VIRGINIA DEPARTMENT OF SOCIAL SERVICES

VCU Gerontology
College of Health Professions

Medication Best Practices in ALFs

A four-part webinar series

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for the VCU Department of Gerontology &
Virginia Department of Social Services, Division of Licensing Programs

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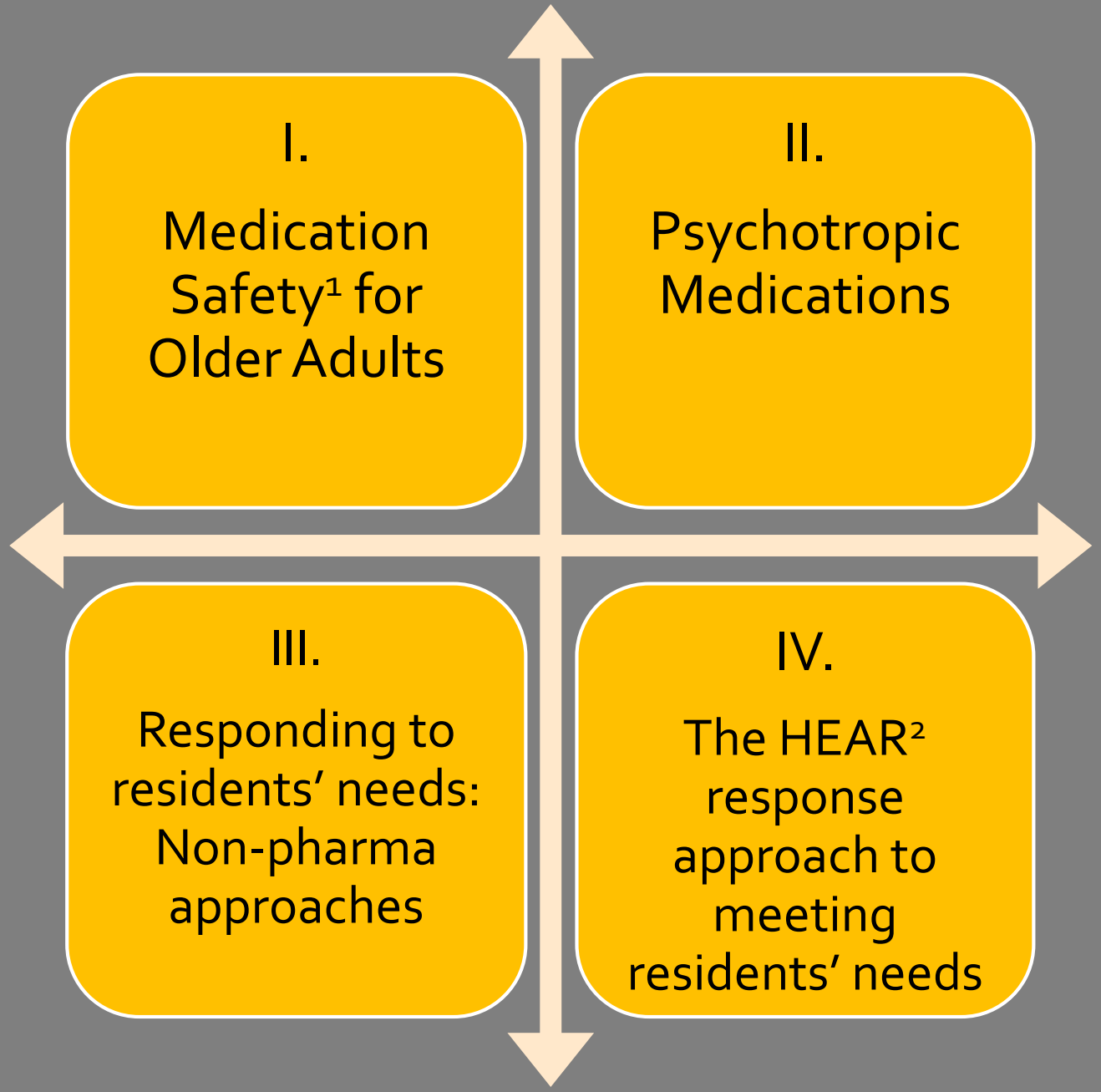
Series Overview



[1]The Medication Safety Curriculum is based on a revision of Dr. Patricia Slattum's DSS training PowerPoint, "Nutritional Needs of Older Adults and Medication Safety"
[2]The HEAR approach was developed by Dr. Andrew Heck, Geropartners. Used with permission.

AT the end of this series, you will have an increased understanding of :

Strategies to prevent medication-related problems

Healthcare providers' **role** as partners in maintaining and improving medication safety

Resources for improving medication safety in ALFS

Psychotropic medications and why they are used.

The **warnings** concerning antipsychotic use, especially in persons living with dementia.

Antipsychotics as part of a **comprehensive care plan** for persons with diagnosed mental illness.

