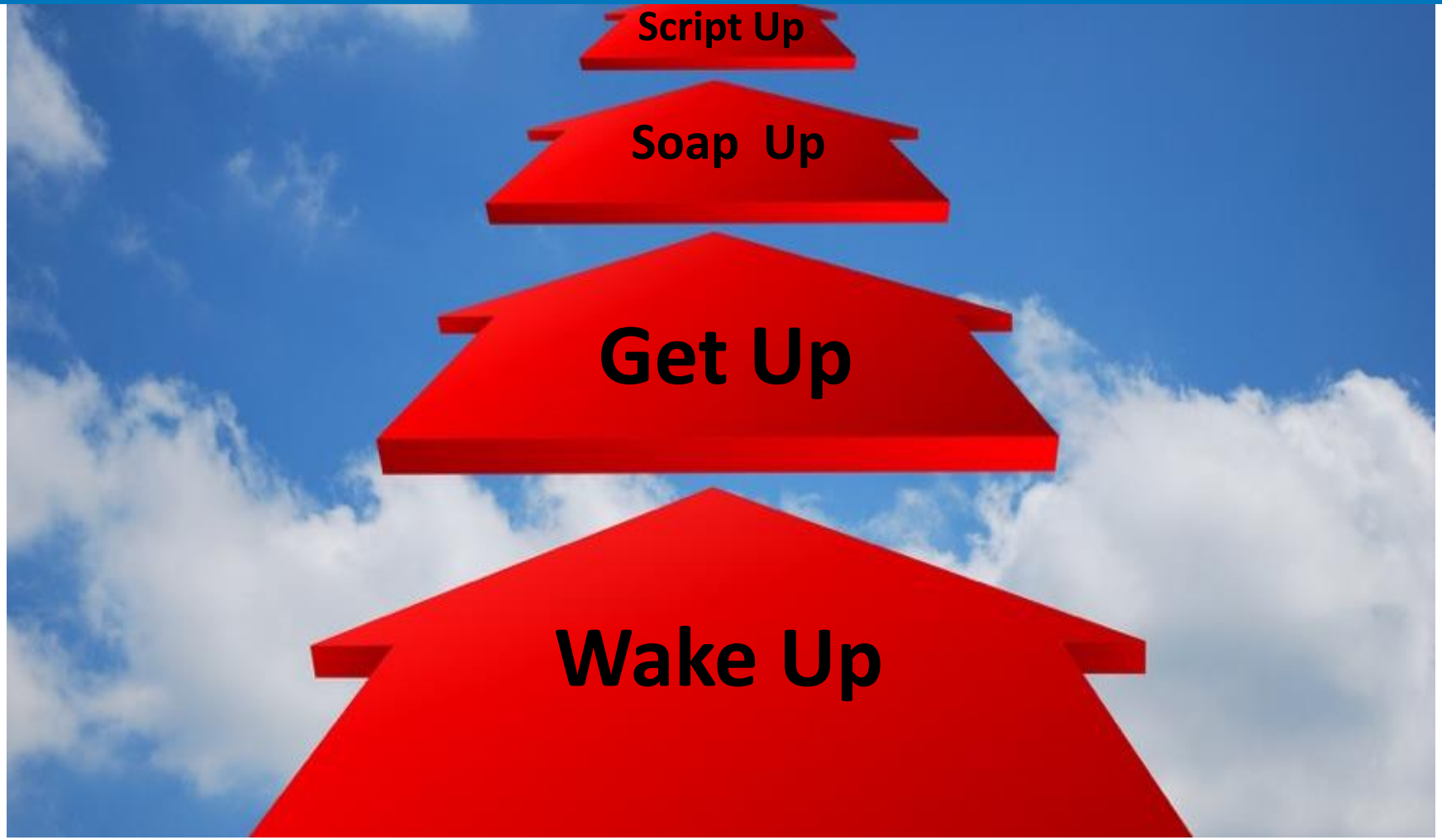
The Way UP:
How Four Cross-Cutting Strategies Can Reduce Harm Across the Board

DFW
Tuesday January 9th, 2018
Barbara DeBaun, RN, MSN, CIC

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

A Fresh Approach to Harm Reduction



The Way UP

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

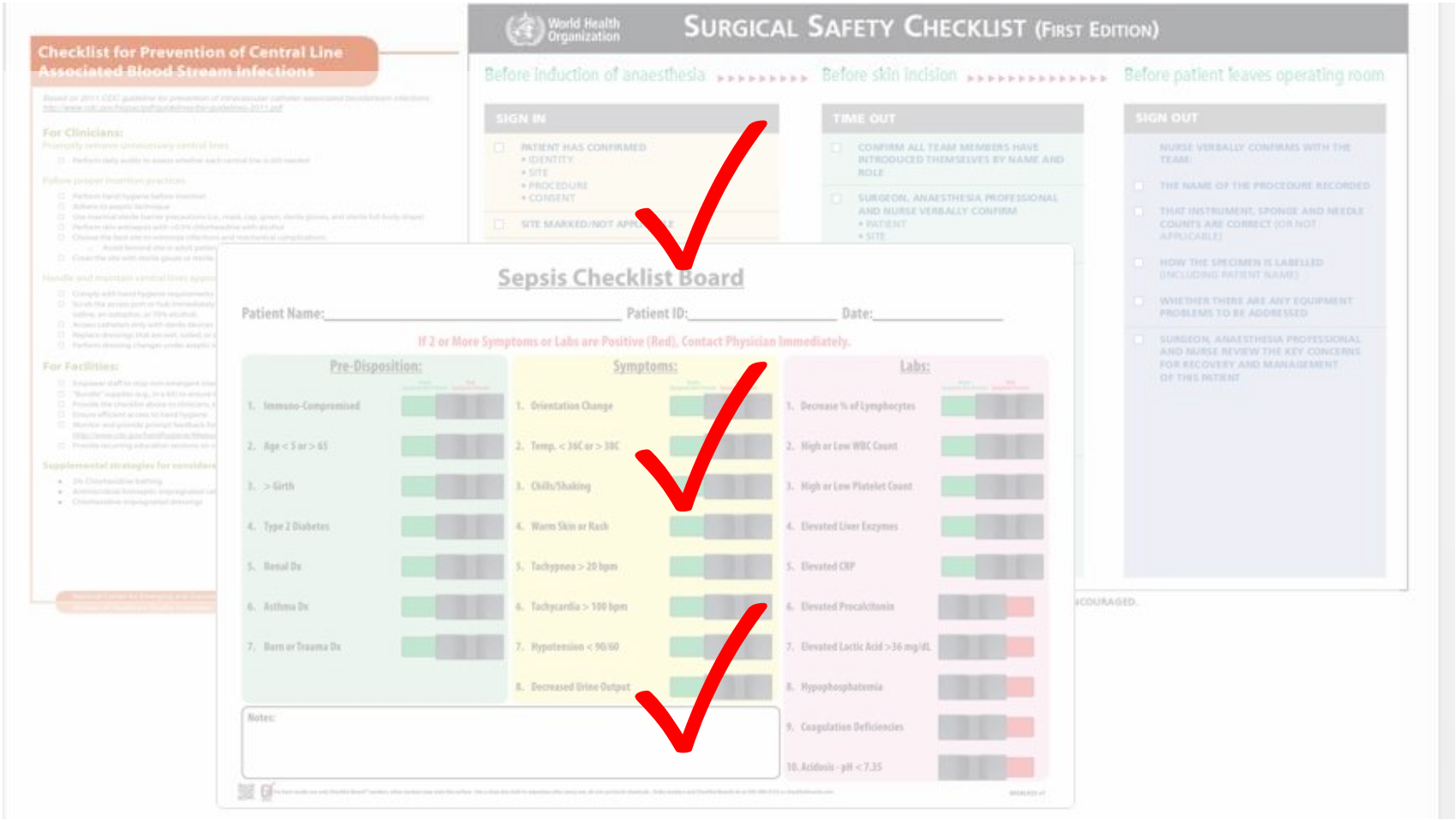
Polling Question

- The UP Campaign is:
  - Brand new information for me
  - Something we just started working on
  - Something we have fully executed
  - Something we don't have time for at the moment

Questions to Run On

- How can we better engage front-line caregivers without creating additional burdens?
- What could introducing a simple, cross-cutting set of practices accomplish with your hospitals?
- How can you deploy a program like the UP Campaign with your hospitals and strengthen front-line engagement?

Are Checklists Enough?

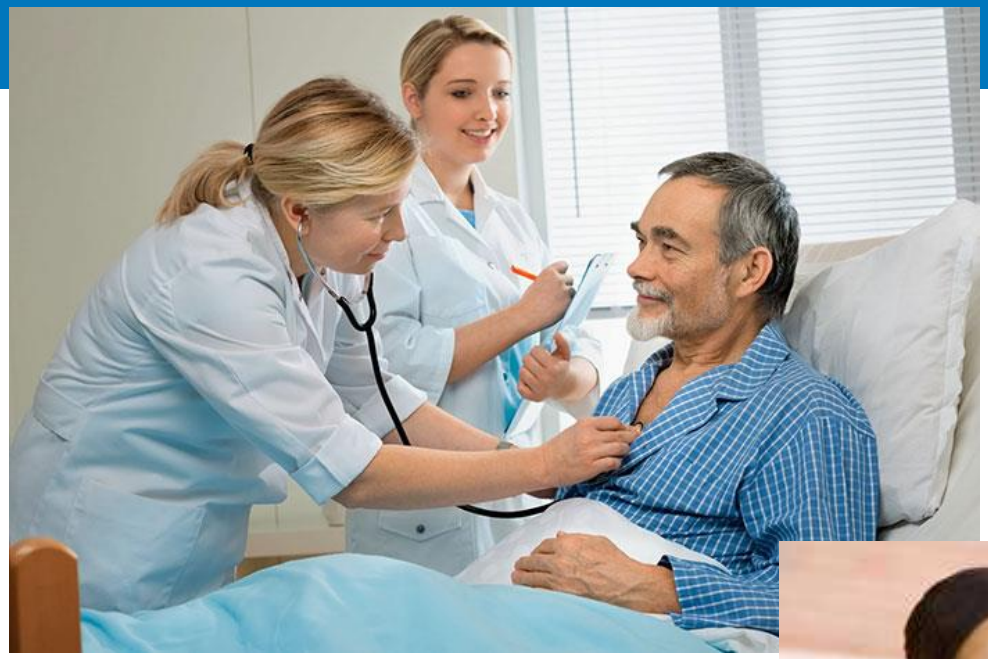


American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Why Incorporate UP?

