

7th Symposium on Primary Breast Cancer in Older Women

Polypharmacy: Is it relevant?

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Disclosures

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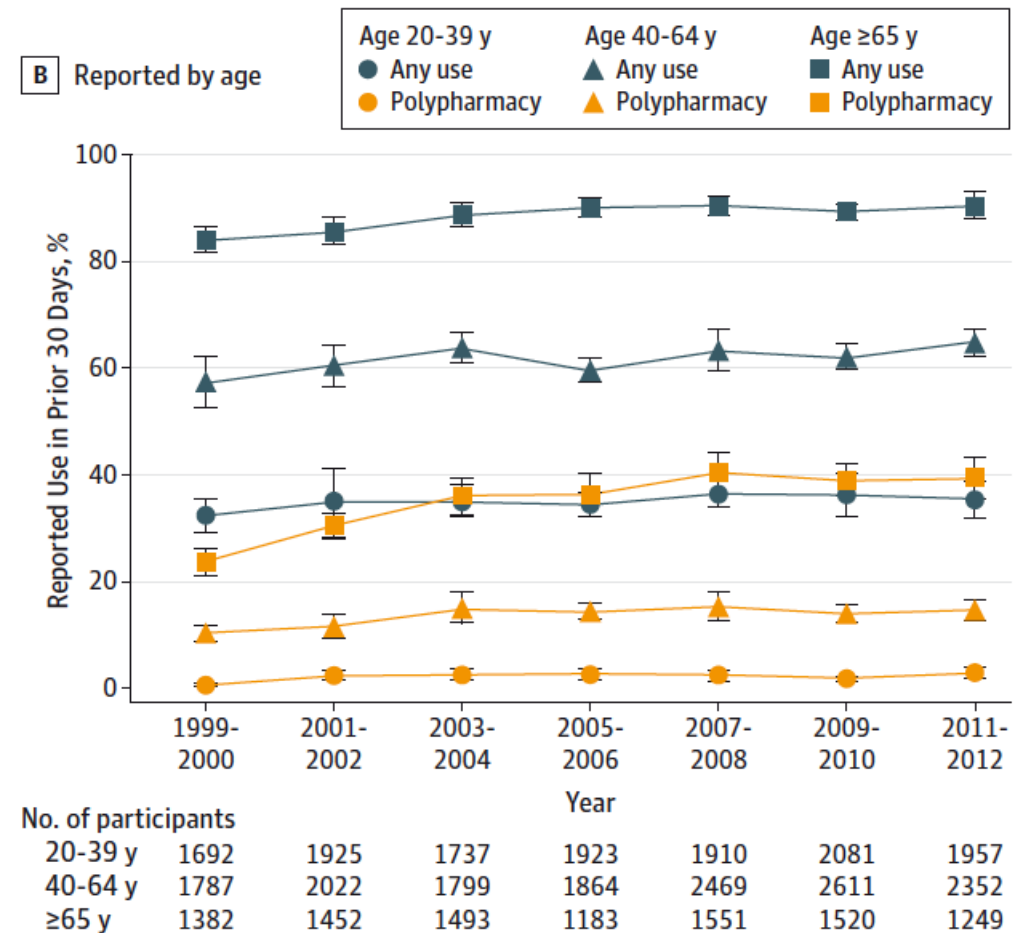
Objectives

1. Understand the risks of polypharmacy in women with breast cancer.
2. Be able to identify and reduce polypharmacy in women with breast cancer.
3. Use tools to facilitate deprescribing for older patients.

Older patients are the highest consumers of medication.

- 9/10 people 65+ reported using 1 or more prescription drug in the prior 30 days
- 39.7% took 5 or more meds
- 1/5 take 10 or more
- 42% take at least 1 OTC
- 49% take at least 1 supplement

National Center for Health Statistics. Health, United States, 2013: With Special Feature on Prescription Drugs. Hyattsville, MD. 2014, available at CDC.goQato, JAMA 2008;300:303-9.
Hines, Am J Geriatr Pharmacother 2011; 9: 364-77