Behaviors and psychological **symptoms of dementia** (BPSD) as communication efforts

Underlying causes of people's **behaviors**

The impact of approaches/attitudes when **responding** to residents' needs

Person-centered, non-pharma **techniques** for responding to residents' needs

Part I: Medication Safety for Older Adults

As a result of attending this webinar, you will:

1) be able to **identify** medication-related problems in older adults

2) have **strategies** to prevent adverse drug events

3) understand the role of healthcare providers as **partners in** maintaining and improving **medication safety**

4) be able to **identify resources** for improving medication safety in the ALF environment

Medication Safety: **OVERVIEW**

"…Medications probably are the single most important health care technology in preventing illness, disability, and death in the geriatric population…"[1]

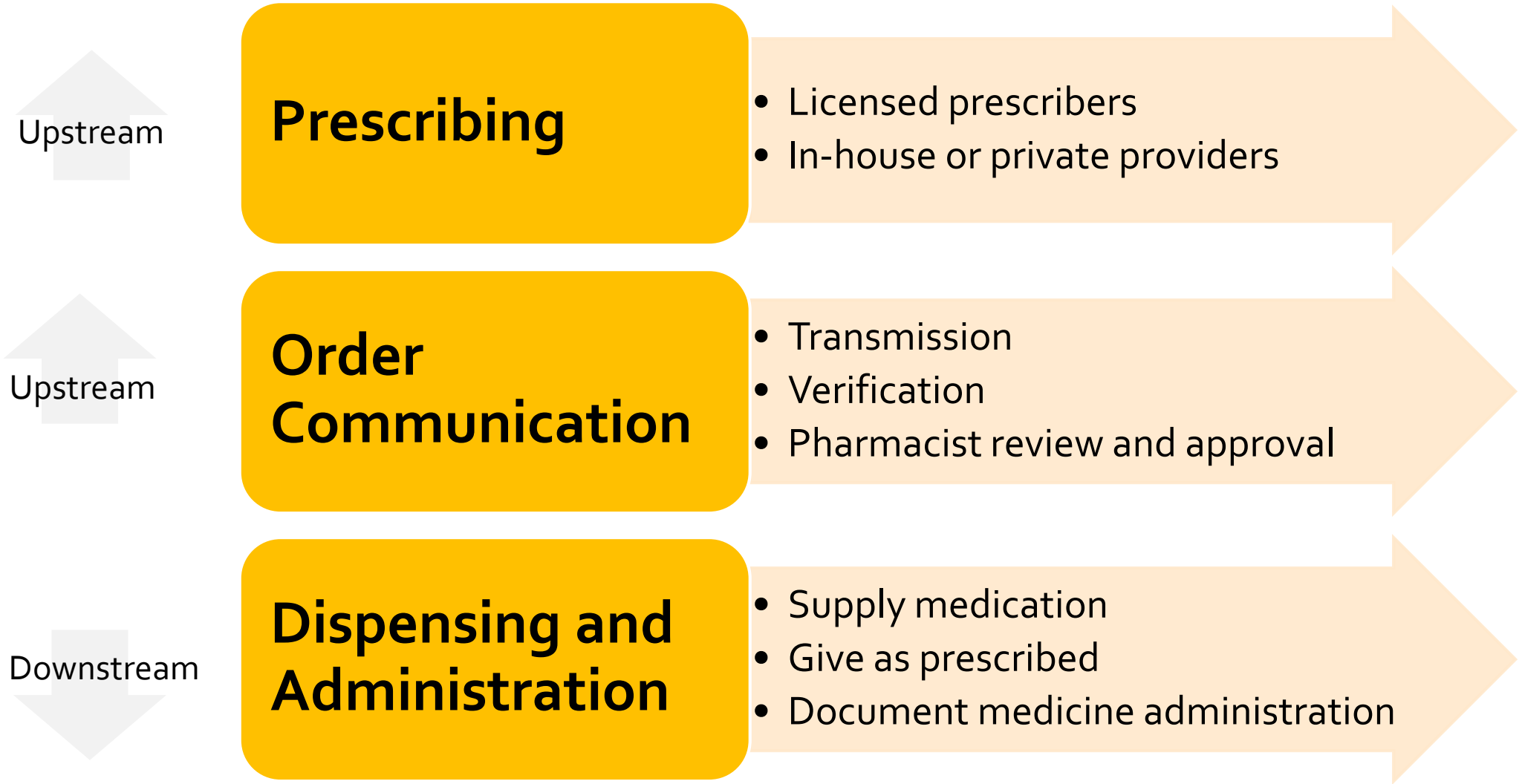
[1]Avorn, J. (1995). Medication use and the elderly: Current status and opportunities. *Health Affairs (Project Hope)*, *14*(1), 276-86.

Special Considerations for Medication Safety

- We grow more diverse in aging
- Ever-changing bodies and minds *across the life-span*
- Comorbidities
- Polypharmacy[1]
- Drug Interactions
- Transitions of care

[1] Masnoon N, Shakib S, Kalisch-Ellett L, Caughey GE. What is polypharmacy? A systematic review of definitions. *BMC Geriatrics*. 2017;17:230. doi:10.1186/s12877-017-0621-2.

