MORNING CMO REPORT

05.03.2017

FROM THE DESK OF:
Anthony P. Weiss, MD, Chief Medical Officer,
Associate Dean for Clinical Affairs,
Upstate University Hospital

UPSTATE UNIVERSITY HOSPITAL

Adult Rapid Response/Code Blue Team

Applies to All Physicians

RRT
Informational

Effective July 3, 2017

At the DT Campus, a dedicated Medicine Resident (PGY-) will become the Provider Team Leader of the Adult Rapid Response Team and Code Blue Team.

Why the Change?

Evidence based practice indicates that Medical Emergency Teams with consistent core team members lead to improved patient outcomes, improved response times, and effective communication and team dynamics.

Measurable Outcomes:

RRT: The Team Leader will be proficient in recognizing and treating acutely decompensating patients (current ave~ 65 RRTs/mo), leading to:

- **Decreased number of transfers to higher level of care (current ave~ 45%)**
- **Decreased number of Code Blue events (~20/month)**
- **Decreased Mortality**

Get With The Guidelines Resuscitation Program

Applies to All Physicians

Implications: While the attending of record and their residents still "own" the patient and must be available to manage care, they will no longer be the first resident to RRT and Code calls.

Upstate University Hospital recently joined AHA's Get with the Guidelines- Resuscitation Program. The program's goal is to improve adherence to evidence based care of patients who experience a resuscitation event. In addition, the program allows us to track compliance and to benchmark with hospitals locally, statewide and nationally. Upstate's Code Blue Team will actively participate in pre-scheduled mandatory code simulations. This will lead to a successful, high-performance team, with a goal to improve upon:

- **Adherence to AHA Algorithms:**
  - **Time to first Chest Compressions <= 1 min**
  - **Time to first shock<= 2 min**

ALERT-Highest priority emergency communication; warrants immediate action or attention by the recipient.
HIGH ADVISORY-High priority does not warrant immediate action but recipients should be aware.
ADVISORY-Provides very important information for a specific incident or situation that does not require immediate action.
UPDATES TO ALERTS AND ADVISORIES-Provides updated information regarding an incident or situation; unlikely to require immediate action.
INFORMATIONAL MESSAGE-Provides timely information, important for review or serves as a reminder for an action that should be taken.

- **Time to first Epinephrine <= 5 min**

- **Improve survival of patients who experience an in-hospital cardiac arrest**
- **Decrease Mortality**

Delirium

Applies to All Physicians

Delirium Informational

New updates have been made to Policy: CM D-15 **Delirium Screening, Prevention & Management Interventions for the Adult Medical/Surgical Patient** and to the prescribing provider order set.

Goal: Prevention/Early Recognition & Appropriate Treatment

What you need to know:

- There is an updated **Delirium Order Set** for providers which should be utilized on admission in **all patients ≥ 65 years** and any patient <65 who is high risk (see risk table below and attached order set).

Delirium is a condition with **acute/rapid** onset marked by fluctuating levels of consciousness. It represents a change from a person's baseline (defined as the person's "usual" cognition / behavior at least 2 weeks prior to hospitalization).

- Delirium:
  - Often goes unnoticed and untreated, complicating the care of the patient.
  - Costs the health care system millions of dollars due to **increased length of stay**.
  - Affects up to **a third of patients** over 70 (Collier, R. 2012).
  - Is **reversible and preventable** and is often due to a medical reason such as infection.
- Nurses will be utilizing a new evidence-based Delirium Screening Tool called the Confusion Assessment Method (CAM). They will notify you, as they do now, if the patient is assessed to be positive for delirium.

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- There have been changes to the Delirium Provider Order Set:
  - Nursing interventions are no longer listed in the order set (they are in the Nursing Assessment flowsheet, under Neuro - Delirium Screening Tool section)
  - A recommendation / reminder to always consider non-pharmacological measures prior to antipsychotic therapy has been included.
  - A recommendation / reminder to check an ECG prior to first dose of antipsychotic therapy.

- Delirium is a diagnosis: use the appropriate ICD-10 Code and add to Problem List.

Risk Table-Delirium: Who is highest risk?

