiazide 25 mg daily	Blood pressure	Duplicate reason	Tylenol P.M. 1 tablet nightly	Sleep
Metformin 500 mg 2x/d	Diabetes		Colace as needed	Constipation
Omeprazole 20 mg daily	GERD		Claritin 1 tablet daily	Allergies
Ibuprofen 400 mg 3x/d as needed	Arthritis/pain		Metoprolol 50 mg 2x/d	Blood pressure
Sertraline 25 mg daily	Depression		Melatonin 3 mg nightly	Sleep

Tools to Assist in Deprescribing

STOPP/START

Screening Tool of Older
Person's Prescriptions/
Screening Tool to Alert to
Right Treatment

A structured, physiologic systems–based tool for older adults (65+)

STOPP: flag potentially inappropriate medications (PIMs) to deprescribe

START: identify potential prescribing omissions (PPOs) where evidence–based therapy should be initiated.

BEERS Criteria

Identify potentially inappropriate medications (PIMs) for Adults 65+

Focus on high–risk medication classes

Guidance on drug–disease and drug–drug interactions

Medication List - Application of Tools

Medication	Reason		Medication	Reason
Lisinopril 20 mg daily	Blood pressure	High fall risk	Benadryl 50 mg nightly as needed	Allergies and Sleep
Prilosec OTC daily	Heartburn		Multivitamin daily	Supplement
Hydrochlorothiazide 25 mg daily	Blood pressure	High fall risk	Tylenol P.M. 1 tablet nightly	Sleep
Metformin 500 mg 2x/d	Diabetes		Colace as needed	Constipation
Omeprazole 20 mg daily	GERD		Claritin 1 tablet daily	Allergies
Ibuprofen 400 mg 3x/d as needed	Arthritis/pain	BEERS: Risk of GI bleed	Metoprolol 50 mg 2x/d	Blood pressure
Sertraline 25 mg daily	Depression	BEERS - mixed evidence	Melatonin 3 mg nightly	Sleep

Updated Medication List

Medication	Reason	Medication	Reason
Lisinopril 20 mg daily	Blood pressure	Claritin 1 tablet daily as needed	Allergies
Metformin 500 mg 2x/d	Diabetes	Melatonin 3 mg nightly As needed	Sleep
Omeprazole 20 mg daily	GERD		
Sertraline 25 mg daily	Depression		
Metoprolol 50 mg 2x/d	Blood pressure		
Multivitamin daily	Supplement		
Colace as needed	Constipation		

Deprescribing: Medication Safety



- Reason a medication is being reduced or stopped
- Possible withdrawal or rebound symptoms
- What to monitor at home
- How to follow the tapering plan safely
- Risks of OTC medications and supplements
- Keeping an updated medication list
- Safe medication storage and disposal
- Communication with all healthcare providers
- Setting realistic expectations
- Encouraging questions and shared decision-making

Strategies to Mitigate Polypharmacy in Older Adults

- Regular medication reviews
- Monitoring for adverse medication effects
- Use of screening tools
- Deprescribing protocols
- Tailored pharmacotherapy
- Interdisciplinary care teams
- Patient and caregiver education





- Resource for patients, caregivers and health care providers

[Deprescribing.org - Optimizing Medication Use](#)

[v2My-Medication-Record-and-Experience.pdf](#)

5 Tips to Manage Polypharmacy



Document the reason for use when prescribing a medication.

These tips were developed with and for clinicians providing primary care to Canadians. For more information about the 5 Tips:

Ask whether a new problem could be caused by a medication.



Scan/Click here

Support your patients to maintain and share a list of their medications.

Conduct medication reviews with your patients or connect them to a trusted health care provider.

Deprescribe and simplify to reduce medication burden.



deprescribing.org

[ismp](https://www.ismp.ca)

Institute for Safe Medication Practices Canada
Institut pour le contrôle des médicaments au Québec du Canada

[CSA
AMA](https://www.csa-ama.ca)

Canada's Drug Agency
L'Agence des médicaments du Canada

Document the reason for use when prescribing a medication.

These tips were developed with and for clinicians providing primary care to Canadians. For more information about the 5 Tips:

Ask whether a new problem could be caused by a medication.



Scan/Click here

Support your patients to maintain and share a list of their medications.

Conduct medication reviews with your patients or connect them to a trusted health care provider.

Deprescribe and simplify to reduce medication burden.



References

- American Geriatrics Society. (2023). American geriatrics society 2023 updated ACS Beers criteria for potentially inappropriate medication use in older adults. *Journal of the American Geriatrics Society*, 71(7),2052–2081.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/jgs.18372>
- CGA Toolkit (2023). STOPP–START v.3: Screening tool of older people's prescriptions (STOPP) and screening tool to alert to right treatment (START). https://www.cgakit.com/_files/ugd/2a1cfa_94280508e6014f3db06594abd0193994.pdf
- Copley, D. M., Manias, E., Watkins, V., & Hutchinson, A. M. (2025). Communication processes related to decision–making in medication management between healthcare providers, older people and their carers: A systematic review. *Health Expectations* (28). 1–25.
<https://doi.org/10.1111/hex.70252>
- Hoel, R. W., Giddings Connolly, R. M., & Takahashi, P. Y. (2021). Polypharmacy management in older patients. *Thematic Review on Aging, Mayo Clinic*, 96 (1), 242–256. <https://doi.org/10.1016/j.mayocp.2020.06.012>
- Jandu, J. S., Mohanaselvan, A., & Bista, S. (2024). Strategies to reduce polypharmacy in older adults. StatPearls Publishing.
<https://www.ncbi.nlm.nih.gov/sites/books/NBK574550/>
- Ngcobo, N. N. (2025) Polypharmacy and deprescribing among geriatric patients. *Aging and Health Research* (5).
<https://doi.org/10.1016/j.ahr.2025.100256>
- O'Mahony, D., Cherubini, A., Guiteras, A. R., Denkinge, M., Beuscart, J–B., Onder, G., Gudmundsson, A., Cruz–Jentoft, A. J., Knol, W., Bhat, G., van der Velde, N., Petrovic, M., & Curtin, D. (2023). STOPP/START criteria for potentially inappropriate prescribing in older people: Version 3. *European Geriatric Medicine* (14), 625–632

Thank You!