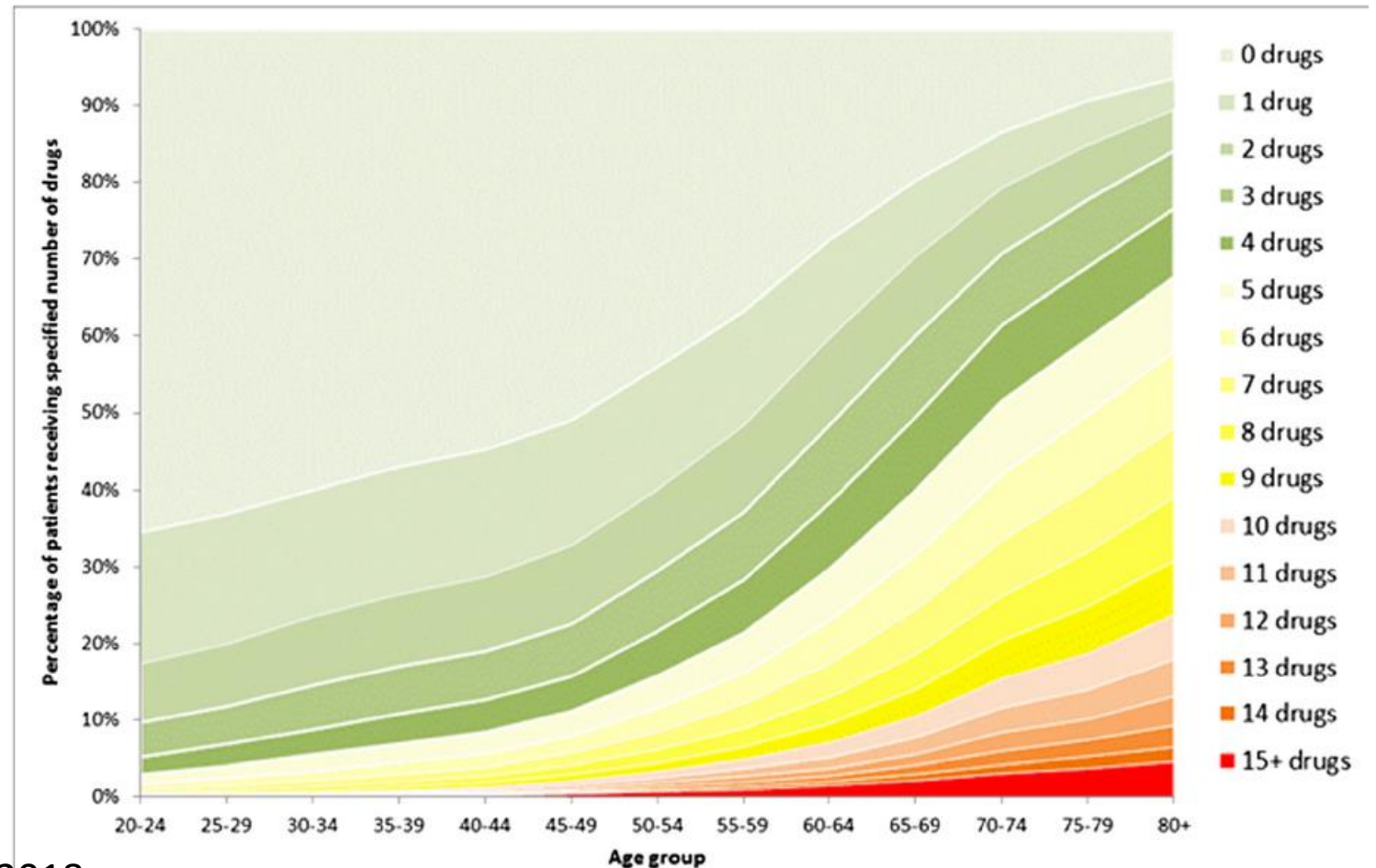


Kantor ED. JAMA. 2015;314(17):1818-1831.

Polypharmacy is prevalent and harmful

- Polypharmacy – significant and consistent risk factor for adverse drug reactions (ADRS), falls, dizziness, hospitalizations
- High use of inappropriate medications
- ADRs in 10-35% ambulatory older patients, responsible for 9% hospital admissions

2010

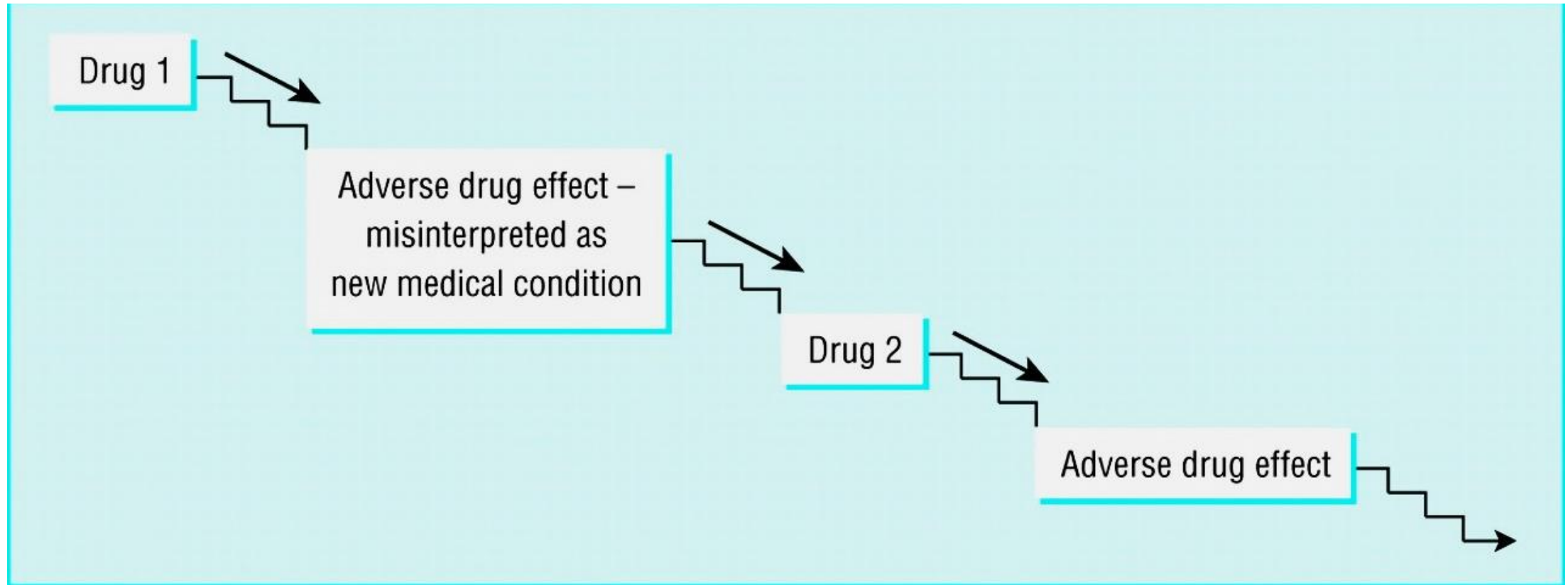


Gray SL et al. *J Am Geriatr Soc* 66:282–288, 2018.

Fried T, et al. *J Am Geriatr Soc*. 2014;62:2261-2272.

Guthrie et al. *BMC Medicine* 2015;13:74.

Prescribing cascades



NSAID >> anti-HTN

Calcium channel blocker >> loop diuretic

Acetylcholinesterase inhibitor >> bladder anticholinergic

Rochon, P. A et al. BMJ 1997;315:1096-1099.

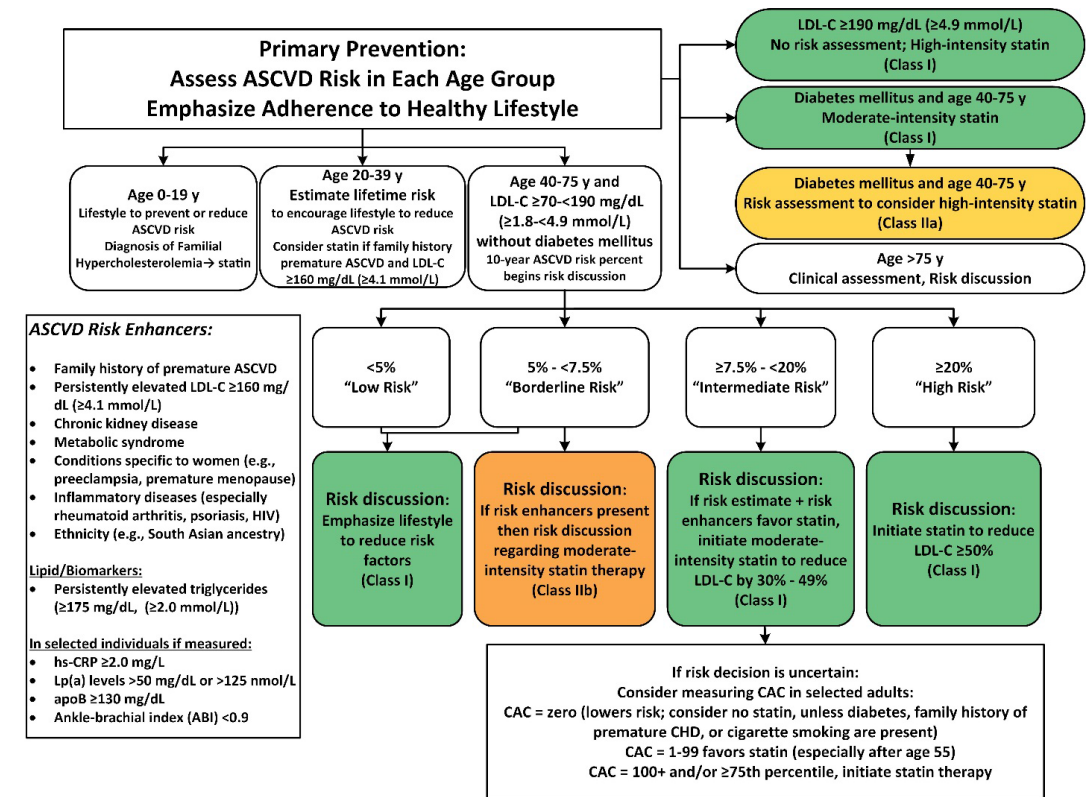
Brath et al. J Am Geriatr Soc, 2018.