- **Advanced age ≥ 65**
- **Dementia, comorbid**
- **Polypharmacy**
  - **Drug withdrawal**
- **Functional impairment in ADLs**
- **Increased number of medical comorbidities = greater risk**
- **History of alcohol or substance abuse**
- **Sex (male)**
- **Sensory impairment (decreased vision, decreased hearing)**
- **Bed rest**
- **Indwelling devices (e.g. Foley, IV,**

Reference:

Collier, R. (2012) Hospital-induced delirium hits hard. *Canadian Medical Association Journal* Jan10; 184 (1) 23-24. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3255198/

*See attached:

- Delirium: Interprofessional Assessment & Management with the Hospitalized Older Adult (PowerPoint)
- Provider Order Set

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D-23 Management of Disruptive Behavior of Patient &/or Family Member (s)

Applies to All Physicians

D-23
Informational

We have, unfortunately, been seeing an increase in the number of reported incidents of disruptive behavior toward staff from both patients and visitors. The revised policy D-23, as described below, is meant to address this issue:

Intended Audience: All Upstate University Hospital Physicians, Residents and Medical Students

Exceptions/Exemptions:

- **Physiologic or Psychiatric Issues:** As described in Administrative policy D-23.
- **Emergency Department (ED)**: The ED is exempt from following the procedures set forth in this policy but may follow the steps for an Administrative Discharge or to request a "Safety Risk to Self/Others" flag from Social Work.

Definitions: *Disruptive Behavior (DB)*, *Treatment Team* (TT), *Behavior Agreement (BA)*, *Administrative Discharge (AD*,

Section 1: Steps to implementing a Behavioral Agreement

- Inform the Nurse Manager/designee of the DB; NM will then confer with Patient Experience Leader (PXL) to determine if DB meets the criteria above. A member or members of the TT will meet with the patient &/or family member(s) immediately and discuss the inappropriate behavior.
- If DB behavior continues after initial counseling, NM/designee will confer with PXL and convene a meeting with the TT to develop a BA (this meeting should take place as soon as possible). The purpose of this meeting is to determine the contents of the BA.
- The NM and PXL will be responsible for communicating the expectations, boundaries, and consequences of the BA to the patient &/or family member(s) utilizing UPD if appropriate.

Section 2: Procedure to Communicate and Enforce the Behavioral Agreement

- The NM/designee and PXL will document in the MR the results of delivery of BA and notify the Attending/designee managing the patient, that a BA is now in force and the behavior expectations including consequences/restrictions.

- NM/designee will encourage ALL staff including physicians to report any further inappropriate behavior.

Section 3: Steps to Request an Administrative Discharge (AD)

- The decision to discharge a patient may be based on a pattern of violations of the expectations and boundaries of behavior set forth in the BA entered into with the patient &/or family member(s). The Attending/designee and PXL will be asked to contact the Chief Medical Officer (CMO) to request permission for an AD. (any and all pertinent information including all MR information pertaining to BA will be provided to the CMO).

Outstanding Physician Comments

Applies to All Physicians

Each week we receive written comments from our patients regarding the care we provide within the Hospital. Below are this week's comments from grateful patients receiving care on the units and clinics at Upstate:

Comments
Informational

6E - Dr. King was a great surgeon took time to explain all aspects to surgery and speak to my parents regarding my care.

8G – Dr. Hegazy - was very professional and caring, he was always upbeat and very thorough.

ED- Dr. Schenker – amazing!

Inpatient Pediatrics – Dr. Katz did an amazing job.
Dr. Loftus and his team were amazing!! Very attentive to a nervous Mother.

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ADVISORY-Provides very important information for a specific incident or situation that does not require immediate action.
UPDATES TO ALERTS AND ADVISORIES-Provides updated information regarding an incident or situation; unlikely to require immediate action.
INFORMATIONAL MESSAGE-Provides timely information, important for review or serves as a reminder for an action that should be taken.

Medicine Subspecialties – I always recommend this practice and **Dr. Neupane**. I have never had a bad experience.
Dr. Bonilla-Trejos called me personally as soon as he had my results. He did more complete testing than anyone has ever done before in three states.
Loved **Dr. Bisen**; so glad to work with her. She listened to my concerns.