Medication Management Process[1]

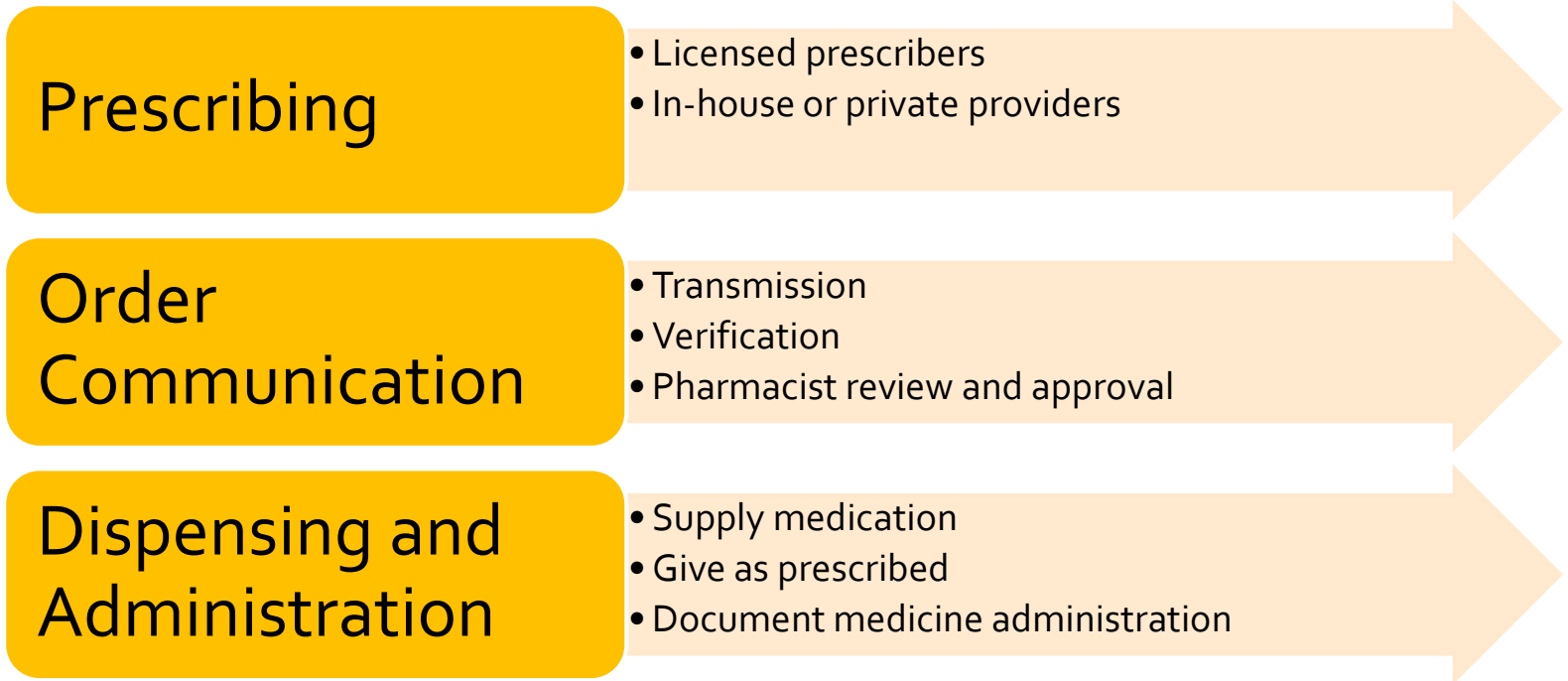


[1]Leading Age Center for Aging Service Technologies. (2015). Medication Management Technologies for Long-Term and Post-Acute Care: A primer and provider selection guide. Retrieved from http://www.leadingage.org/sites/default/files/Medication%20ManagementWhitepaper.pdf


YOU
are
Part of the
Medication Safety Team

Poll

Where do your role(s) fall in the medication management process? Please check all that apply



The Aging Body and Medications

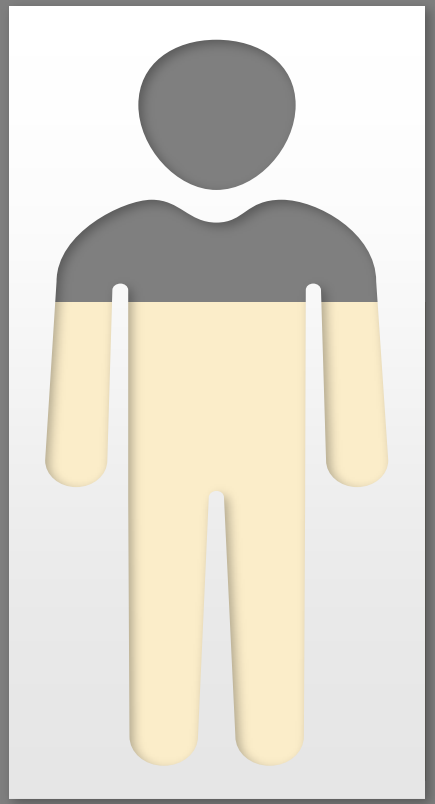
Our bodies experience physical changes as we age.