Gill SS et al. Arch Intern Med 2005;165:808-813.

Savage RD et al. JAMA Intern Med. 2020;180:643-651.

Preventive medication use among persons with limited life expectancy

- 25 to 70% of patients with advanced illness or at the end of life receive an unnecessary or inappropriate medication
- Clinical practice guidelines favor the application of therapy and do not consider multimorbidity or life-limiting illness



Polypharmacy in patients with cancer

- High prevalence due to comorbidities and addition of supportive care meds
- Nightingale: 234 patients with cancer getting GA
 - mean of 9.2 medications
 - 41% with polypharmacy
 - 40% with a Beers medication, 38% with a STOPP medication
 - Inappropriate med use associated with polypharmacy and with comorbidities
- Polypharmacy as a potential screener for the need for GA
 - Associated with comorbidity, reduced physical status, ADL and IADL impairment

Nightingale et al. JCO. 2015;33:1453-59.

Tse N, et al The Oncologist. 2023; 28: e128–e135

Inappropriate medications and outcomes in cancer

- 500 patients 65+ receiving chemotherapy, 29% getting Beers drugs
 - No association with grade 3-5 chemotoxicity OR 0.97 (0.66-1.43)
 - No association with hospitalizations during chemo, OR 1.01 (0.64-1.61)
- 1595 women with breast cancer getting chemo, 21.3% on a high-risk subset of Beers
 - No association with ER visits, hospitalization or death during chemo, OR 1.23 (0.97-1.57)

Maggiore R et al for CARG. J Am Geriatr Soc 62:1505–1512, 2014.

Karuturi M, Holmes HM, et al. Cancer 2018;124(14):3000-3007.

Polypharmacy and outcomes in cancer

- Polypharmacy
 - Associated with lower overall survival in 2 of 11 studies
 - No association with chemotherapy completion
 - Associated with postoperative complications, functional impairment and possibly chemotherapy related toxicity
- Inappropriate medication use
 - Only associated with outcomes in 3/11 studies
 - Associated with delirium, readmission, progression-free survival

Drug Interactions

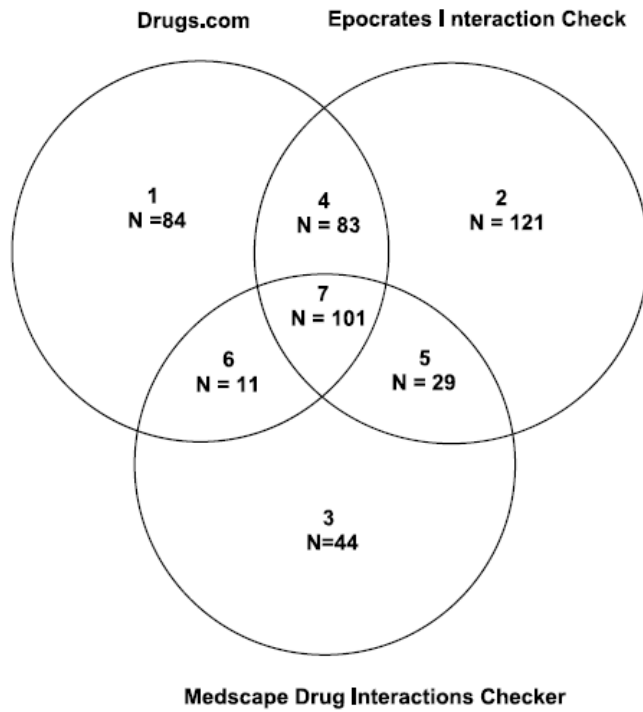


Table 3 – Types and frequency of potential drug interactions identified.

Potential drug interaction classification	Involving all drugs (N = 769)	Patients affected (N = 184)	Involving chemotherapy drugs (N = 225)	Patients affected (N = 112)
	N (%*)	N (%**)	N (%*)	N (%**)
Level 1	82 (10.7)	52 (21.3)	32 (14.2)	25 (10.2)
Level 2	286 (37.2)	126 (52.0)	25 (11.1)	16 (6.6)
Level 3	22 (2.8)	19 (7.8)	0 (0.0)	0 (0.0)
Level 4	274 (35.6)	137 (56.1)	136 (60.4)	87 (35.6)
Level 5	105 (13.6)	77 (31.6)	31 (13.8)	31 (12.7)