UHCC Neurology – Dr. Sanders – I found her to be patient, careful and helpful. Her assurances were very much appreciated!
Dr. Vertino – he was wonderful

Joslin – Dr Nadkarni is compassionate and always cheerful.
I am so happy **Dr. Piper** joined your team. She was wonderful.

Joslin – Dr Nadkarni is compassionate and always cheerful.
I am so happy **Dr. Piper** joined your team. She was wonderful.

She was one of the most knowledgeable and caring doctors I've ever been seen by.
Dr. Bollineni was excellent - very knowledgeable and patient centered approach; explained things thoroughly.
Dr. Izquierdo was very helpful, accommodating, compassionate, knowledgeable, professional. A model physician for Upstate!

Surgery Harrison Center – Dr Bem is very friendly and explains everything before doing it; very courteous.

University Geriatricians – I am very lucky to have **Dr Brangman!** I trust her absolutely and she encourages me to take action
Dr. Berg and her staff are the best doctors we have EVER been to for my mother. Dr. Berg and her staff are excellent, professional, courteous and compassionate. They are beyond anything I ever imagined in a geriatrician!!

Upstate Urology – Gennady Bratslavsky is unlike any other surgeon anywhere--caring, knowledgeable, just excellent, and he goes way beyond what one would even expect. He'll call you at home, give you his cell number, just amazing. Furthermore, he fixes you and makes you feel good about it.
Dr. Bratslavsky--no need to explain further. He is unique. You better keep him.
I love **Dr. Ferry**. She is very kind and caring....she's the best !

Dr. Natasha Ginzburg is excellent in her manner, knowledge, and demonstrated concern for her patients.

Breast Care Center – **Dr. Upadhyaya** was very professional and explained everything. He also had visuals for better understanding

Adult Medicine – **Dr Farrah** is always friendly and respectful.

University Cardiology – **Dr Carhart** easy to talk with as well as ease in providing information.

Hepatobiliary Clinic – **Dr Jain** was very nice, informative and explained things to me so that I completely understood what was going on.

Upstate Outpatient Surgery Center – **Dr. Dolinak** is an extremely friendly Dr. who takes the time to listen and explain procedures. She's never in a rush, always appears 100% focused on the patient.

Radiology CG – **Dr Zhang -** he explained the procedure; phenomenal treatment!

The Surgery Center CG – **Dr Surowiec** - he called back when he was available and made sure my needs were met.

Dr. Luthringer is the best! Both professionally and personally! I can't refer enough patients to him!

Delirium Adult Non-ICU, Non-ETOH IP [30400009061]

Not intended for use in ICU and alcohol associated delirium

Delirium Prevention and Management on the Adult Med-Surg Units

URL: http://www.upstate.edu/policies/documents/intra/CM_D-15.pdf

Nursing

Interventions

☑ Assess for Delirium on Admission and with each Assessment Per Policy	Routine, CONTINUOUS For 30 Days
☑ Communicate change in mental status per CAM to appropriate provider	Routine, CONTINUOUS For 30 Days

Consults

Consults

☑ Consult to ACE (Geriatrics) Inpatient	Reason for Consult: Requesting:
☑ Consult to Psychiatry Inpatient	Reason for Consult: Requesting:
☐ Consult to Pharmacy Inpatient	Routine, ONCE For 1 Occurrences Pharmacy to review patient meds? Check for drug interactions? Pharmacist to dose? Help with medication dosing - please indicate drug. Is a Formal Clinical Pharmacology Consult requested? Other request? Reason for Consult: Evaluation of medication regimen, recommendations toward optimization

Medications

Pain - Mild/Moderate/Severe

☐ Acetaminophen - Mild/Moderate OR Moderate/Severe Pain (Single Response)	
◉ acetaminophen (TYLENOL) tablet	650 mg, Oral, Three Times Daily-With Meals, For 30 Days For mild/moderate pain
◉ acetaminophen (TYLENOL) tablet	975 mg, Oral, Three Times Daily-With Meals, For 30 Days For moderate/severe pain
☐ Oxycodone - Mild/Moderate OR Moderate/Severe Pain (Single Response)	
◉ oxyCODONE (ROXICODONE) immediate release tablet	2.5 mg, Oral, Every 4 hours PRN, Moderate Pain, mild/moderate pain, For 3 Days Every 4-6 hours PRN
◉ oxyCODONE (ROXICODONE) immediate release tablet	5 mg, Oral, Every 4 hours PRN, Moderate Pain, moderate/severe pain, For 3 Days Every 4-6 hours PRN