- Patient safety with UP & checklists together!
  - Checklists have been integrated into many processes (necessary).
  - Have staff become too task- focused?
  - UP enhances critical thinking.
  - UP & checklists create synergy for patient safety.



We may be inadvertently reducing the joy in work by adding successive, well evidenced tools that become a growing burden in the work flow of our front-line caregivers.

Why the "UP" Campaign?

- Increases impact on harm reduction
- Generates momentum in your organization
- Focuses support from leadership
- Engages front line staff
  - connects the dots
  - creates a vision
- Applies throughout organization
- Simplifies patient safety implementation
- Help patients recover **faster** and with **fewer** complications

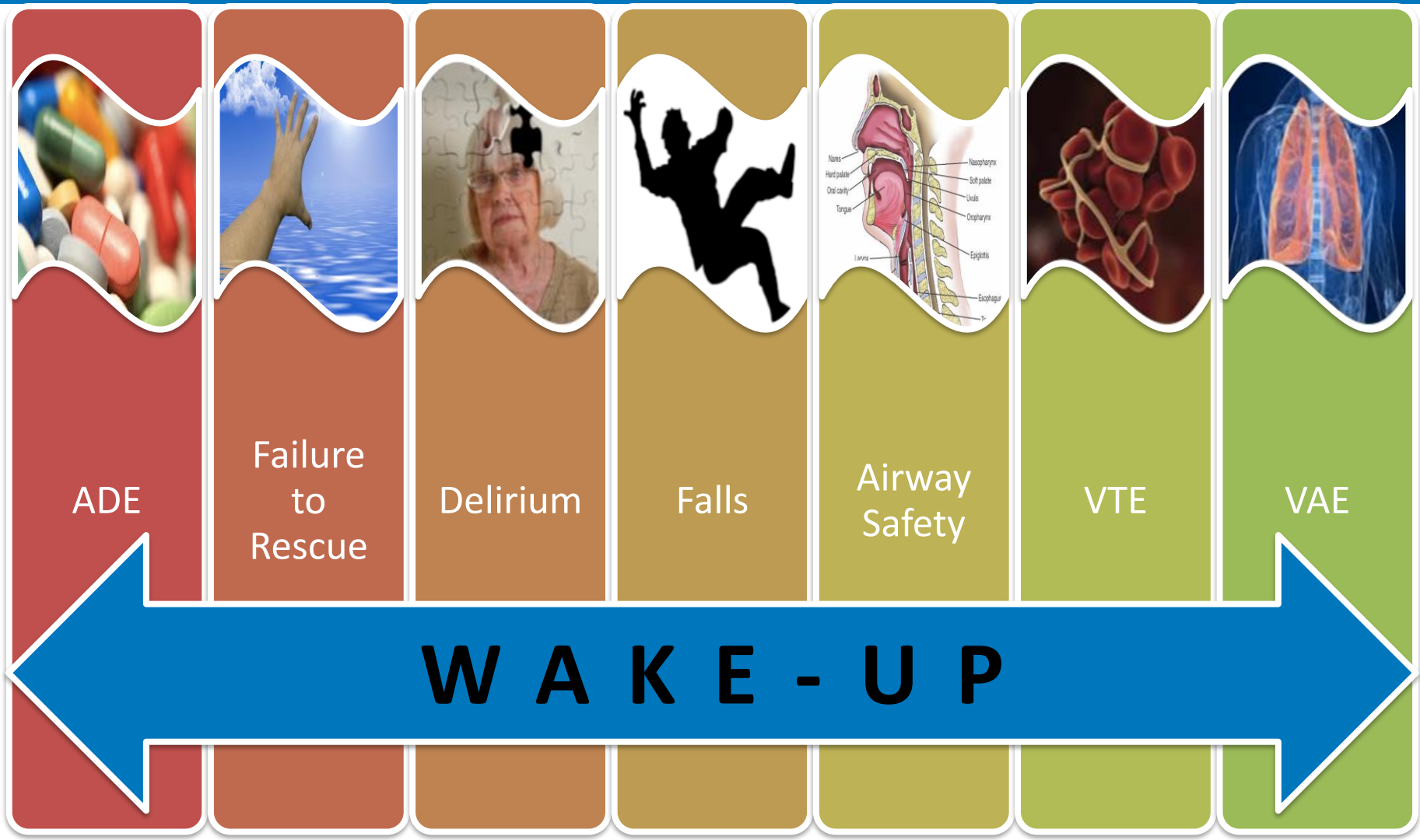
Goal: engage front-line staff and leaders and to increase critical thinking skills.

Can we streamline and simplify, making it easier for front-line staff and still improve safety?

Objectives

- Outline the UP Campaign crosscutting interventions
- Identify essential next steps for WAKE-UP, GET-UP, SOAP-UP and SCRIPT-UP
- Develop an implementation plan for the UP Campaign

1 Opioid & Sedation Management



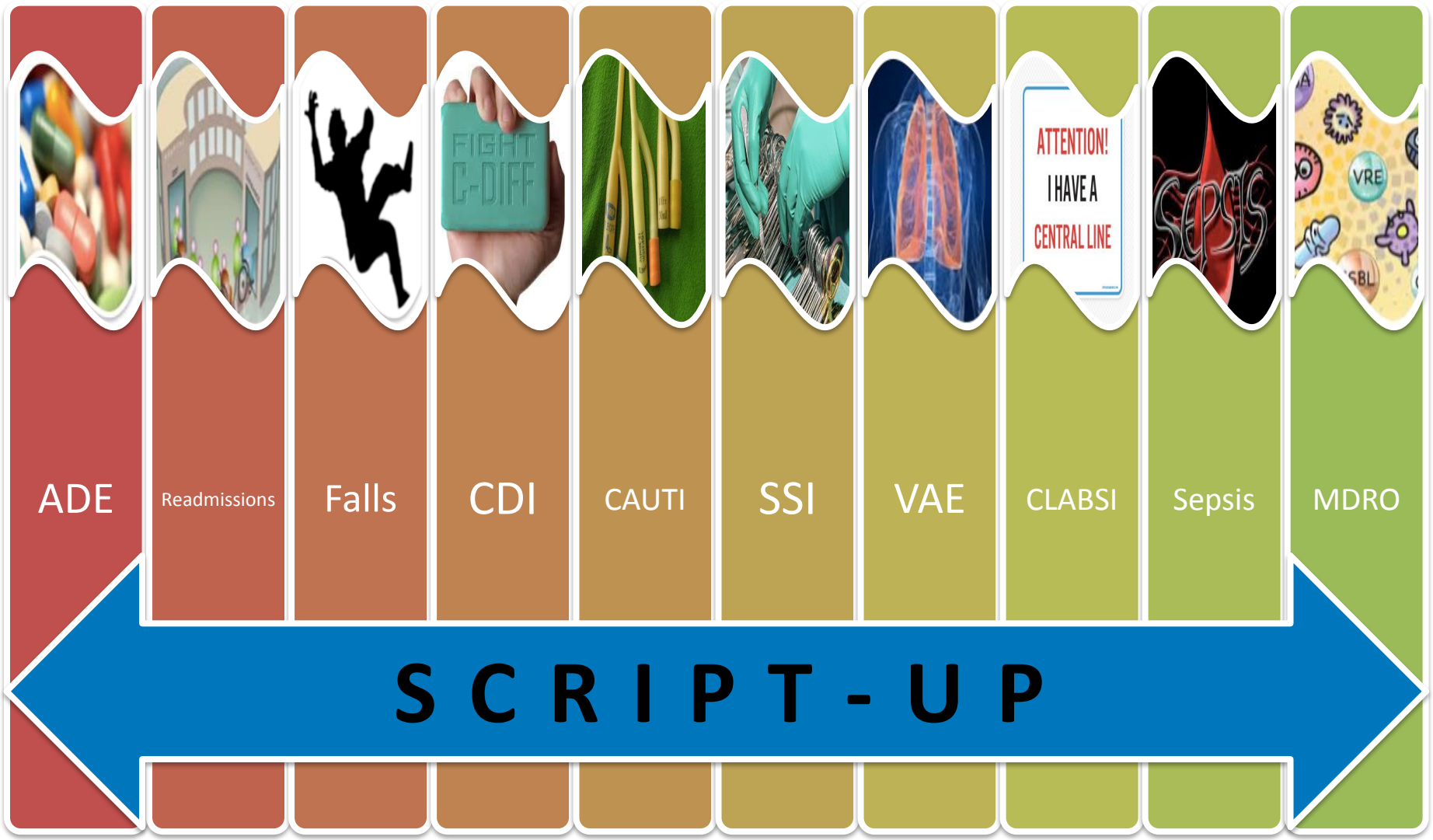
American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