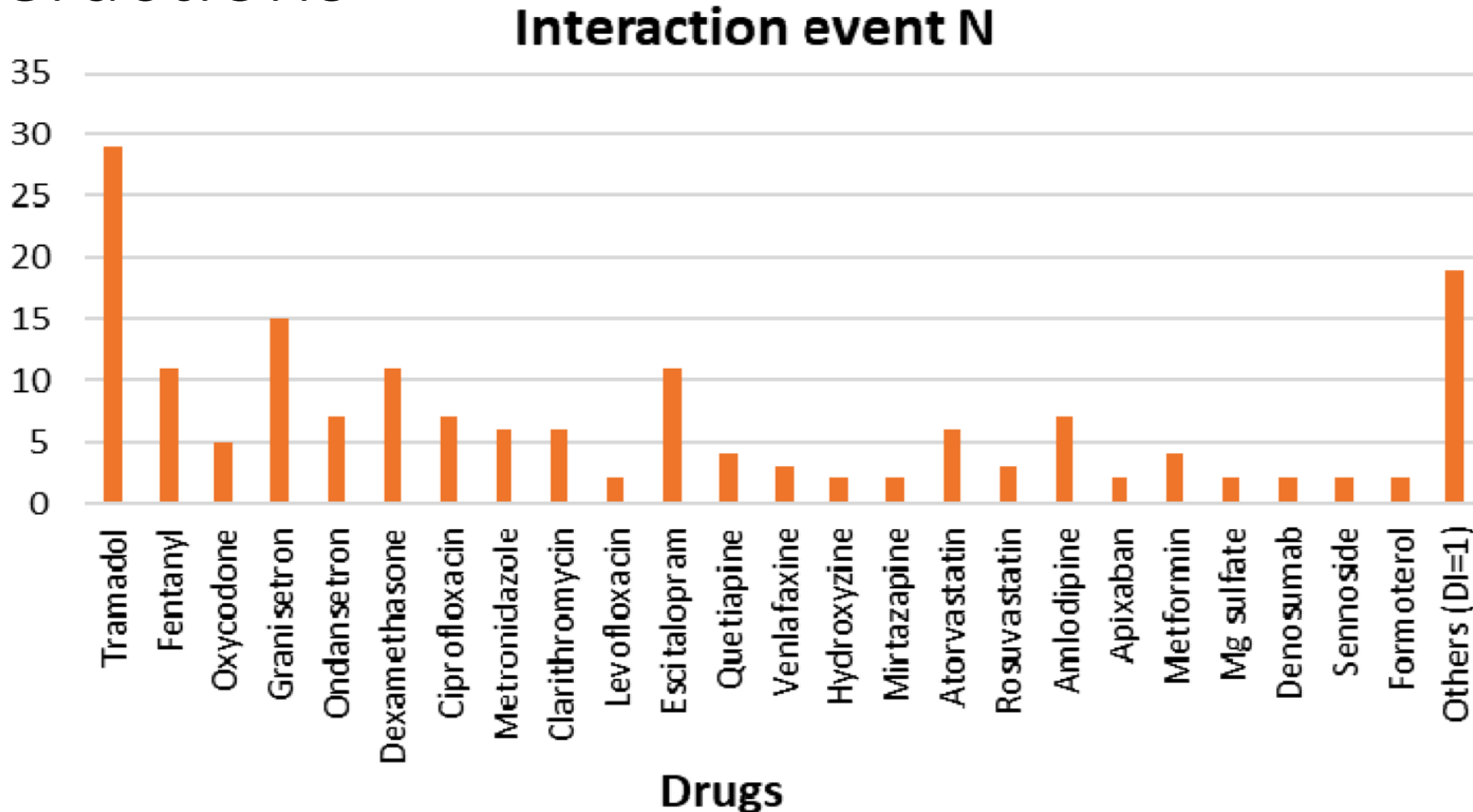
Note: * Represents percentage of the total number of potential drug interactions; ** Represents percentage of total patients in the sample (N = 244).

- Potential interactions common
- Lack of agreement across reference sources

Popa MA, et al. J Geriatr Oncol. 2014;5:307-14.

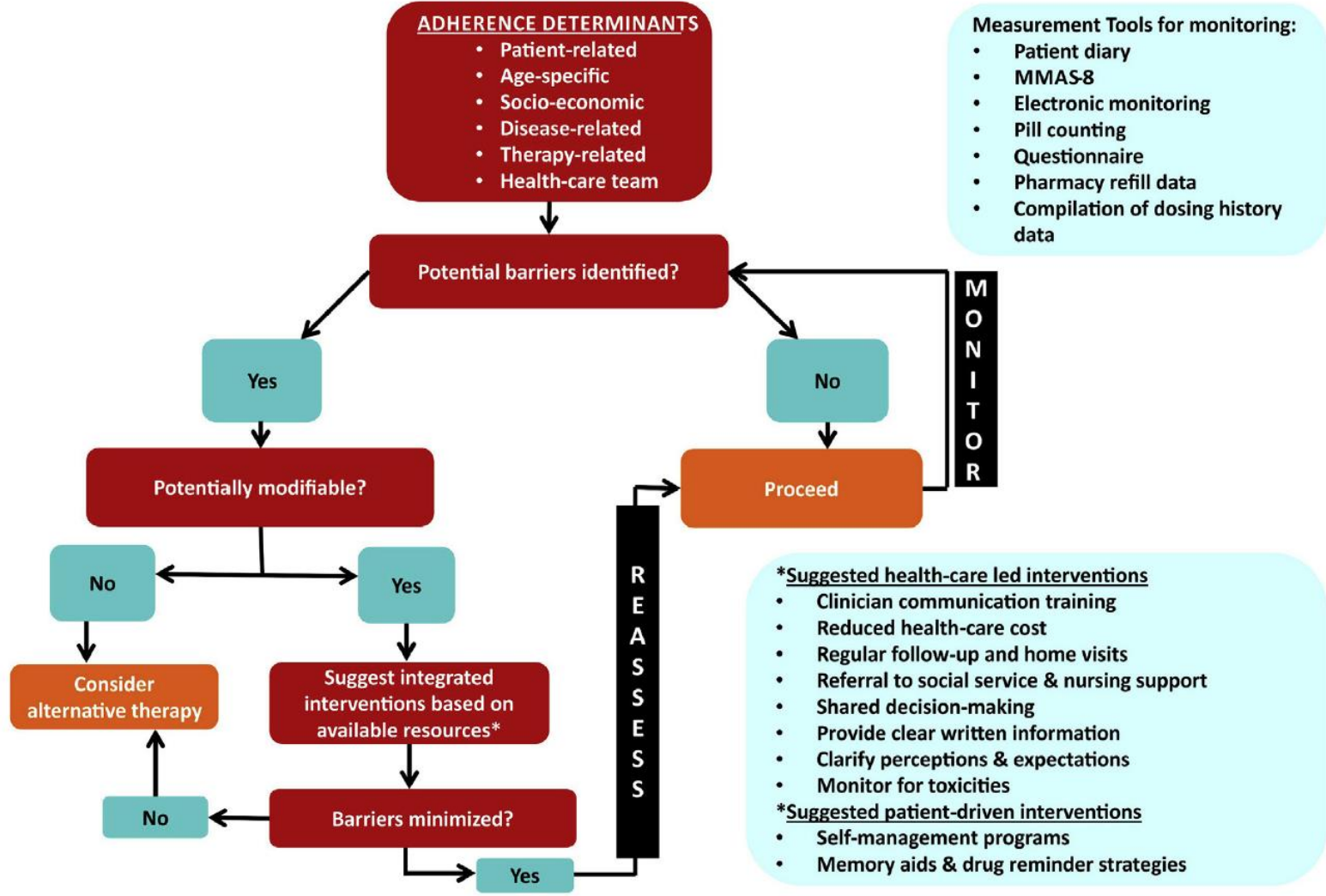
Ramasubbu SK, et al. Cancer Treat Res Commun. 2021;26:100277.

Particular attention to CDK4/6 inhibitor interactions



Medication adherence

The paradox – polypharmacy associated with improved medication adherence in breast cancer



Management considerations when initiating oral cancer agents in older patients

Polypharmacy – the patient experience



Lived experience of taking medication

1. Medication forms a significant part of a patient's routine

Well, on a Saturday morning it's the drug day. And I'm in the kitchen for half-an-hour with all the boxes and, you know. I go through the medication, put them in the boxes and I'm checking to see if we need any, and if we need any I have the reserve supply elsewhere in the dining room.