Anxiety / Sleep

☐ trazodone (DESYREL) tablet	25 mg, Oral, Nightly PRN, Sleep, for insomnia, For 30 Days

☐ trazodone (DESYREL) tablet	25 mg, Oral, Once, For 1 Doses For insomnia AND no effect within 1-2 hours of initial dose trazodone

Bowel Management

☐ senna 8.6 mg tablet	2 tablet, Oral, Nightly, For 30 Days For constipation
☐ polyethylene glycol (MIRALAX) 17g packet	17 g, Oral, Daily PRN, constipation, For 30 Days
☐ Bisacodyl 5 mg or 10 mg tab: (Single Response)	
◉ bisacodyl (DULCOLAX) EC tablet	5 mg, Oral, Nightly PRN, Constipation, For 30 Days
◉ bisacodyl (DULCOLAX) EC tablet	10 mg, Oral, Nightly PRN, Constipation, For 30 Days
☐ bisacodyl (DULCOLAX) suppository	10 mg, Rectal, Nightly PRN, Constipation, For 30 Days

Antipsychotics - GERIATRIC DOSING (>/= 65 years old), if DELIRIUM PRESENT

--- Nonpharmacological measures should be used prior to antipsychotic therapy

--- Obtain an ECG prior to first dose of antipsychotic therapy; assess for prolonged QTc

--- For agitation: Oral route of administration recommended if possible; IM therapy next alternative

☐ haloperidol (HALDOL) tablet	1 mg, Oral, Every 6 hours PRN, Agitation, For 3 Days
☐ haloperidol (HALDOL) injection	0.5 mg, Intramuscular, Every 6 hours PRN, Agitation, For 3 Days
☐ quetiapine (SEROQUEL) tablet	12.5 mg, Oral, Two Times Daily Standard, For 3 Days For agitation
☐ risperidone (RISPERDAL) tablet	0.25 mg, Oral, Every 6 hours PRN, for agitation, For 3 Days
☐ risperidone (RISPERDAL M-TABS) disintegrating tablet	0.5 mg, Oral, Every 12 hours PRN, for agitation, For 3 Days
☐ ziprasidone (GEODON) injection	5 mg, Intramuscular, Every 6 hours PRN, Agitation, For 3 Days

Antipsychotics - STANDARD ADULT DOSING, if DELIRIUM PRESENT

--- Nonpharmacological measures should be used prior to antipsychotic therapy

--- Obtain an ECG prior to first dose of antipsychotic therapy; assess for prolonged QTc

--- For agitation: Oral route of administration recommended if possible; IM therapy next alternative

☐ haloperidol (HALDOL) tablet	2 mg, Oral, Every 6 hours PRN, Agitation, For 3 Days
☐ haloperidol (HALDOL) injection	1 mg, Intramuscular, Every 6 hours PRN, Agitation, For 3 Days

☐ olanzapine (ZYPREXA) tablet	5 mg, Oral, Nightly, For 3 Days For agitation
☐ olanzapine zydis (ZYPREXA) disintegrating tablet	5 mg, Oral, Nightly, For 3 Days For agitation
☐ olanzapine (ZYPREXA) IM injection	5 mg, Intramuscular, Every 6 hours PRN, Agitation, For 3 Days
☐ quetiapine (SEROQUEL) tablet	25 mg, Oral, Daily PRN, for agitation, For 3 Days
☐ risperidone (RISPERDAL) tablet	0.5 mg, Oral, Every 6 hours PRN, for agitation, For 3 Days
☐ risperidone (RISPERDAL M-TABS) disintegrating tablet	0.5 mg, Oral, Every 6 hours PRN, for agitatiion, For 3 Days
☐ ziprasidone (GEODON) injection	10 mg, Intramuscular, Every 6 hours PRN, Agitation, For 3 Days

Delirium:
Interprofessional Assessment & Management with the Hospitalized Older Adult

Christopher J. Norman, GNP

Division of Geriatrics

Objectives

- Using a case-based approach, the learner will accurately assess for delirium in the older adult utilizing evidence based tools, clinical knowledge, and whole-person consideration.
- Identify risk factors that predispose an older adult to delirium in the acute setting.
- Distinguish the characteristics between delirium, dementia, and depression, utilizing these terms appropriately when describing an older adult's clinical condition.
- Incorporate nonpharmacological and appropriate pharmacological management strategies for prevention and treatment of delirium.