2 Early Progressive Mobility

3 Hand Hygiene

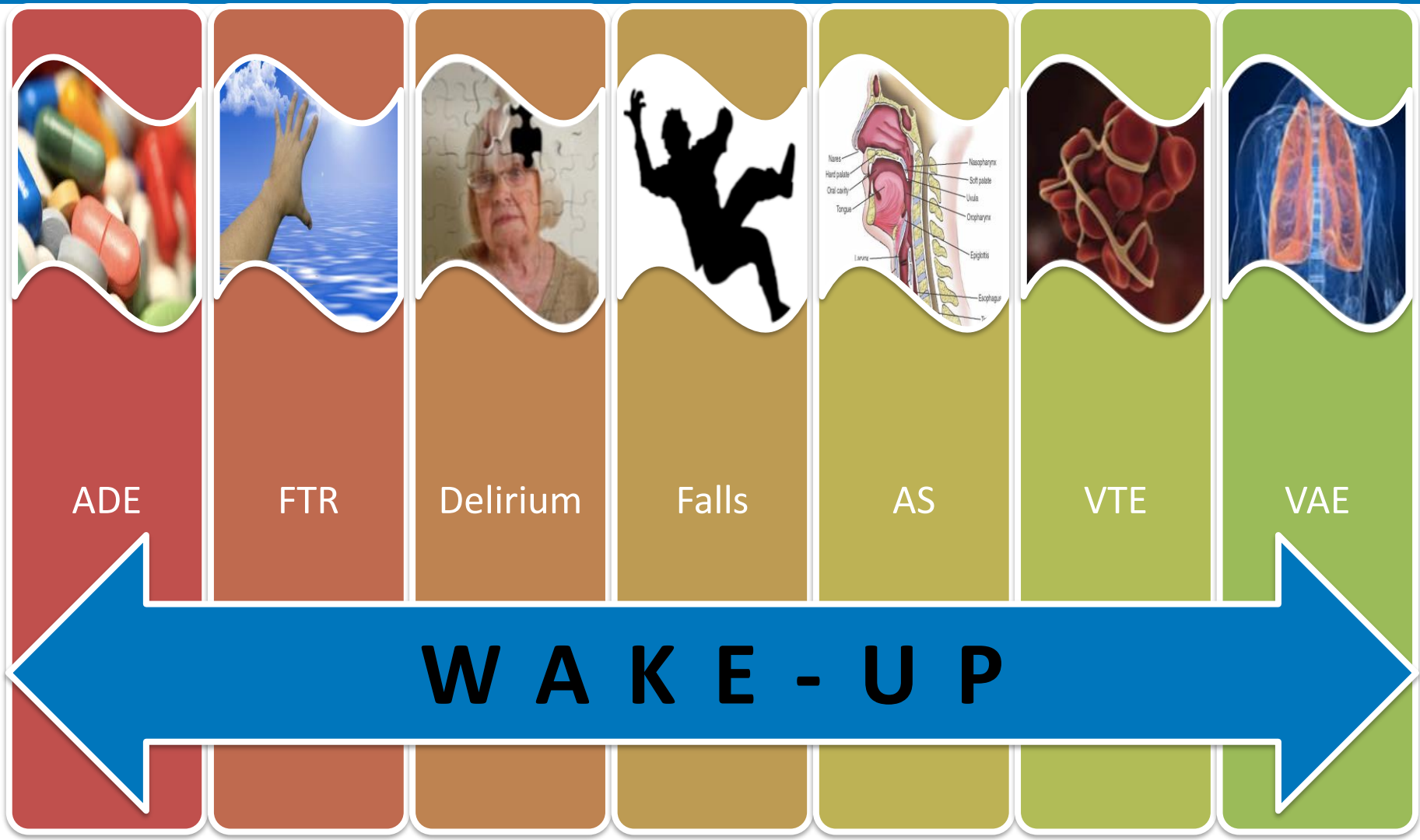
#4 Optimize Medications



FOUNDATIONAL QUESTIONS:

1. Is my patient awake enough to get up?
2. Have I protected my patient from infections?
3. Does my patient need any medication changes?

1 Opioid & Sedation Management



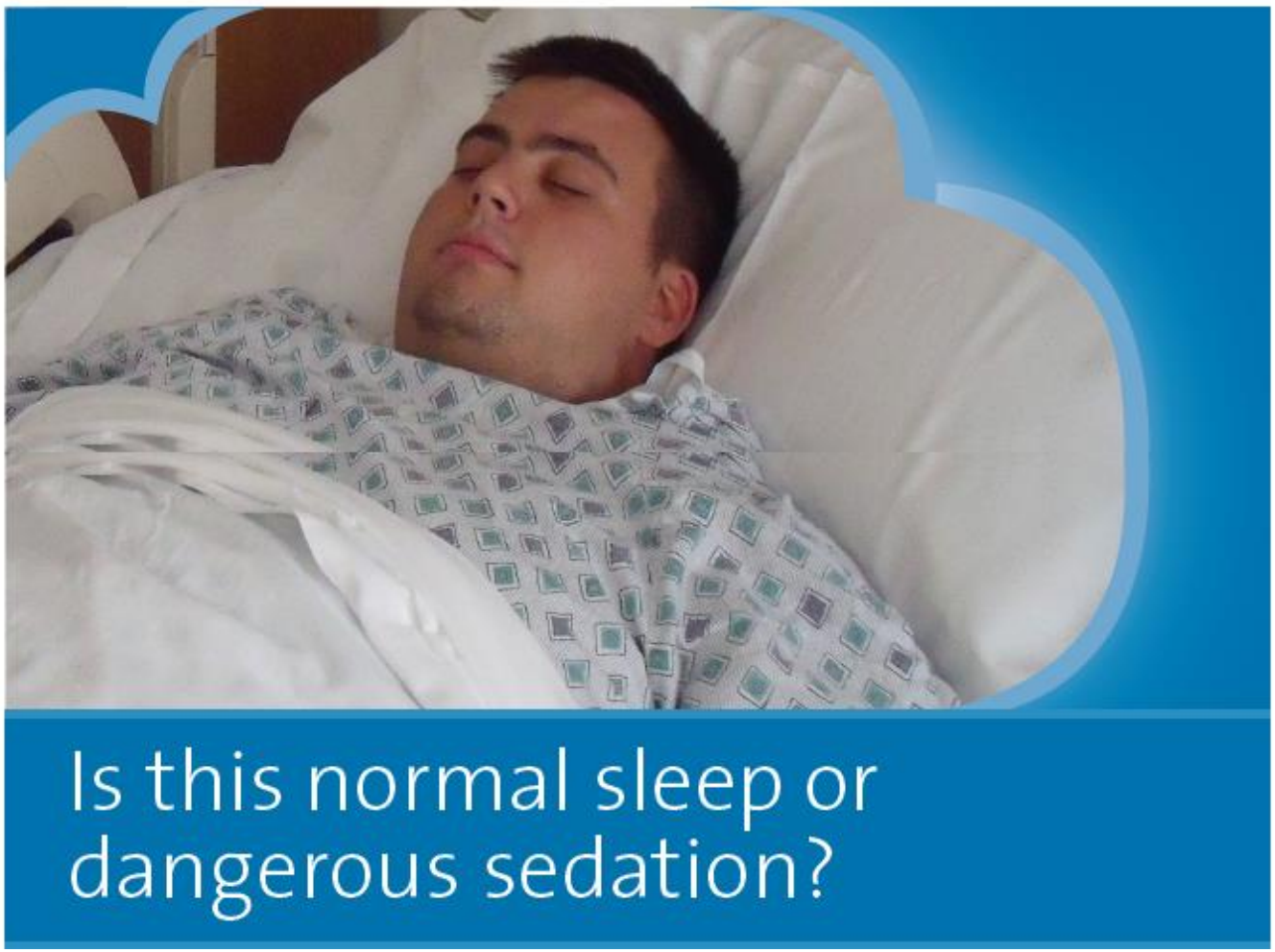
American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Polling Question

- Have you ever taken care of a patient who appeared to be ‘resting/sleeping comfortably’?
  - Yes
  - No

Sleep vs Sedation



Not Just Sedatives and Opioids

- Antihistamines/anticholinergics
- Antipsychotics
- Some antidepressants
- Anti-emetics
- Muscle relaxants

ICU Pitfalls of Sedatives and Analgesics

Sedatives and analgesics may contribute to:

- Increased duration of mechanical ventilation
- Length of intensive care requirement
- Impede neurological examination
- May predispose to delirium

Kollef M, et al. *Chest*. 114:541-548.
Pandharipande et al. *Anesthesiology*. 2006;124:21-26.

Med/Surg Pitfalls of Sedatives and Analgesics

- Over sedation
- Transfer to ICU
- Hypoxic encephalopathy
- Death

MUST DO's

WAKE-UP MUST DO's

1. Establish Expectations

2. Pair POSS & Pain

3. Manage with Multiple Modalities

MUST DO #1
Establish Expectations

Goals of Pain Management:

- Relieve suffering
- Achieve early mobilization
- Reduce hospital length of stay

THE GOAL IS NOT ZERO PAIN!

MUST DO #2
Pair POSS & Pain

Just Right!

Over Medicated: Hibernating

Under Medicated: Not Happy

☹#@xx!!

Pasero Opioid-Induced Sedation Scale (POSS) With Interventions*

S = Sleep, easy to arouse

Acceptable; no action necessary; may increase opioid dose if needed

1 = Awake and alert

Acceptable; no action necessary; may increase opioid dose if needed

2 = Slightly drowsy, easily aroused

Acceptable; no action necessary; may increase opioid dose if needed

3 = Frequently drowsy, arousable, drifts off to sleep during conversation

Unacceptable; monitor respiratory status and sedation level closely until sedation level is stable at less than 3 and respiratory status is satisfactory; decrease opioid dose 25% to 50%[1] or notify primary[2] or anesthesia provider for orders; consider administering a non-sedating, opioid-sparing nonopioid, such as acetaminophen or a NSAID, if not contraindicated; ask patient to take deep breaths every 15-30 minutes.

4 = Somnolent, minimal or no response to verbal and physical stimulation

Unacceptable; stop opioid; consider administering naloxone[3,4]; stay with patient, stimulate, and support respiration as indicated by patient status; call Rapid Response Team (Code Blue) if indicated; notify primary[2] or anesthesia provider; monitor respiratory status and sedation level closely until sedation level is stable at less than 3 and respiratory status is satisfactory.

No discharge from PACU
No additional opioids

***Appropriate action is given in italics at each level of sedation.**

[1] If opioid analgesic orders or hospital protocol do not include the expectation that the opioid dose will be decreased if a patient is excessively sedated, such orders should be promptly obtained.

[2] For example, the physician, nurse practitioner, advanced practice nurse, or physician assistant responsible for the pain management prescription.

[3] For adults experiencing respiratory depression give intravenous naloxone very slowly while observing patient response ("titrate to effect"). If sedation and respiratory depression occurs during administration of transdermal fentanyl, remove the patch; if naloxone is necessary, treatment will be needed for a prolonged period, and the typical approach involves a naloxone infusion. Patient must be monitored closely for at least 24 hours after discontinuation of the transdermal fentanyl.

[4] Hospital protocols should include the expectation that a nurse will administer naloxone to any patient suspected of having life-threatening opioid-induced sedation and respiratory depression.