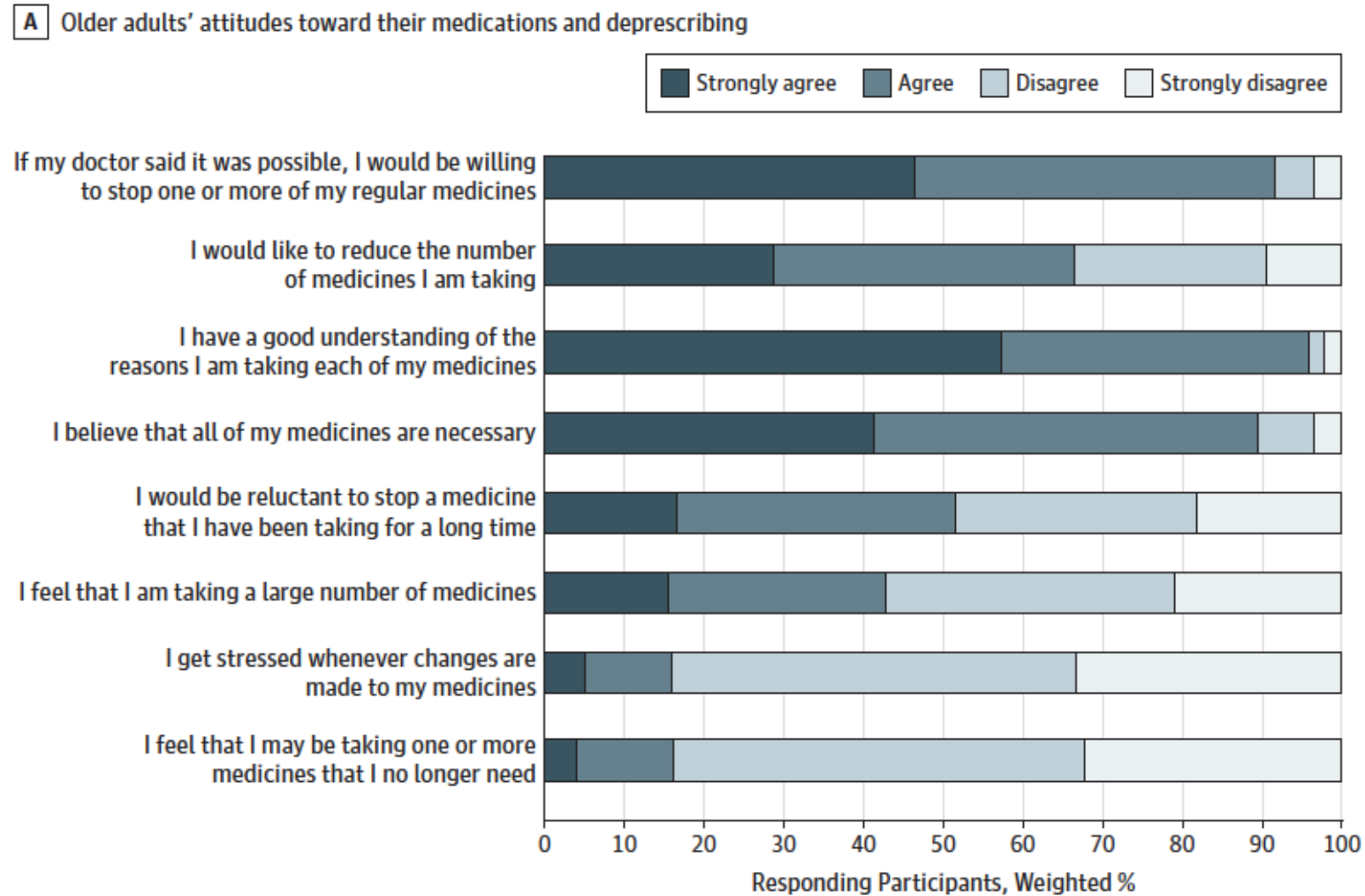
2. The risks of medication

I used to check my blood pressure every day and religiously take my tablets. And I thought eh, and I would say it is higher than yesterday, and this used to worry me. Now I don't worry about it.

3. Willingness to change

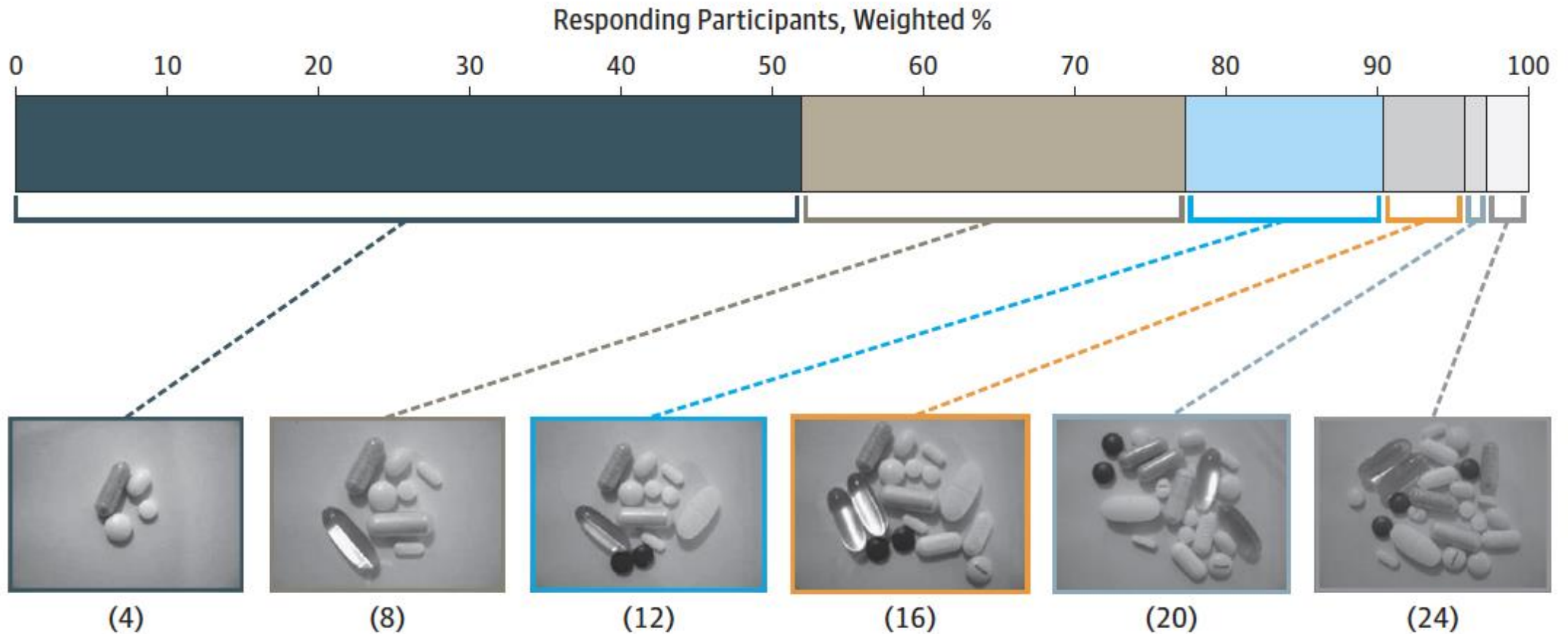
So when it like sort of melts in your mouth that's when I feel sick. And I'll say oh I'm not taking them. I'm always changing, telling the doctors like.