Why the Need for Education?

- An 84yo female with delirium is administered lorazepam 2mg for getting up to use the bathroom….
- A 70yo male with delirium is administered a total of 17mg of IV or IM haloperidol within 2.5 hours on a night shift, after receiving multiple doses of Lortab, a medication to which he has a known allergy….
- A 91yo female, morbidly obese, receives 100mcg of IV fentanyl intra-operatively, a total of 20mg of morphine post-operatively, and then lorazepam 5mg for management of her delirium….

These, among others, are actual examples of clinical management decisions made at Upstate University Hospital. The people in these cases lived, but others have not due in part to the inappropriate assessment and management of their delirium.

Case Study

- Ms. F. is an 84yo female, presenting to the ED with new onset RIGHT-sided facial droop and disorientation, witnessed per family. Symptoms resolved upon arrival to ED.
- PMH: hyperlipidemia (HLD), osteoarthritis (OA)
- Meds: Tylenol Extra-Strength PRN
- Labs: CMP - Na 147
- Diagnostics: cranial CT (-), echo (-)
- Stroke Team initiated aspirin 325mg, atorvastatin 80mg; decision made to admit to floor for further stroke work-up.

Was Ms. F. delirious upon presentation to the ED? Yes!

In the ED, Ms. F. received lorazepam 2mg IVP, indicated for "agitation," when she got up from her gurney to use the bathroom without supervision. Prior to this, she received fentanyl 25mcg IVP for pain r/t her knee OA, d/t sitting for 3 hours.

Were these medications given appropriately? No. Asking about baseline function and cognition, and allowing intermittent ambulation with family could have avoided use of both benzo and narcotic at this time.

She was admitted to a medical floor at 2130.

What is Delirium?

- Delirium is a condition with ACUTE ONSET, marked by fluctuating levels of consciousness. It represents a change from a person's baseline (defined as the person's "usual" cognition / behavior at least 2 weeks prior to hospitalization).
- Delirium is NOT dementia and not inevitable.
- Delirium IS reversible and preventable!

- Types:
  - Hypoactive (least recognized, e.g. quiet, apathetic, lethargic, sedated, slow to respond)
  - Hyperactive (most recognized, e.g. agitated, combative, restlessness)
  - Mixed (e.g. fluctuation between hypo- and hyperactive)

- The delirious older adult is at increased risk for:
  - Functional decline
  - Falls
  - Longer hospital length of stay ($$$)
  - Hospital readmission
  - Alternative living situation after hospital discharge (i.e. rehab, nursing home)
  - Development of dementia or other cognitive impairment
  - Developing delirium again in the future
  - Death

Feature	Dementia	Delirium	Depression
Onset	Slow, insidious months/years	Sudden hours, days	Abrupt with life changes
Course	Progressive, not reversible	Short, fluctuating (usually reversible)	Worse morning usually reversible with treatm.
Duration	Months to years	Hours to less than a month	At least 2 weeks
Activity	Wandering, agitated	Agitation, restless hyperactive del. Sleepy, slow hypoactive delirium	Withdrawn, apathy
Alertness	Generally normal	Fluctuates hypervigilant to lethargic	Normal
Attention	Generally normal	Impaired difficult to converse, fluct.	Normal poor concentration
Mood	Low mood may be present	Fluctuating emotions	Depressed lack of interest, biological symptoms
Thinking	Word-finding difficulties	Disorganised distorted fragmented	Slow depressive themes
Perception	Usually normal in early stages except Lewy Body Dementia	Distorted illusions and hallucinations (normally visual), delusions	Usually intact but delusions and hallucinations (usually auditory) in severe cases

Note: This table is NOT exclusively diagnostic of these conditions, but to be used as a guideline for using appropriate terminology when documenting a patient's cognitive impairment in the context of his/her clinical history.