Two Scales are Better than One for Narcotic and Sedation Administration

PAIN ALONE

- Risk factors may be absent
- Objective?
- Dosage based on number or range
- Patients and families understand the numeric dosing

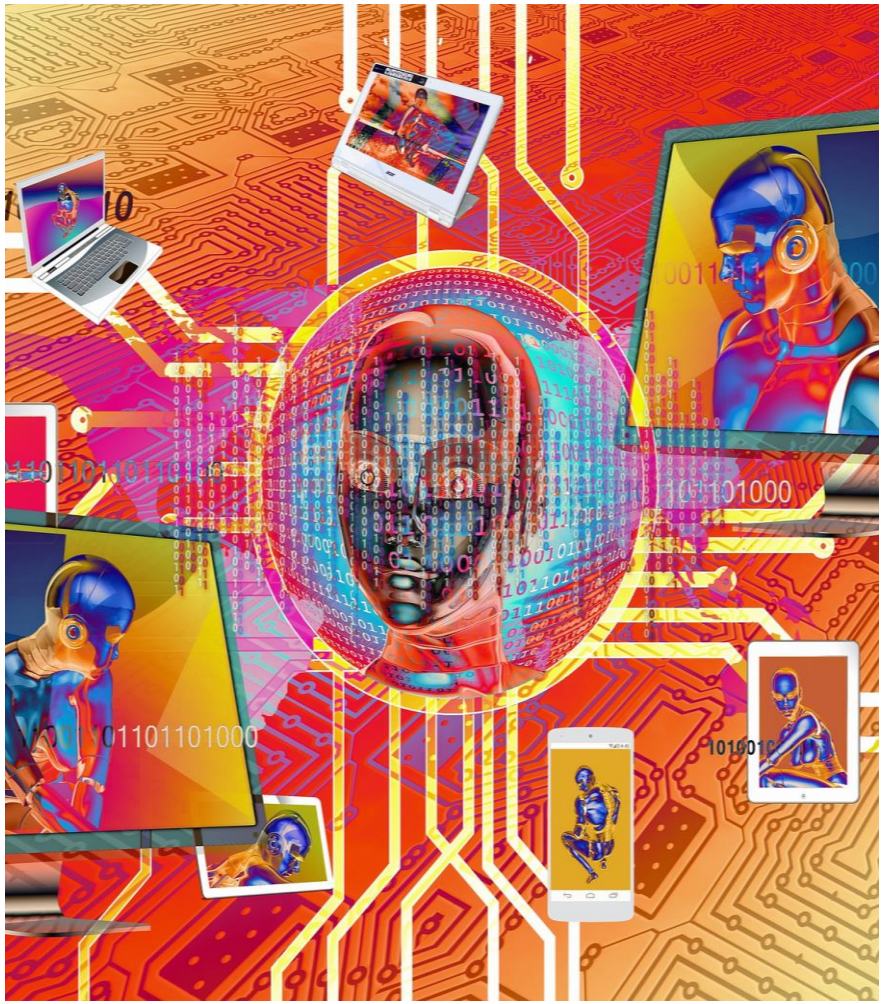
PAIN & POSS

- Two scales allow for safer dosing
- High pain scale with high POSS scale – no narcotics
- High pain scale low POSS - med dose

MUST DO #3
Multi-Modal Pain Management

Pharmacological and

Non-pharmacological



MULTIMODAL PAIN MANAGEMENT

- Combination of opioid and one or more other drugs
  - acetaminophen (Tylenol, others)
  - ibuprofen (Advil, Motrin IB, others)
  - celecoxib (Celebrex)
  - ketamine (Ketalar)
  - gabapentin (Gralise, Neurontin)
- Non-pharmacological interventions

www.mayoclinic.org/pain-medications/art-20046452

CAN WE MANAGE PAIN WITH NON-PHARMACOLOGIC METHODS?

What do we do at home?

Comfort measures:

- Pet therapy
- Warm compresses, blankets
- Ice packs
- Extra pillows
- Aromatherapy
- Massage
- Herbal tea
- Stress ball
- Music

DO COMFORT ITEMS HELP?

- These modalities can:
  - Reduce anxiety
  - Reduce pain
- Reducing anxiety can reduce pain
- Non-pharmacologic pain reduction methods reduce the need for pain medications

POSITIVE RESULTS

- Pain scores
- Nausea scores
- Anxiety scores….

All decreased by more than 50%

NEXT: Looking to see if opioid usage and opioid ADEs are both decreased.

WAKE UP
Success, Barriers & Help

Must Do's

1. Establish Expectations
2. Pair POSS & Pain
3. Manage with Multiple Modalities

Next Steps

- ✓ Are you setting pain management expectations ("0" is not the goal) prior to admission?
- ✓ Are you asking about comfort level in addition to pain score?
- ✓ Are you using the Pasero Opioid-induced Sedation Scale (POSS) prior to and after opioid administration?
- ✓ Do you offer multimodal pain management; both pharmacologic and non-pharmacologic modalities?

2 Early Progressive Mobility

Polling Question

- In our facility, we do the following for our alert critically ill patients who happen to require ventilation support:
  - Keep them on strict bedrest
  - Try to get them up in a chair
  - Actively assist them to ambulate

Pathophysiological changes within 24H of bed rest

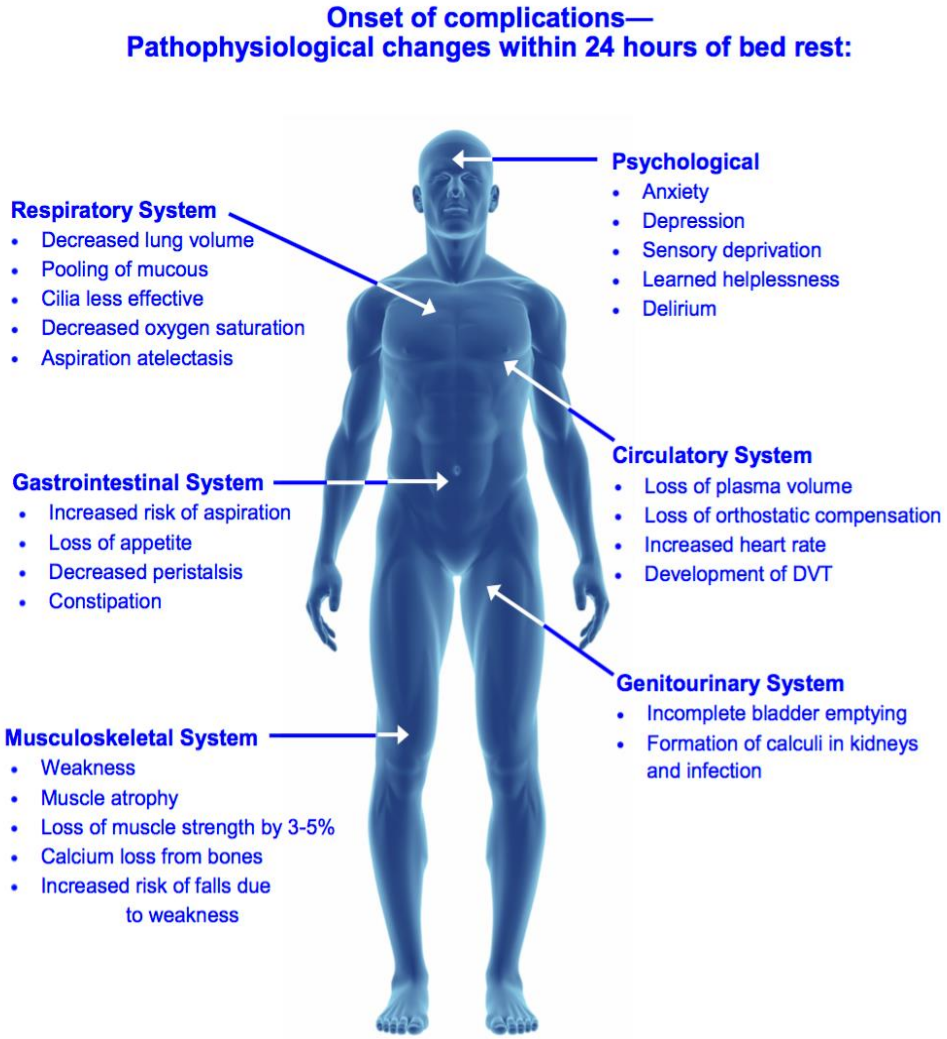


Image retrieved at: [Mobilization of Vulerable Elders in Ontario (MOVE ON)]

What happened to mobility?

"There is an inherent tension between preventing falls and promoting mobility" Growdon, Shorr, Inouye 2017

Cumulative impact on quality of life

- "New Walking Dependence" occurs in 16-59% in older hospitalized patients (Hirsh 1990, Lazarus 1991, Mahoney 1998)
- 65% of patients had a significant functional mobility decline by day 2 (Hirsh 1990)
- 27% still dependent in walking 3 months post discharge (Mahoney 1998)

It's Simple

If they came in walking, keep them walking

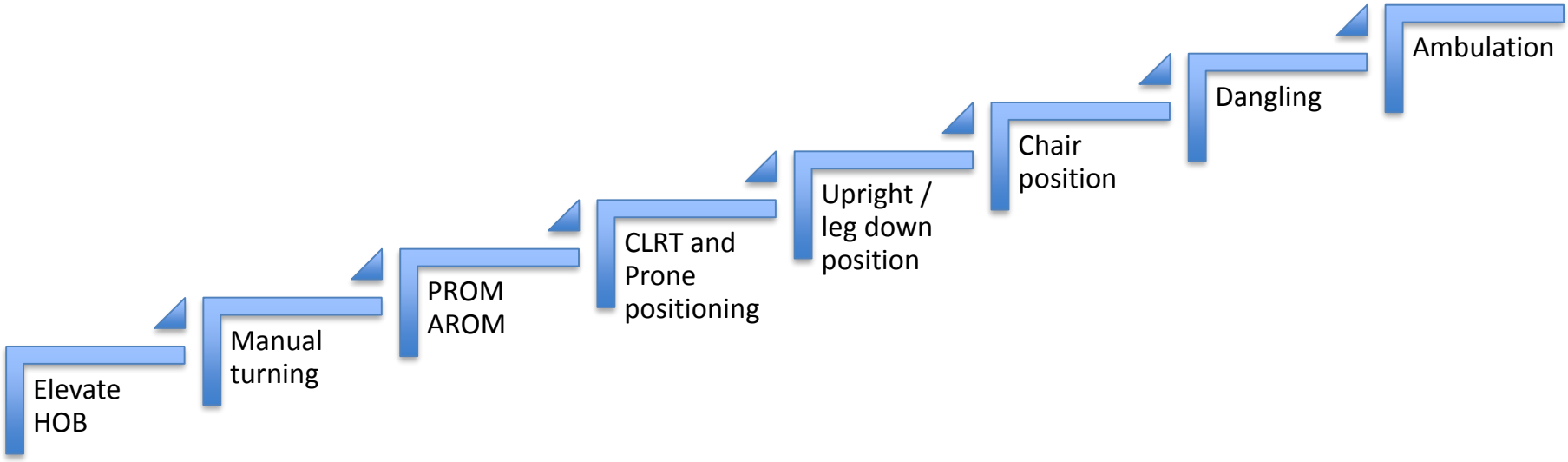
Use mobility to accelerate progress

"When am I going to walk? I walked yesterday. It's better than just being in the chair. I feel better when I am walking."

What is progressive mobility?