Most people would like to reduce their medication



Most people would like to reduce their medication

B Responses to "What is the maximum number of pills that you would be comfortable taking daily?"



Addressing polypharmacy – a how-to guide from Young SIOG

Medication Review (MR) Process

Who could benefit from an MR?

Adults who are starting chemotherapy and on ≥ 5 medications

Triggers to repeat an MR:

- Change in organ function (e.g., renal or liver impairment)
- Unplanned hospitalization
- Transitions in care settings
- Addition of medications for someone with polypharmacy (i.e., on ≥ 5 medications)

Who should conduct the MR?

The MR should be conducted by a member of the MDT with knowledge of, pharmacology, pharmacotherapy, and effective communication skills.

Where available, a pharmacist should support the MDT to conduct the MR.

Conducting the MR

1. Obtain a full medication history

- Invite patient or caregiver to bring in all medication including prescribed, over-the counter, and complementary and alternative medicines to the consultation.
- For each medication identify drug name, dose, frequency, duration, route of administration, and indication.
- This step could be done in advance of the consultation by obtaining a full list of medication from the primary care physician and/or community pharmacist.

2. Tools for monitoring adherence

- Patient diary
- Pharmacy refill data
- Pill counting
- Dosing history data
- Medication Adherence Report Scale (e.g., MARS-5)

Suggested interventions to promote adherence:

- Provide written information
- Clarify expectations and perceptions
- Memory aids and drug reminders

3. Tools to identify PIMs

- AGS Beers Criteria
- STOPP/START
- MAI

The tools may identify PIMs that may be necessary in the cancer setting.

4. Identify interactions

Resources to identify drug-drug interactions (DDIs):

- Medscape Interaction Checker
- ONCOassist
- Cancer iChart
- Memorial Sloan Kettering Cancer Centre evidence-based information on interactions, vitamins, and dietary supplements

Oral anticancer therapies are associated with increased DDIs and drug-food interactions. Older people with cancer and comorbidities are at increased risk of potential DDIs because of altered pharmacokinetic and pharmacodynamic status.

5. De-prescribing

Deprescribing process:

- Determine life expectancy and treatment goals
- Review medication
- Evaluate medication appropriateness
- Identify medication to stop
- Create a deprescribing plan
- Monitor and review

Discuss with oncology MDT and agree actions

Document MR and agreed actions in medical records

Communicate MR to primary care physician and community pharmacist

Agree clinically appropriate timeframe for next MR

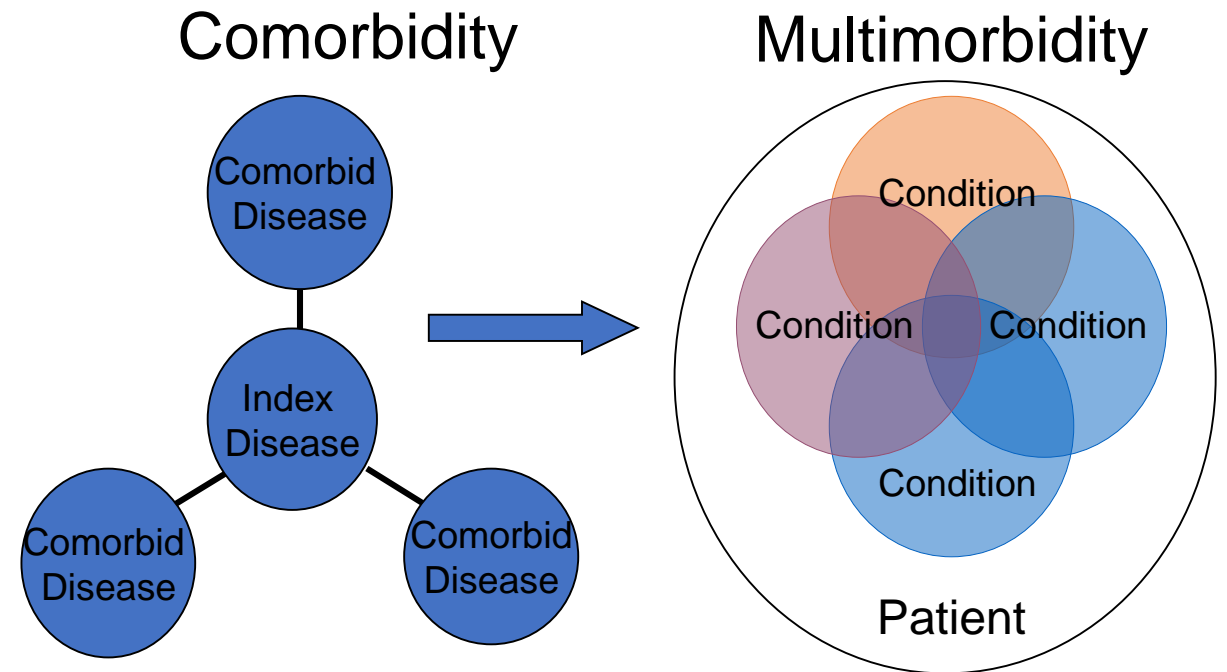
Deprescribing

Definition:

- The systematic process of identifying and discontinuing or reducing the dose of medications in instances in which **existing or potential harms outweigh existing or potential benefits** within the context of an individual *patient's care goals, current level of functioning, life expectancy, values, and preferences*.

Deprescribing –When medications have...

- Clear harms
 - Potential adverse drug effect
 - High risk or inappropriate medications
- Uncertain benefits
 - Multimorbidity and polypharmacy
 - Life-limiting or debilitating illness
 - Change in goals of care
- When the medication is part of a prescribing cascade



How to become a deprescriber

1. Use a model or framework
2. “Own” the list
3. Use a specific strategy
 - Pick a drug
 - Pick a tool
 - Use an algorithm



Model or framework

- Approach to decisions (i.e. “way of thinking”)
- Consider goals of care, time to benefit, life expectancy, clinical status and whether treatment aligns with goals



Entire medication list

- Assessing patient clinical status
- Considerations for assessing whether a medication can be deprescribed
- List of medications to consider deprescribing
- Prioritizing drugs for deprescribing
- Monitoring



Medication-specific

- Detailed guidance on deprescribing an individual medication
- Assessing whether a specific medication can be deprescribed
- How to deprescribe individual medication (e.g. tapering, discussing, monitoring)

The Process of Deprescribing

1. Ascertain that all drugs the patient is currently taking and the reasons for each one.
2. Consider overall risk of drug-induced harm in individual patients in determining the required intensity of deprescribing intervention.
3. Assess each drug for its eligibility to be discontinued.
4. Prioritize drugs for discontinuation.
5. Implement and monitor drug discontinuation regimen.