Delirium: Who gets it?

- Advanced age (>/= 70yo)
- Dementia, comorbid
- Polypharmacy
  - Drug withdrawal
- Functional impairment in ADLs
- Increased number of medical comorbidities = greater risk
- History of alcohol or substance abuse
- Sex (male)
- Sensory impairment (decreased vision, decreased hearing)
- Bed rest
- Indwelling devices (e.g. Foley, IV, PEG, trach)
- Restraints
- Anemia (severe)
- NPO (or poor PO intake)

Delirium: Assessment

- CAM = Confusion Assessment Method
  - Validated for use in non-ICU and ICU hospital settings
  - Widely used

DSM-V Criteria: Delirium

- A disturbance in **attention** (i.e. reduced ability to direct, focus, sustain, and shift attention) and **awareness** (i.e. reduced orientation to the environment).
- The disturbance develops over a short period of time (usually hours to a few days), represents a **change from baseline** attention and awareness, and tends to **fluctuate** in severity during the course of the day.
- An additional disturbance of cognition (e.g. memory deficit, disorientation, language, visuospatial ability, or perception) of **new onset**.
- The disturbances in Criteria A or C are **not better explained by another preexisting, established or evolving neurocognitive disorder** and do not occur in the context of a severely reduced level of arousal, such as coma.
- There is evidence from the history, physical examination, or laboratory findings that the disturbance is a **direct physiological consequence of another medical condition**, substance intoxication or withdrawal, or exposure to a toxin, or is due to multiple etiologies.

Possible Causes? Think "DELIRIUM"

D = Drugs (i.e. new changes / additions, dose, frequency)

E = Electrolyte disturbances (i.e. dehydration, sodium)

L = Lack of drugs (i.e. uncontrolled pain or withdrawal)

I = Infection (i.e. UTI, respiratory)

R = Reduced sensory input (i.e. poor vision, hearing)

I = Intracranial (i.e. hemorrhage, stroke, tumor)

U = Urinary, fecal issues (i.e. urinary retention, fecal impaction)

M = Myocardial, pulmonary (i.e. MI, COPD, CHF exacerbation)

Risk Factor: Medications!

- Higher anticholinergic burden = higher risk of delirium
- Consider these tools during medication reconciliation when considering risk for delirium:
  - Anticholinergic Cognitive Burden Scale (ACB): http://www.agingbraincare.org/uploads/products/ACB_scale_-_legal_size.pdf
  - Beers Criteria (2015): https://consultgeri.org/try-this/general-assessment/issue-16, then http://onlinelibrary.wiley.com/doi/10.1111/jgs.13702/pdf
  - START / STOPP Criteria (2012) – risk stratification tool: http://www.ngna.org/_resources/documentation/chapter/carolina_mountain/STARTandSTOPP.pdf

Management: Prevention is key!

Prevention of delirium is the BEST management strategy!

- Nonpharmacological strategies should be implemented in cases where high risk of delirium development is suspected. These same strategies can also be used in the management of an actively delirious person.

Case Study (continued)…

- 24 hours after admission, Ms. F. became acutely hypertensive (SBP 180s-200s), bradypneic, then hypoxic and unresponsive. Code called, intubation successful, transferred to ICU. Hydralazine and lorazepam lowered her SBP to 110-130s and ventilator weaning began within 24 hours after intubation, with successful extubation the next day (now LOS Day #3). Transferred back to medical floor.
- On the same day of extubation in the evening, Ms. F. developed what was described as "dementia problems." Urinary retention identified, straight catheterization completed with urinalysis suspicious for UTI. "Dementia problems" described in RN note as "putting her leg out of the side rail, trying to get up."
- Night float called, and Ms. F. was administered haloperidol 1mg IVP, and ziprasidone 10mg IM within 1 hour of administration of haloperidol.
- The next day, Ms. F. was assessed to be alternatingly lethargic and impulsive, maintained on bedrest, and continued to retain urine for the next 24 hours. A companion sitter was ordered, and ACE Team consult was placed for "evaluation and management of dementia."