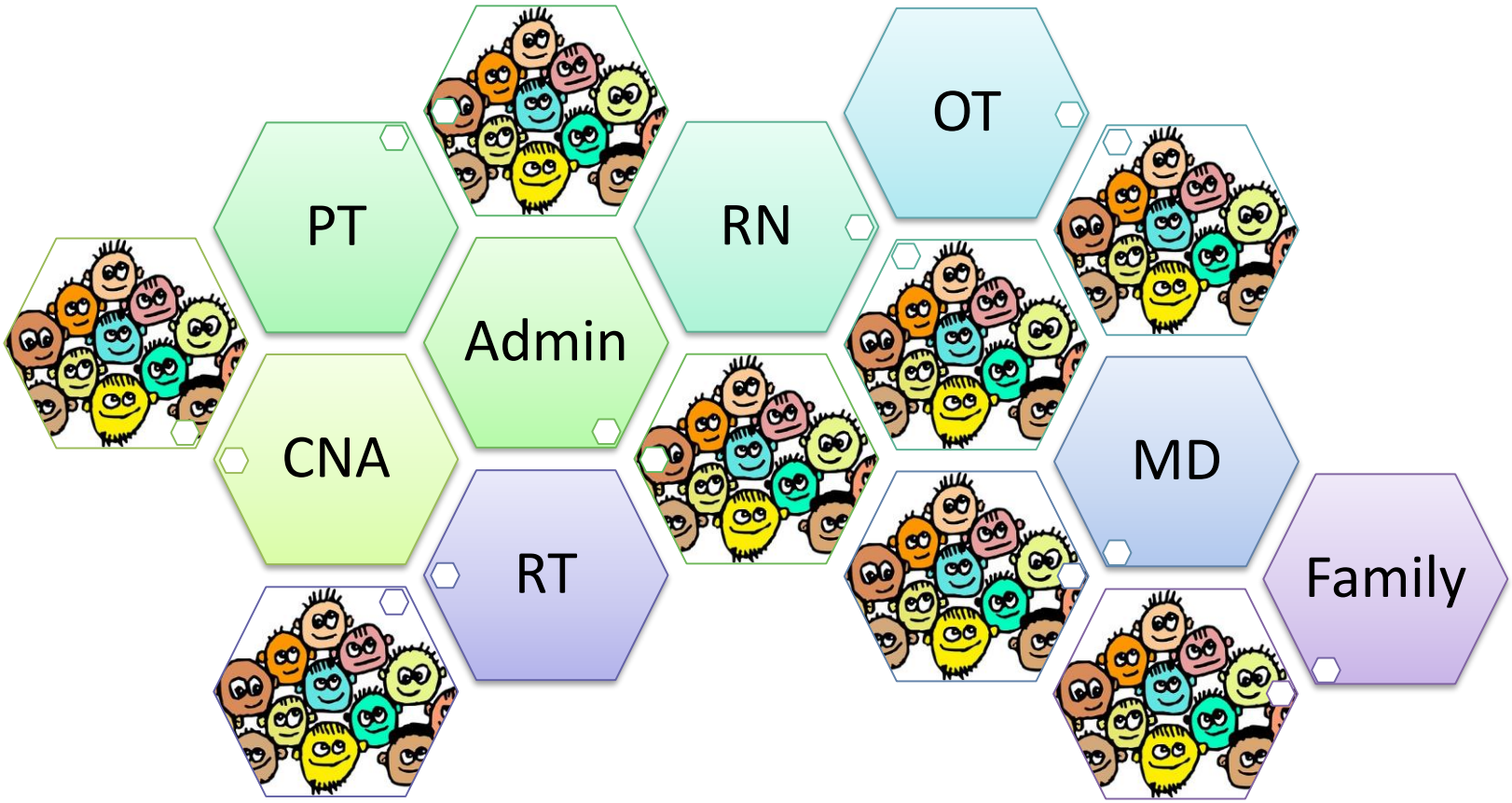
- Progressive mobility is defined as a series of planned movements in a sequential matter beginning at a patient's current mobility status with goal of returning to his/her baseline

(Vollman 2010)



Vollman, KM. Introduction to Progressive Mobility. Crit Care Nurs. 2010;30(2):53-55.

TEAMING UP TO MOBILIZE



MUST DO's

GET-UP MUST DO'S!

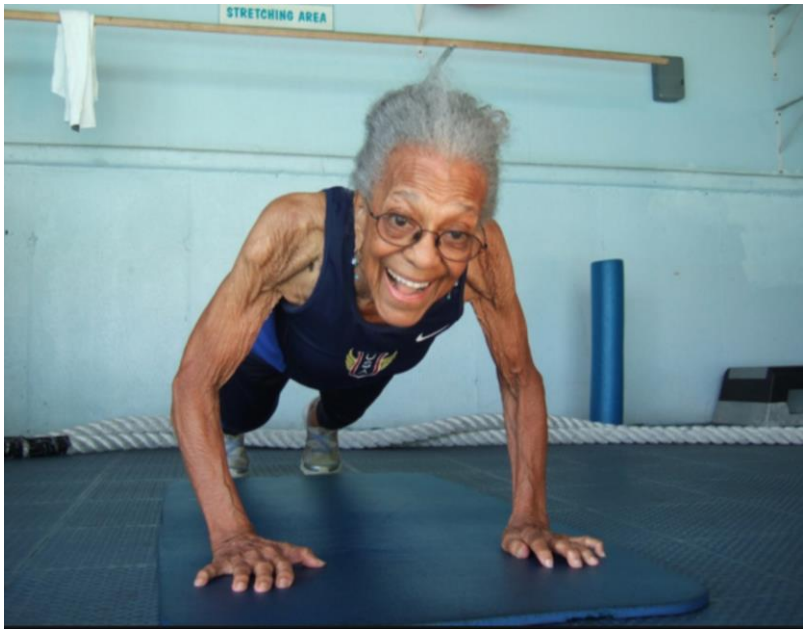
1. Walk in, walk during, walk out!
2. Grab and go mobility devices.
3. Three laps a day keeps the nursing home away!

MUST DO #1
Walk In, Walk During, Walk Out!

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

MUST DO #1
Walk In, Walk During, Walk Out!



- Determine pre admission ambulation status
- Don’t assume a frail appearance means weakness
- Use Get Up and Go test to assess ambulation skills

Mobility begins on admission

Tier Level	Defining Characteristics	Intervention[a]
Tier 1: Nonambulatory	Patients who • require more than a one-person assist for ambulation/transfers • are unable to maintain weight on their lower extremities • require any form of lift equipment	Active range-of-motion exercises: • ankle pumps • heel slides • hip abduction • quad sets • shoulder flexion Passive range-of-motion exercises: • ankle dorsiflexion • hip flexion • hip abduction • shoulder flexion Sit on side of bed Get out of bed and into a chair with appropriate equipment
Tier 2: Ambulatory	Patients who • are able to ambulate independently • require a one-person assist with ambulation	Ambulate with or without assistance in the hallway as tolerated Get out of bed and into a chair for all meals

[a] To be performed three times a day (in accordance with a patient's ability).

Wood W, et al.(2014) A Mobility Program for an Inpatient Acute Care Medical Unit. http://www.nursingcenter.com/pdfjournal?AID=2591440&an=00000446-201410000-00023&Journal_ID=54030&Issue_ID=2591321

MUST DO #2
Grab and Go Mobility Devices!

- Gait Belts in every room*
- Patients and staff have access to mobility devices
- Safe mobilization and patient handling training for staff

Gait belts are used to help control the patient's center of balance.

*with the exception of rooms for behavioral health patients

MUST DO #3
3 Laps a Day, Keeps the Nursing Home Away!

American Hospital Association

HRET
HEALTH RESEARCH & EDUCATIONAL TRUST

Facing the Facts about Mobility

Mobility interventions are regularly missed

- Nursing perceptions
  - Lack of time
  - Ease of omission
  - Belief it is PTs responsibility
- Survey results
  - Concern for patients level of weakness, pain and fatigue
  - Presence of devices – IVs and Urinary Catheters
  - Lack of staff to assist

Doherty-King, B Bowers, B. How nurses decide to ambulate hospitalized older adults: development of a conceptual model. Gerontologist. 2011 Dec:51(6): 786-97

Tips for Promoting Mobility

- **Order Modifications**
  - Delete orders for
    - Bedrest
    - Ad lib
  - Replace with specific orders
    - Times, activities, distance
- **Promote Team Mobility Management**
  - Delegation of patient mobility
    - Replace sitters with a mobility aide
  - Rehab and Nursing face-to-face bedside handoffs
    - Document plans and progress on white boards

GET UP
Success, Barriers & Help

Must Do's

1. Walk in, walk during, walk out!
2. Grab and go mobility devices.
3. Three laps a day keeps the nursing home away!

Next Steps

- ✓ Do you have a mobility team?
- ✓ Do you have a mobility protocol?
- ✓ Have you clearly identified staff that have the capacity to ambulate patients daily?
- ✓ Do your nurses or rehabilitation/physical therapists evaluate each patient's mobility status upon admission?
- ✓ Is mobility equipment readily available for nurses and patients to access? (canes, walkers, lifting and safe patient handling devices, gait belts)
- ✓ Do you have a way to document and monitor daily mobility?

3 Hand Hygiene

Hand-washing an OLD intervention

- Since 1847 we have understood that hand hygiene (HH) makes a difference in the spread of infections
  - Dr. Ignaz Semmelweis in Vienna – Childbed fever
  - Dr. Lister – Operating Room
  - 1980's concepts of hand hygiene in health care emerged
  - 2002 alcohol based hand rub adopted
  - 2007-2008 WHO Global clean hands initiative
- Yet the average HH compliance is 48%

https://www.cdc.gov

We need to get it right!