Identifying high risk medications

- Beers criteria: anticholinergics, sedatives, antispasmodics, long term PPI, long term NSAIDs
- STOPP/START criteria: if/then indicators for medications
- Medication Appropriateness Index: 10 criteria that are scored
- Opioids, hypoglycemics, insulin, anti-platelet agents, anticoagulants

AGS Beers Panel. J Amer Geriatr Soc 2023

Hanlon JT and Schmader KE. Drugs Aging 2013;30:893–900.

O'Mahoney D, et al. Age Ageing 2014;0:1-6.

Salahudeen MS, et al. J Am Geriatr Soc 63:85–90, 2015.

Tools to use

- Deprescribing guides
- Tapering schedules
- Patient brochures

A GUIDE TO
deprescribing

phn
TASMANIA
An Australian Government Initiative

primary health
TASMANIA

CPs Experts in Medicines
CONSULTANT PHARMACY SERVICES

OPIOIDS

KEY POINTS

Due to poor efficacy and major side effects, opioid therapy is not indicated for the long-term management (>90 days) of non-cancer pain.

Opioids are playing a diminishing role in the management of chronic non-cancer pain.

Multidisciplinary pain management programs utilising psychology, exercise and functional-based outcomes result in better quality of life and better pain management than use of opioids.

CONTEXT

Opioids are commonly used to treat acute pain, malignant pain and in palliative care. Certain opioids are used in the treatment of opioid addiction. This deprescribing guide applies to the use of opioids in chronic non-cancer pain.

BENEFIT VERSUS HARM

Favours Continuing Medication	Favours Deprescribing Medication
Increased Benefit <ul style="list-style-type: none">• Short term use for acute pain	Decreased Benefits <ul style="list-style-type: none">• Long term use (>8 weeks)

Main Benefits
Relief from pain and facilitation of function and activity

www.rprimaryhealthtas.com.au

<https://www.deprescribingnetwork.ca/tapering>

Tools for Deprescribing

3.7 was the NNT for the Eliminating Medications Through Patient Ownership of End Results (EMPOWER) study for discontinuing or reducing benzodiazepines.



Sedative-hypnotics

You May Be at Risk

You are taking one of the following sedative-hypnotic medications:

<input type="radio"/> Alprazolam (Xanax®)	<input type="radio"/> Diazepam (Valium®)	<input type="radio"/> Temazepam (Restoril®)
<input type="radio"/> Bromazepam (Lectopam®)	<input type="radio"/> Estazolam	<input type="radio"/> Triazolam (Halcion®)
<input type="radio"/> Chlorazepate	<input type="radio"/> Flurazepam	<input type="radio"/> Eszopiclone (Lunesta®)
<input type="radio"/> Chlordiazepoxide-amitriptyline	<input type="radio"/> Loprazolam	<input type="radio"/> Zaleplon (Sonata®)
<input type="radio"/> Clidinium-chlordiazepoxide	<input type="radio"/> Lorazepam (Ativan®)	<input type="radio"/> Zolpidem (Ambien®, Intermezzo®, Edluar®, Sublinox®, Zolpimist®)
<input type="radio"/> Clobazam	<input type="radio"/> Lormetazepam	<input type="radio"/> Zopiclone (Imovane®, Rhovane®)
<input type="radio"/> Clonazepam (Rivotril®, Klonopin®)	<input type="radio"/> Nitrazepam	
	<input type="radio"/> Oxazepam (Serax®)	
	<input type="radio"/> Quazepam	



CIHR IRSC
Canadian Institutes of Health Research



IUGM
Institut universitaire de gériatrie de Montréal



Université de Montréal



Michel Saucier Chair in Pharmacy, Health & Aging
La Chaire pharmaceutique Michel Saucier
en santé et vieillissement



CaDeN
Canadian Deprescribing Network

Tapering-off program

Be sure to talk to your doctor, nurse or pharmacist before you try reducing your dose or stopping your medication.

WEEKS	TAPERING SCHEDULE							✓
	MO	TU	WE	TH	FR	SA	SU	
1 and 2	●	●	●	●	●	●	●	
3 and 4	●	●	●	●	●	●	●	
5 and 6	●	●	●	●	●	●	●	
7 and 8	●	●	●	●	●	●	●	
9 and 10	●	●	●	●	●	●	●	
11 and 12	●	●	●	●	●	●	●	
13 and 14	●	●	●	●	●	●	●	
15 and 16	✗	●	✗	✗	●	✗	●	
17 and 18	✗	✗	✗	✗	✗	✗	✗	

EXPLANATIONS

● Full dose
 ◐ Half dose
 ◑ Quarter of a dose
 ✗ No dose

NSW Guide - deprescribing opioids

NSW Therapeutic Advisory
Group, available at
www.nswtag.org.au

DEPRESCRIBING GUIDE FOR REGULAR LONG-TERM OPIOID ANALGESIC USE (>3 MONTHS) IN OLDER ADULTS

(including morphine, hydromorphone, fentanyl, oxycodone, buprenorphine, codeine)

1 This guide provides deprescribing information that can be applied to written and/or verbal communication (in the form of "preferred language") between clinicians, patients and/or carers. This guide is adapted for older adults (>65 years) in hospitals. It may not apply to programs targeting drugs of dependence (e.g. methadone programs) and palliative care. Adapt appropriately for individual patients.

GO TO SECTION:

- Indication
- How to wean
- Alternative management
- Monitoring
- Evidence-based advice
- Summarised phrasing during admission and/or at discharge
- References

CONSIDER TWO STEPS WHEN DEPRESCRIBING:

1
Should I deprescribe?

2
How do I deprescribe?

STEP 1: WHY SHOULD I DEPRESCRIBE? (PATIENT ASSESSMENT)

Deprescribing triggers:

- Inappropriate indication, no current indication, presence or risk of adverse events, drug interaction, drug-disease interaction, high drug burden index (DBI)¹, poor adherence, lack of adequate response, need for escalating dose without adequate response, aberrant behaviours developed, or patient preference.

1a) Is there a documented indication or symptom supporting continued use?

Inappropriate indication for continued use:

- Resolution of painful condition.
- Lack of adequate improvement in pain control (e.g. allodynia or hyperalgesia) and/or function.
- Medical (including mental health) conditions and other medicines that increase risk of opioid overdose.
- Treatment of painful conditions where opioid analgesics are not effective (e.g. low back pain, fibromyalgia).

Do not deprescribe as a sole provider and consider involvement of specialist pain management team or drug and alcohol services if:

- Complex severe pain is present.
- There are associated risks if weaned (e.g. substance use disorder, worsening of mental health conditions, unstable adverse social circumstances).^{2,3}
- Response to non-opioid or non-drug therapeutic interventions has been poor.
- Enrolled in a drugs of dependence program.