These changes can impact:

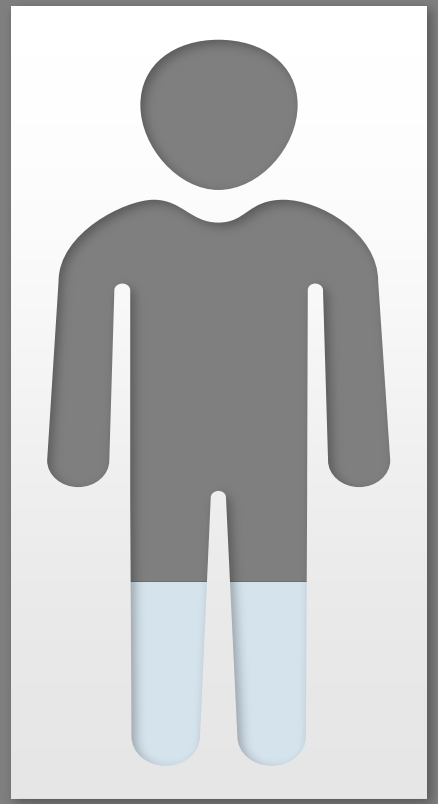
- How well medications get into and out of the body.
- How the body responds to medications.

Slattum, P.W., Peron, E.P., & Ogbonna, K. (2016). The Pharmacology of Aging. In: Fillit H.M., Rockwood K., Woodhouse K. (eds). *Brocklehurst's Textbook of Geriatric Medicine and Gerontology.* New York, NY: Churchill Livingstone.

Changes in Body Composition with Aging



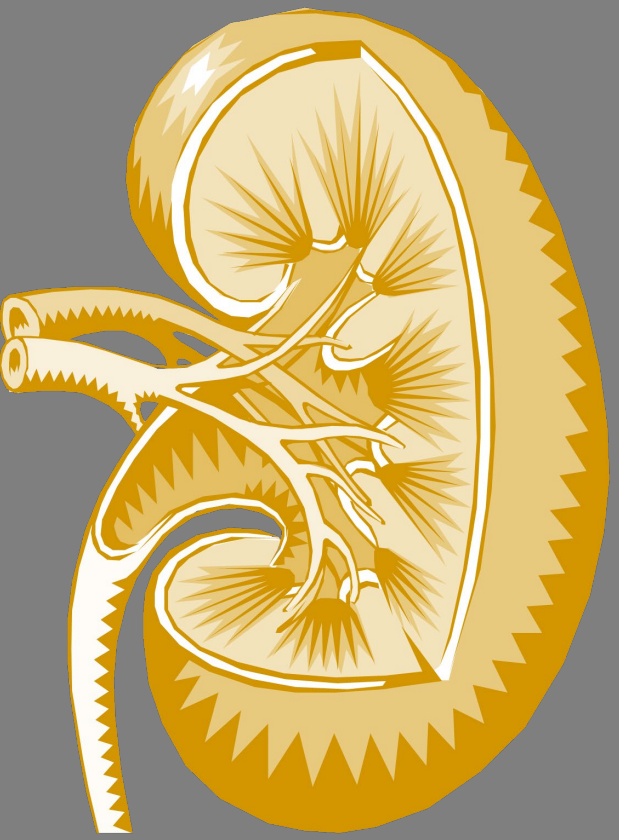
Higher body fat



Lower body water

Blood concentration of medication → medication effect

Changes in the Kidney and Liver with Aging



Most drugs leave the body through the liver and kidney:

- **Liver and kidney functions decline with aging**
- **Drugs take longer to get out of the body**
- **Older adults may need lower doses or a longer time between doses**

Changes in Drug Response with Aging

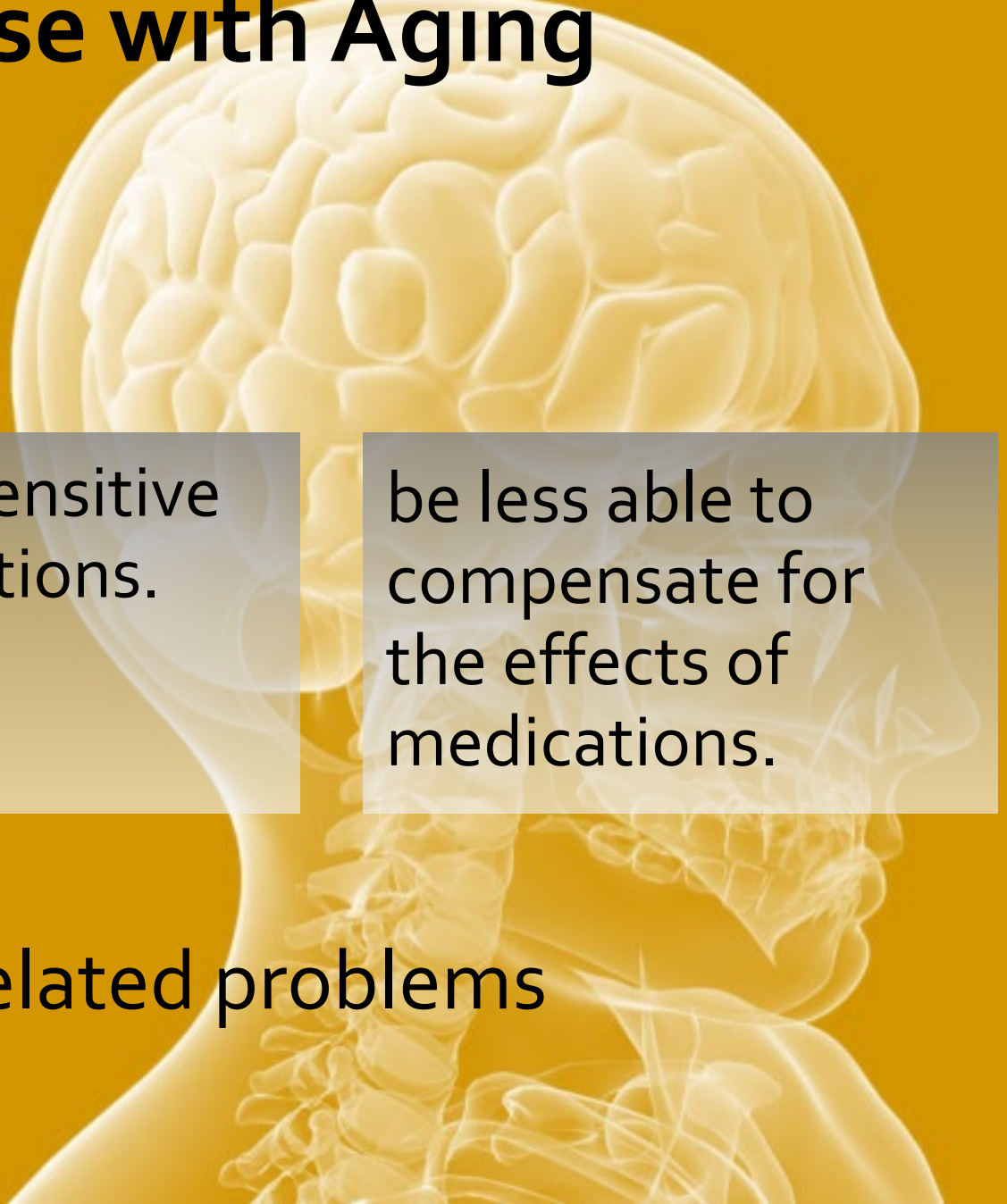
Older adults may:

have decreased functional ability before taking the medication.

be more sensitive to medications.

be less able to compensate for the effects of medications.

This may result in medication-related problems



WHAT IS A MEDICATION-RELATED PROBLEM ?

An undesirable event experienced by a patient that involves (or is suspected to involve) drug therapy and actually (or potentially) interferes with a desired patient outcome.

Risk Factors for Medication-Related Problems[1]

More than 6 current medical diagnoses	More than 12 doses of medi-cations per day	9 or more total medi-cations	History of adverse drug reactions in the past	Low body weight	Age > 85 years	Low kidney function

[1]Fouts, M. Hanlon, J., Peiper, C., Perfetto, E. & Feinberg, J. Identification of elderly nursing facility residents at high risk for drug-related problems. *Cons Pharmacist,12*:1103

Other Factors Contributing to Medication-Related Problems in Older Adults[1]

- Incorrect drug or dose
- Non-adherence to the drug regimen
- Multiple prescribers
- Limited evidence base
- Limited health professional expertise in aging
- Ageism: "That's what happens to older people."

"Any new symptom in an older [person] should be considered a possible drug side effect until proved otherwise."[1]

[1]Avorn, J., & Shrank, W. H. (2008). A substantial cause of preventable illness. *BMJ : British Medical Journal*, *336*(7650), 956–957. http://doi.org/10.1136/bmj.39520.671053.94

Geriatric Syndromes[1]

Clinical conditions in older persons that do not fit into exact disease categories

Geriatric syndromes include:

- Delirium
- Falls
- Frailty
- Dizziness
- Fainting or temporary loss of consciousness
- Urinary incontinence
- Functional decline

[1]Inouye, S. K., Studenski, S., Tinetti, M. E., & Kuchel, G. A. (2007). Geriatric Syndromes: Clinical, Research and Policy Implications of a Core Geriatric Concept. *Journal of the American Geriatrics Society*, *55*(5), 780–791. http://doi.org/10.1111/j.1532-5415.2007.01156.x

POLL:

In which of these areas have you observed medication-related problems in your workplace (current or former)?

(Please check all that apply.)