- Protect our patients from HAI by performing HH.
- Promote patient and family engagement- give them permission to “speak up for clean hands.”
- Promote patient HH for patients.

http://www.cdc.gov/handhygiene/patients/index.html

Polling Question

- In our facility, if a nurse observes another nurse who forgets to perform hand hygiene, s/he will:
  - Likely ignore it
  - Say something to the nurse later on in the shift
  - Speak up immediately to remind the nurse to perform hand hygiene

MUST DO's

SOAP-UP Must Do's - beyond your current plan

1. Prompt Peer Performance

2. Track Quietly and Trend Loudly

3. Drive Drift Down

MUST DO # 1
Prompt Peer Performance

MUST DO #2
Track Quietly and Trend Loudly

Hand Hygiene

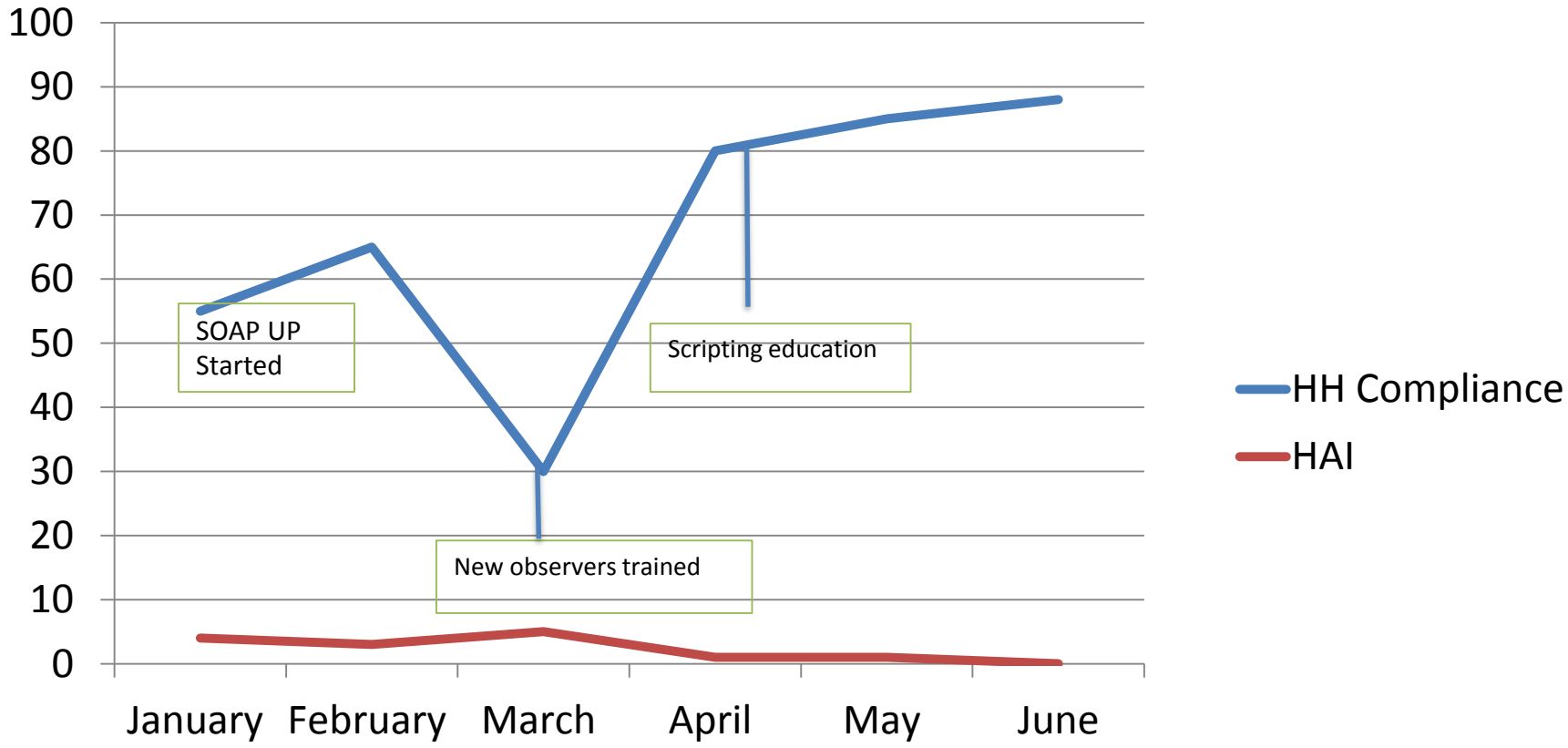
vs.

Healthcare-Associated Infections

American Hospital Association

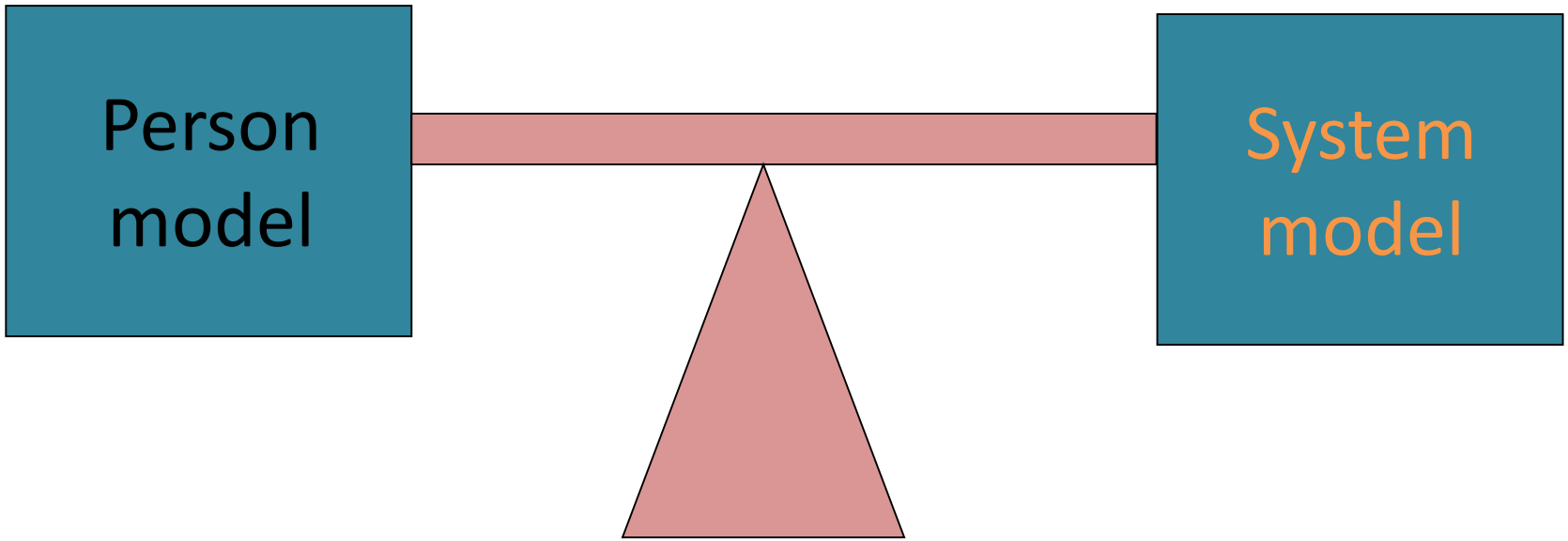
HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Track Quietly and Trend Loudly



MUST DO #3
Drive Drift Down

The Right Balance



Important to get the balance right.
Both extremes have their pitfalls.

Shared Accountability

Instructions:
- Do not share with anyone that you are conducting the audit
- Observe all staff-nurses, physicians, RT's, housekeeping staff, etc. (see other side of form for Staff Codes)
- Observe for 30 minutes. This may be broken up in small increments of time. *OR,*
- Observe at least 15 staff members

Unit/Department _____ **Date** _____ **Time** _____

Indicate below what activity was observed and check the one box that applies to that activity

PERSON ENTERED THE ROOM FOR DIRECT CONTACT WITH THE PATIENT OR ENVIRONMENT	HAND HYGIENE SUPPLIES (SOAP, HAND SANITIZER, TOWELS) ARE ADEQUATE		DID YOU SEE HIM/HER USE SOAP OR ALCOHOL GEL WHEN ENTERING THE ROOM?		PERSON EXITED THE ROOM AFTER DIRECT CONTACT WITH THE PATIENT OR ENVIRONMENT	DID YOU SEE HIM/HER USE SOAP OR ALCOHOL GEL WHEN EXITING THE ROOM?		PERSON EXITED THE ROOM WITH GLOVES ON AFTER DIRECT CONTACT WITH THE PATIENT OR ENVIRONMENT	DID YOU SEE HIM/HER USE SOAP OR ALCOHOL GEL AFTER REMOVING GLOVES?	
Enter Staff Code	Yes	No	Yes	No	Enter Staff Code	Yes	No	Enter Staff Code	Yes	No
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
Total # of Staff Observed	Total		Total	Total	Total # of Staff Observed	Total	Total	Total # of Staff Observed	Total	Total

Adapted with permission from Stanford Health Care, Palo Alto, CA

Stanford HEALTH CARE STANFORD MEDICINE

American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

What Works?

- Observation and surveillance of hand hygiene is the best way to ensure appropriate compliance.
- Schedule an unscheduled observation by trained observers.
- Intervene immediately if a breach in HH is observed.
- Provide scripts for reminding peers to perform HH.
- Promote culture of safety .