1b) Are there adverse effects?

Consider potential adverse events from opioid therapy:

- Falls, dizziness, orthostatic hypotension, itch, dry mouth, meiosis, urinary retention, nausea, vomiting, dyspepsia, constipation, respiratory depression, headaches, cognitive impairment (e.g. confusion), drowsiness, over-sedation, impaired concentration (e.g. increase risk of car accidents), mood changes or dependence.⁴

1c) Is this medication likely to cause more harm than benefit?

Consider the risk of dose-related harm from opioid analgesics. This can be estimated using oral morphine equivalent daily dose (OMEDD), with a substantial increase in harm seen with OMEDD >20 mg.⁵

See [Evidence-based advice](#) for additional information on risks of harm and benefits of continued use.

1d) Does the patient/carer agree with the recommendation to deprescribe?

Following provision of information, discussion and shared-decision making, the patient or carer has communicated that they would like to proceed with or decline the deprescribing recommendation.⁶

PREFERRED LANGUAGE:

(Adapt for each patient and medicine as appropriate)

_____ is currently taking _____
(patient name) (drug name: e.g. oxycodone/naloxone SR [Targin MR] 10/5mg bd)

for _____, and is currently experiencing/at risk of _____
(indication: e.g. chronic back pain) (patient issue: e.g. adverse effects)

The _____ outweighs the _____ for continued use of _____
(risk/benefit + rationale) (risk/benefit + rationale) (drug name: e.g. oxycodone/naloxone SR [Targin MR])

Discussed with _____ and _____ deprescribing recommendation.
(patient /carer name) (agreed/willing to trial/considering/declined)

- Triggers and concerns
- Patient/caregiver perspective
- Self-management
- Alternatives
- Weaning methods
- Monitoring recommendations
- Multidisciplinary approach
- Sample language

The Benefits of Deprescribing

Reduce Burden

Reduce Cost

Improve Quality of
Care

Improve Quality of Life

Part of Patient-
Centered Care

The Barriers of Deprescribing

Unclear Patient
Population

Psychological
Connections with
Medications

Risk of Adverse
Withdrawal Events

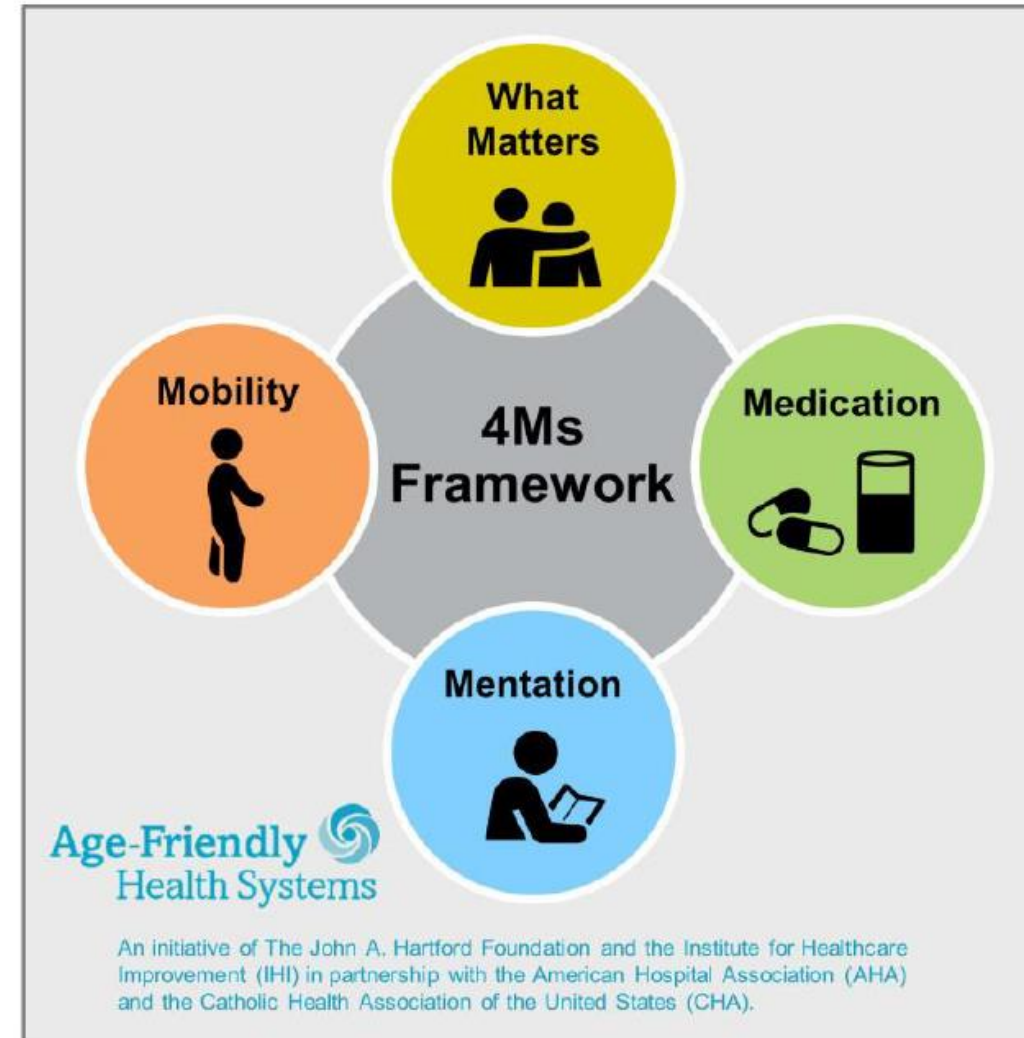
Time, and Confusion
Over Discipline/
Specialty

Lack of Evidence

Deprescribing – communication is key

- Understanding that stopping omeprazole is different from stopping oxycodone >> ***meds have patient-centered context***
- Taking advantage of opportune moments >> ***change in goals of care = change meds***
- Contextualizing patient attitudes, goals, preferences >> ***Use the 4Ms***
- Deprescribe when prescribing >> ***the importance of “priming the pump”***
- Understanding the full benefit/risk picture >> ***negotiate with other prescribers***

Turner JP et al. Ther Adv Drug Saf 2018;9:687-698
Langford AV et al. Pain. 2021;162:2686–2692.



The 4Ms Framework, IHI.org

Key Points

- Polypharmacy is prevalent and harmful in older people.
- In patients with breast cancer, polypharmacy is useful to assess to reduce the risks of drug interactions and as a screen for frailty.
- Deprescribing efforts need to be tailored to the patient and to the medication and situation.

THE NEW HEALTH CARE

The Unsung Role of the Pharmacist in Patient Health

Are people relying too much on the traditional doctor/patient interaction?



By Aaron E. Carroll

Jan. 28, 2019



Thank you

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