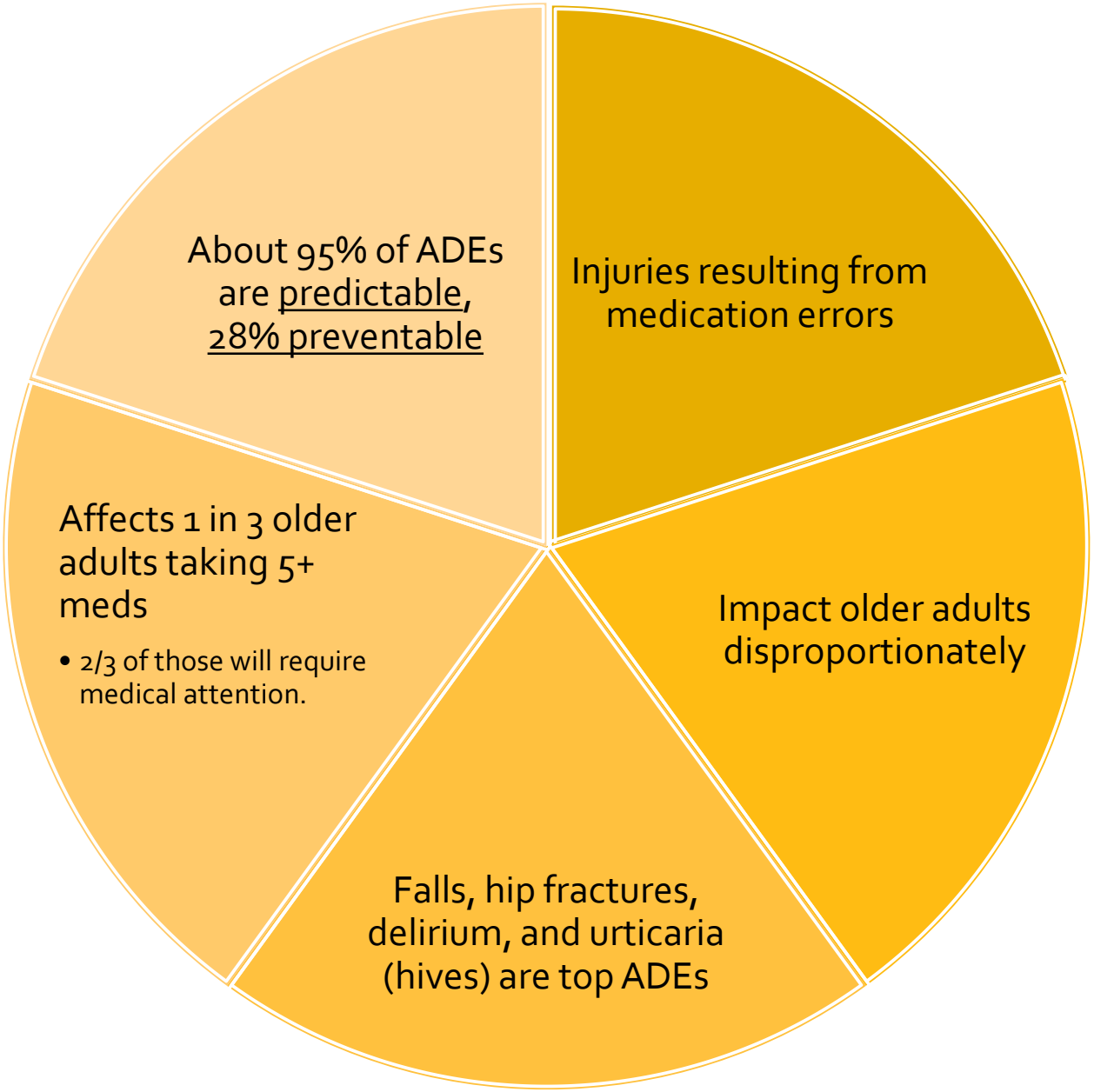
- ❑ Allergic or negative drug/drug interactions
- ❑ Medication administration errors
- ❑ Problems due to side effects (falls, dizziness, etc.)
- ❑ Resident refuses medication
- ❑ Other

Problems Associated with Medication[1]

- Medication errors
- Adverse drug events
- Use of drugs that are potentially inappropriate for older adults
- Polypharmacy
- Increased resource utilization

[1]Leading Age Center for Aging Service Technologies. (2015). Medication Management Technologies for Long-Term and Post-Acute Care: A primer and provider selection guide. Retrieved from http://www.leadingage.org/sites/default/files/Medication%20ManagementWhitepaper.pdf

Adverse Drug Events (ADEs)



Difficulty urinating	Confusion / Delirium	Memory Impair-ment	Dizziness	Dry Mouth	Consti-pation	Rapid Heart Rate	Blurred Vision

Anticholinergic Side Effects

The Beers criteria contains a list of anticholinergic medications.

Inappropriate Prescribing for Older Adults

Defined as[1]:

- Prescribing of medications where the potential risk outweighs the potential benefit
- Prescribing that does not agree with accepted medical standards

[1]Hanlon, J., Schmader, K., Ruby, C., & Weinberger, M. (2001). Suboptimal prescribing in *older inpatients and outpatients. Journal of the American Geriatrics Society, 49*(2), 200-9.

Potentially Inappropriate Drugs

- Older adults more likely to take inappropriately prescribed medication
- Leads to Adverse Drug Events
- 29% of elders receive inappropriate meds[1]

[1]Simon, S. R., Chan, K. A., et al. (2005). Potentially inappropriate medication use by elderly persons in U.S. health maintenance organizations, 2000 - 2001. *J Am GeriatrSoc.* 53(2), 227.