SOAP UP
Success, Barriers & Help

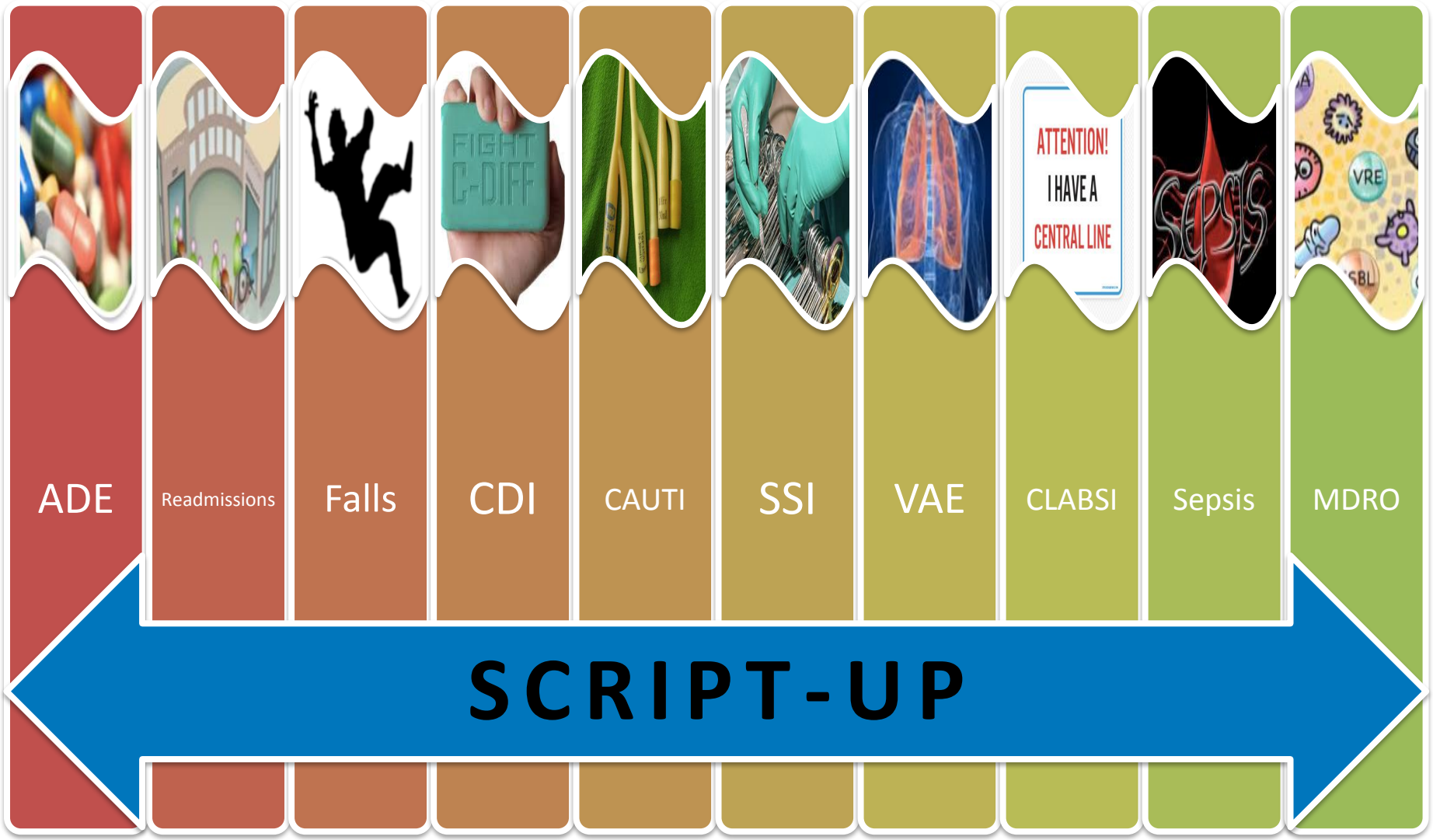
Must Do's

1. Prompt Peer Performance
2. Track Quietly and Trend Loudly
3. Drive Drift Down

Next Steps

- ✓ Do you display hand hygiene (HH) compliance results in highly visible places at the department/unit level?
- ✓ Have you implemented scripting to remind other team members to perform HH when it is not observed?
- ✓ Do you have a system in place that holds all team members accountable to the HH expectations?

#4 Optimize Medications



Polling Question

- In my facility, Antibiotic Stewardship is:
  - Firing on all cylinders
  - Just getting started
  - Gaining traction
  - Not a priority due to resource limitations

Why It Matters

- Adverse drug events are the most common cause of harm (AHRQ)
- Overuse and inappropriate use of antibiotics is the key cause of antibiotic resistance (CDC)
- Beers Criteria Medications are linked to poor health outcomes, including confusion, falls, and mortality (Am. Geriatric Society)
- Risk of ADEs almost doubles with $\geq$ 5 meds (Bourgeois, Shannon et al, 2010)

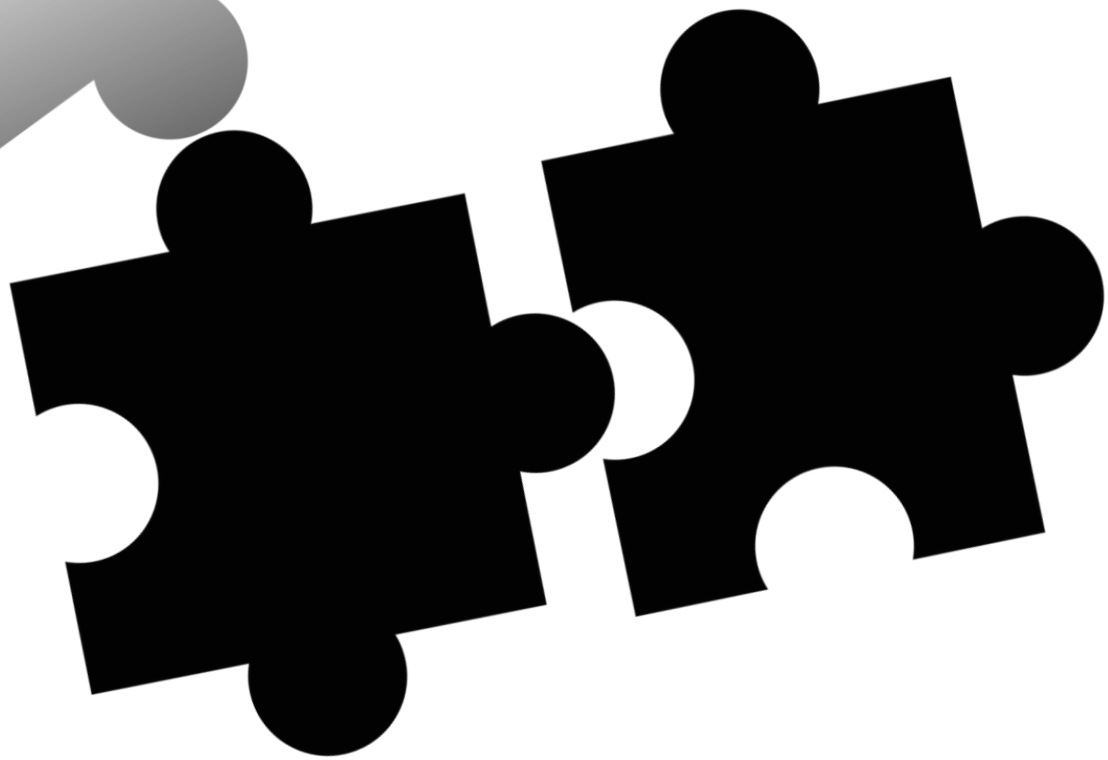
MUST DO's

SCRIPT UP- MUST DO's

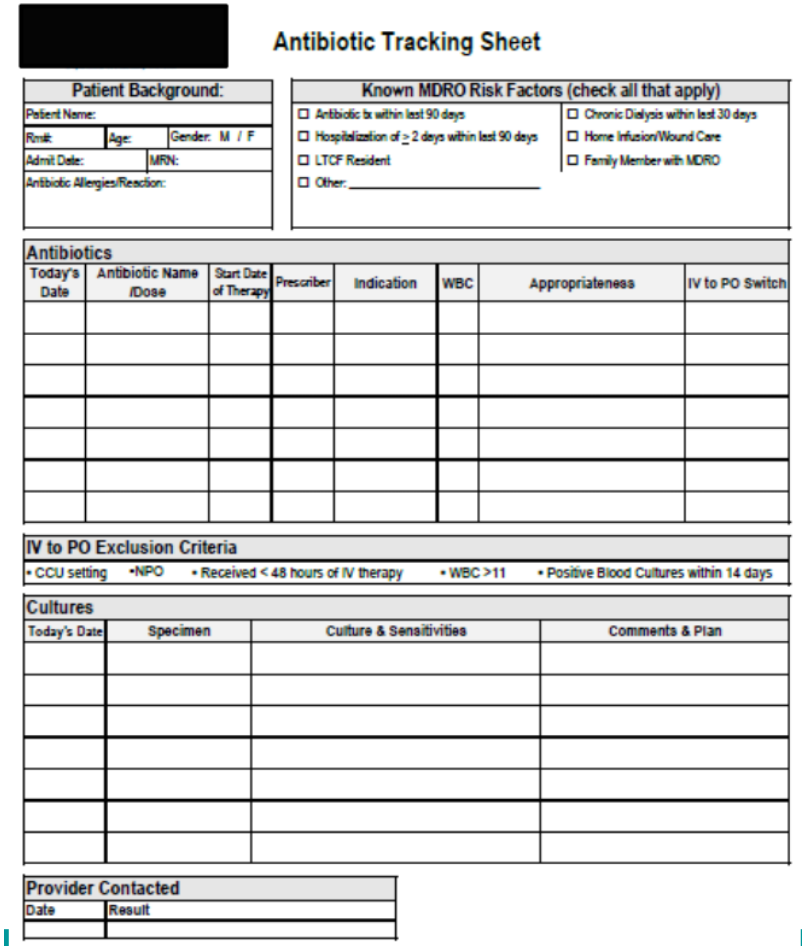
1. Match the drug to the bug
2. Follow Beers if they're up in years
3. Use appropriate meds -- Less may be more
   - Ask if patient needs any medication changes

Must Do #1
Match the Bug to the Drug

- Implement antibiotic time outs at 48 or 72 hours to de-escalate and modify therapy
- Verify the presence of a bacterial or fungal infection



One Idea



[redacted]

Antibiotic Tracking Sheet

Patient Background:		
Patient Name:		
Rm#:	Age:	Gender: M / F
Admit Date:	MRN:	
Antibiotic Allergies/Reaction:		

Known MDRO Risk Factors (check all that apply)	
☐ Antibiotic tx within last 90 days	☐ Chronic Dialysis within last 30 days
☐ Hospitalization of ≥ 2 days within last 90 days	☐ Home Infusion/Wound Care
☐ LTCF Resident	☐ Family Member with MDRO
☐ Other: _____	

Antibiotics

Today's Date	Antibiotic Name /Dose	Start Date of Therapy	Prescriber	Indication	WBC	Appropriateness	IV to PO Switch

IV to PO Exclusion Criteria

• CCU setting • NPO • Received < 48 hours of IV therapy • WBC >11 • Positive Blood Cultures within 14 days

Cultures

Today's Date	Specimen	Culture & Sensitivities	Comments & Plan

Provider Contacted

Date	Result

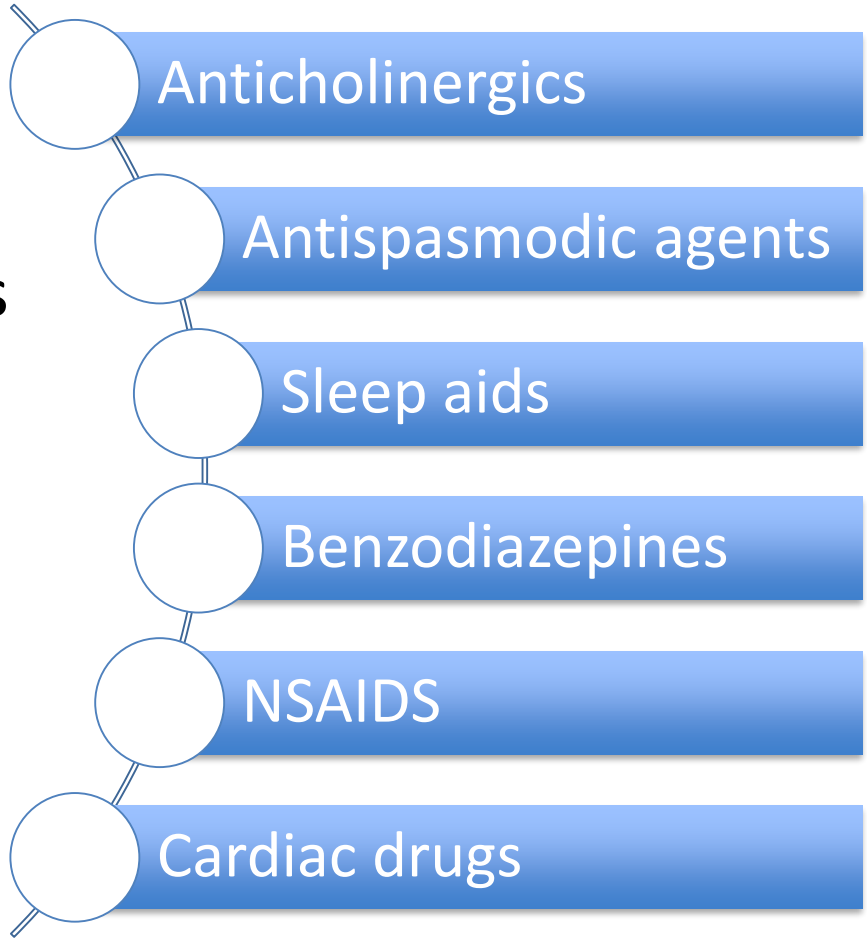
- Pharmacists focus review on patients with a fluoroquinolone order ≥ 48 hours if cultures are back
  - ✓ Review 7-10 patients daily
  - ✓ ~50% require intervention
- Antibiotic monitoring form is completed by pharmacists
- Recommendations made during interdisciplinary rounds or by phone call