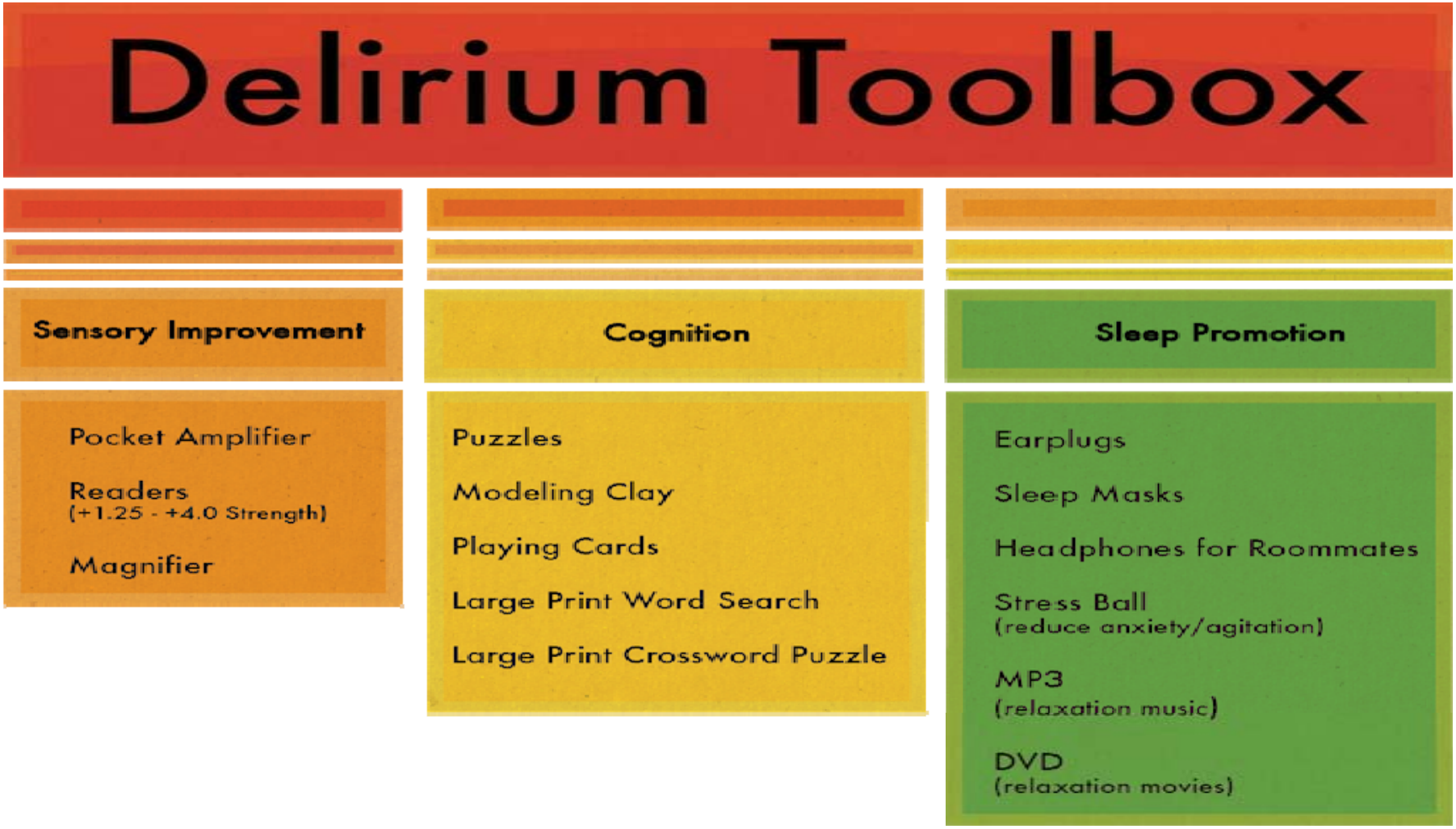
Case Study (continued…)

- What happened? Think about it: lorazepam and fentanyl (both never taken before, per history), can decrease respiratory drive. In context of decreased lung elascticity and compliance associated with advanced age, a greater ratio of fat to muscle (lipophilic meds)…accident waiting to happen! And could have been avoided in the first place!
- Why the urinary retention? Did you think "anticholinergic burden associated with benzodiazepines" as a possible factor? Again, could this have been avoided? Yes!
- Is "dementia" an accurate term to describe Ms. F.'s presentation? No!