Polypharmacy (Not *always* a bad thing)

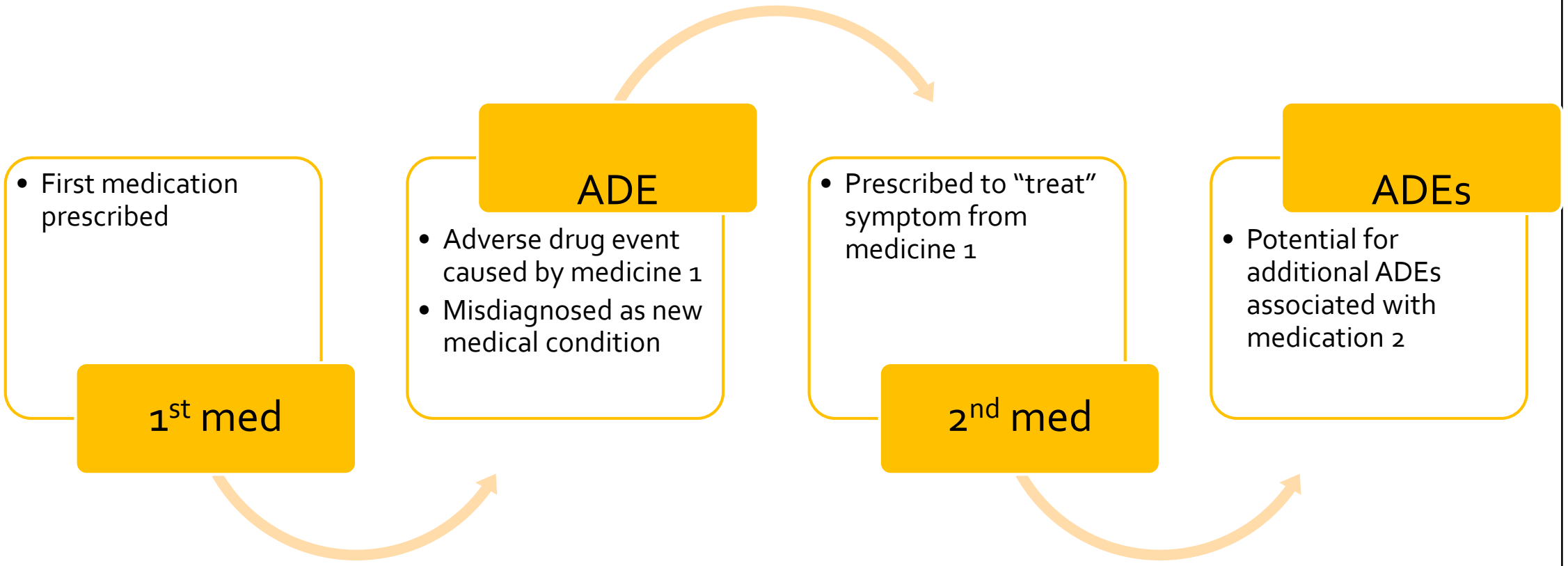
Polypharmacy defined as:

- Administration of more medications than are needed
- Concurrent use of multiple medications

Tools to Reduce PIDs

Beers Criteria	American Geriatrics Society	List of medications that are potentially inappropriate/to be avoided in older adults.
STOPP	Screening Tool of Older People's Potentially Inappropriate Prescriptions	Clinical criteria that help flag inappropriate prescribing for older adults
START	Screening to Alert Doctors to Right Treatments	Used with STOPP; focuses on medication underuse
ARMOR	Assess, Review, Minimize, Optimize, Reassess	Functional tool that considers pt's clinical profile and functional status. Emphasizes quality of life in making medication decisions.

Prescribing Cascades[1]



[1]Kalisch, L., Caughey, G., Roughead, E., & Gilbert, A. (2011). The prescribing cascade. Australian Prescriber, 34(6), 162-166.

Medication Interactions

Drugs can interact with:

- Alcohol
- Food
- Herbal products
- Other supplements
- Other medications

Care Transitions

Poll: Transitions of Care

Have you encountered medication problems during transitions into/out of your communities? (yes/no)

If yes, what was the general problem?

(Please type answer in Questions box of your webinar's Control Panel)

How You Can Help with Transitions

- Identify barriers *before* transitions occur
- Develop an organizational transition of care plan
- Establish contacts with other care sites
- Consider family members as part of care team
- Provide medication lists for residents' appointments; ask for updates

Regulatory Requirements: Hospital Transitions

- 22 VAC 40-73-650-F:

Whenever a resident is admitted to a hospital for treatment of any condition, the facility shall obtain new orders for all medications and treatments prior to or at the time of the resident's return to the facility. The facility shall ensure that the primary physician is aware of all medication orders and has documented any contact with the physician regarding the new orders.

INCREASED RESOURCE UTILIZATION

HOW WE CAN HELP:

Strategies to prevent and effectively react to medication-related problems

Your experience and knowledge are the first line of defense against ADEs

Safe Medication Strategies

Work with pharmacists

- Medication information
- Adherence devises
- Exploring options

Create a safe space for:

- Reporting medication errors
- Questioning particular medication processes
- Staff empowerment

Take advantage of the resources that other professionals bring to the team.

Safe Medication Strategies

Poll

Do you have safe medication strategies to share?

Please type your short answer in the Questions box.

SHARE YOUR EXPERIENCE!