Getting Started

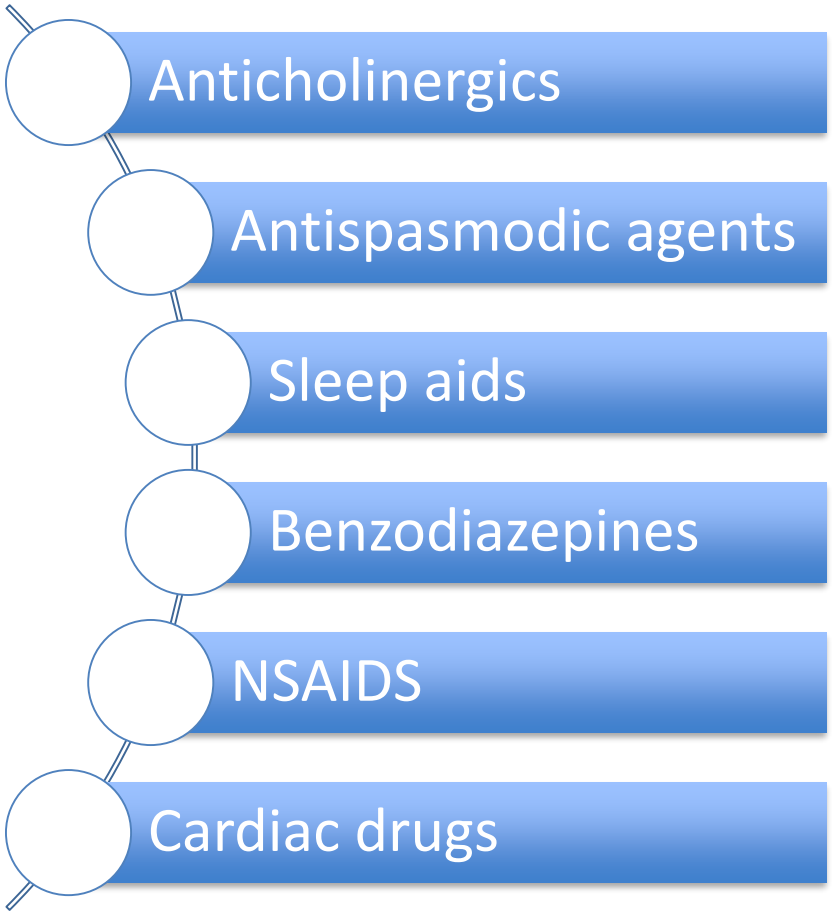
- Decide what antibiotic to target by considering:
  - Potential risk
  - Volume used
  - High cost
- Set up a review process
- Monitor your results
- Spread to other antibiotics when you can

Must Do #2:
Follow Beers, if they're up in years

- Flag, stop and replace medications on the Beers list
- If needed, switch to a safer agent
- If not needed, discontinue medication



Medications to avoid in those over 65yrs



Benadryl®, Phenergan®, Vistaril®

Donnatal®, Bentyl®, Librax®, Probanthine®

Ambien®, Luminal®, Dalmane®, Nembutal®

Ativan®, Valium®, Xanax®, Librium®, Klonopin®

Advil®, Motrin®, Aleve®

Digoxin > 0.125mg/day, Procardia®, Catapres®

Provide Alternatives

Drug Class	Preferred Alternative	Special dosing considerations for the elderly

Benzodiazepines	- For insomnia:
	  - emphasize sleep hygiene
	  - treat for underlying disrupters
	  - evaluate timing of other medications and alcohol
	- For chronic anxiety:
	  - consider buspirone or SSRIs or SNIRs
	  - consider psych referral
		- Risk of fall doubled if used more than 14 days

Pain Medications		Avoid meperidine

Provide Alternatives

Drug Class	Preferred Alternative	Special dosing considerations for the elderly
Cardiovascular agents	- For HTN alone - ACE inhibitors, betablockers, or calcium channel blockers preferred	Most significant risk is orthostatic hypotension Monitor closely and educate patient Slowly increase to full dose
Skeletal muscle relaxants		Monitor length of use and discontinue as soon as no longer indicated; recommended for short use only

Help your physicians by providing guidelines about alternatives and any special dosing or monitoring considerations.

Must Do #3
Use appropriate meds -- less may be more

- Consider shortening med lists, especially PRN medications
  - When adding a med, ask "What can I discontinue?"

Why Less May Be Better

- There is no set number of medications defining polypharmacy – The CDC uses 6
- Concerns
  - Increased ADE
  - Increased drug interactions
  - Increased costs
  - Prescribing cascade
- Associated with
  - Decreased quality of life, mobility and cognition

Script UP
Success, Barriers & Help

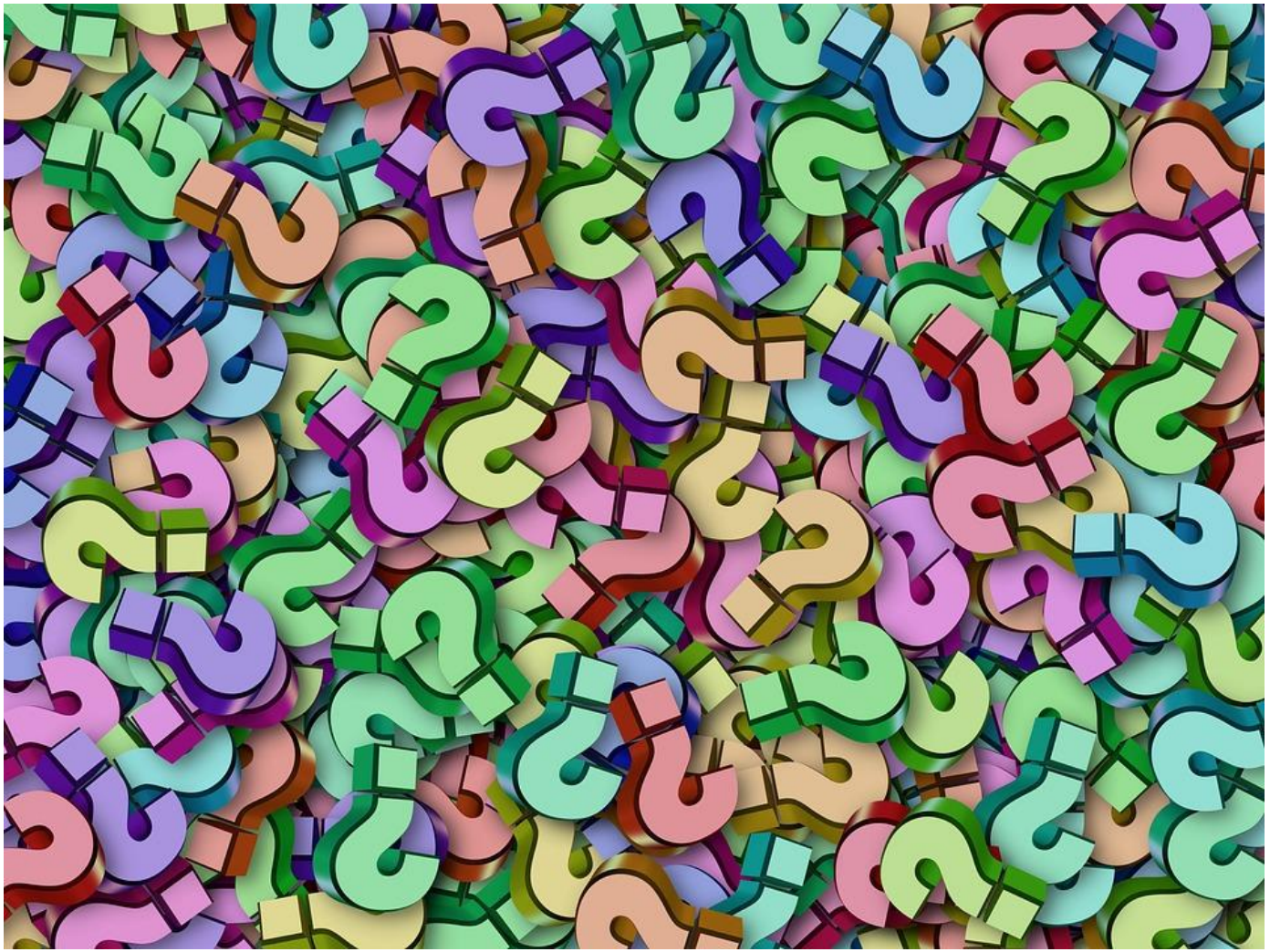
Must Do's

1. Match the drug to the bug
2. Follow Beers if they're up in years
3. Use appropriate meds -- Less may be more
   - Ask if patient needs any medication changes

Next Steps

- ✓ Have you implemented a "time out" after 24-48 hours of antibiotic therapy to re-assess and optimize therapy?
- ✓ Do the staff, providers, and pharmacists have ready access to reminders and alerts to avoid medications on the Beers list for patients over 65 years old?
- ✓ Is there a specific number of medications on a patient's medication list (e.g., 10) that will trigger a review by a pharmacist?

Summary & Discussion



American Hospital Association

HRET HEALTH RESEARCH & EDUCATIONAL TRUST

Reminders

- Complete the post-webinar Survey Monkey that will be sent to you via email:
  - **Must have participated on the webinar for a minimum of 50 minutes**
  - **Required to complete survey to earn 1 CE credit**
  - **CE certificates will be issued to you via email within one week**

Barbara DeBaun, RN, MSN, CIC
Improvement Advisor
Cynosure Health
bdebaun@cynosurehealth.org
415-823-7616