Additional Resources

http://bemedwise.org/

www.fda.gov/drugs/resourcesforyou/consumers/tipsforseniors/default.htm

https://dcri.org/beers-criteria-medication-list/

http://medsandaging.com/

http://www.hazelden.org/web/public/hff10730.page

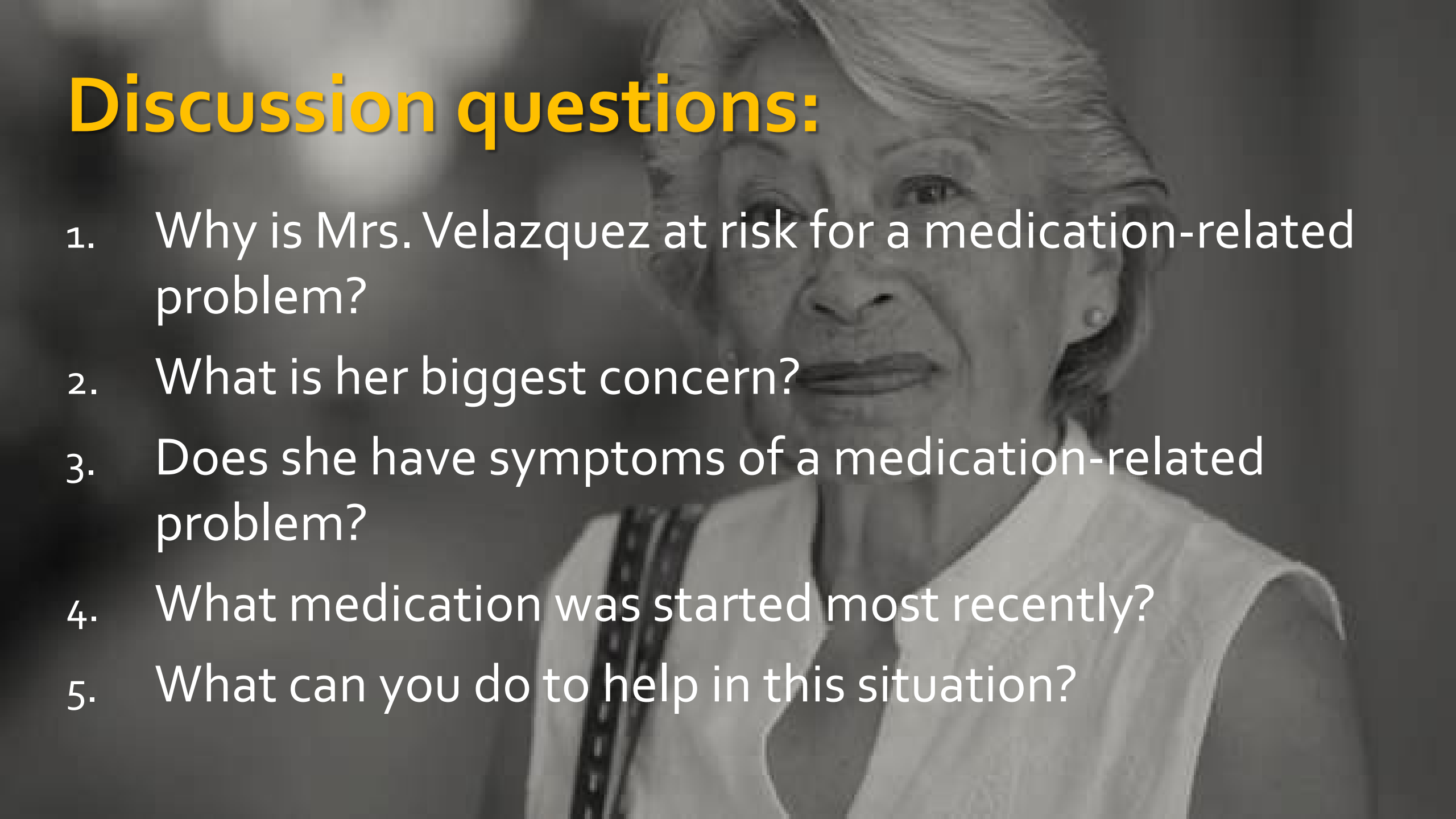
www.ismp.org/

HOMEWORK - Case study: Mrs. Velazquez

- Mrs. Velazquez is an 86-year-old female whose primary complaint is dry mouth.
- She has recently moved into your AL community and is increasingly having difficulty with activities of daily living.
- She dozes off frequently during the day and seems unsteady on her feet.
- She repeats herself during conversations with her daughter and occasionally does not remember events earlier in the day.
- When her daughter tries to discuss this with her, she claims that this is "normal" for someone her age and to stop worrying her.
- Mrs. Velazquez brings up the issue of dry mouth with each of her three doctors, but the only recommendations she has received are to suck on hard candy and drink more fluids.
- She doesn't feel that these measures really help.

Mrs. Velazquez' medication list

Drug	Brand name	dosage	How long taken?
AM: Calcium		600 mg	3 years
Gabapentin	Neurontin®	800mg	2 years
Noon: Duloxetine	Cymbalta®	600mg	3 weeks
Gabapentin	Neurontin®	800 mg	2 years
Oxaprozin	Daypro®	600 mg	1.5 years
PM: Quetiapine	Seroquel®	25 mg	1 year
Amitriptyline		50 mg	3 months
Temazepam	Restoril®	15 mg	10 years
Gabapentin	Neurontin®	800 mg	2 years
PRN: Mylanta, Gas X, Tylenol, Sudafed			



Discussion questions:

1. Why is Mrs. Velazquez at risk for a medication-related problem?
2. What is her biggest concern?
3. Does she have symptoms of a medication-related problem?
4. What medication was started most recently?
5. What can you do to help in this situation?

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THANK YOU!

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