Delirium:
Non-Pharmacological Management

- Use orienting stimuli (i.e. clocks, calendar, radio).
- Validate experience – meet the person where he / she is!
- Incorporate family as much as they are comfortable. Provide adequate socialization.
- Maximize functional independence – get out of bed as soon as clinically possible!
- Keep room quiet and decrease stimuli.
- Use eyeglasses and hearing aides appropriately.
- Ensure adequate intake of PO nutrition and fluids. Assist / Supervise with meals as assessed.
- Ensure adequate sleep and day/night regulation with exposure to sunlight. Encourage daytime activity as much as possible.
- Consider a sitter in cases of self- or other-directed violence.
- Educate and support patient and family (and each other!).

Delirium:
Non-Pharmacological Ideas



Delirium:
Pharmacological Management

- Medication choice should be determined by underlying condition of concern.

Delirium: Pharmacological Management

- If PAIN is suspected:
  - acetaminophen (TYLENOL) tablet
    - 650mg, Oral, 3 times per day with meals, for mild-moderate pain
    - 975mg, Oral, 3 times per day with meals, for moderate-severe pain
  - oxycodone (ROXICODONE) immediate release tablet
    - 2.5mg, Oral, every 4-6 hours PRN, for mild-moderate pain
    - 5mg, Oral, every 4-6 hours PRN, for moderate-severe pain

Delirium: Pharmacological Management

- If SLEEP / WAKE dysfunction suspected:
  - trazodone (DESYREL) tablet
    - 25mg, Oral, nightly PRN, for insomnia
      - 25mg, Oral, one time dose, for insomnia AND no effect within 1-2 hours of initial dose of trazodone

Delirium: Pharmacological Management

- When was the last bowel movement? Are narcotics being used for pain management?
  - senna 8.6mg tablet
    - 2 tablets, Oral, nightly standard, for constipation
  - polyethylene glycol (MIRALAX) packet (+ senna…)
    - 17g, oral, Daily PRN, for constipation
  - bisacodyl (DULCOLAX) DR tablet (+ senna, Miralax…)
    - 5mg, Oral, Nightly PRN, for constipation
    - 10mg, Oral, Nightly PRN, for constipation
  - bisacodyl (DULCOLAX) suppository
    - 10mg, Rectum, Nightly PRN, for constipation

Delirium: Pharmacological Management

- Antipsychotics:
  - indications: severe agitation, high risk for self-/other-directed violence that has NOT been responsive to nonpharmacological measures
  - Obtain an ECG
    - Assess for QTc prolongation
      - Males: > 430-450ms
      - Females: > 450-470ms
  - Administer oral (PO) formulation FIRST, then intramuscular (IM) formulation if no significant clinical effect
  - Consider ACE (Geriatrics) Consult or Psychiatry Consult (particularly if there is a known history of psychiatric disorder) when considering new implementation of antipsychotic medication.

Drug	Dose	Route	Frequency	Pros	Cons
haloperidol (Haldol)	1mg	PO	q6hrs	- High efficacy	- High risk of EPS - Black Box: High risk of morbidity / mortality - Anticholinergic
haloperidol (Haldol)	0.5mg	IM	q6hrs	- High efficacy - Quicker acting than PO	- High risk of EPS - Black Box: High risk of morbidity / mortality - May be traumatic to administer - Anticholinergic
quetiapine (Seroquel)	12.5mg-25mg	PO	Daily Twice daily	- Placebo rate EPS; less risk than Haldol - More favorable in parkinsonism / Parkinson's disease	- Black Box: High risk of morbidity / mortality - Anticholinergic: sedating, orthostatic hypotension
risperidone (Risperdal)	0.25mg-0.5mg	PO	Daily Twice daily	- Less sedating - Less risk of EPS than Haldol (increases with dose)	- Black Box: High risk of morbidity / mortality - Anticholinergic
ziprasidone (Geodon)	5mg	IM	q4hrs	- Less risk of EPS than Haldol	- Black Box: High risk of morbidity / mortality - Anticholinergic

Note: Generally, first-generation antipsychotic medications are more anticholinergic than second-generation antipsychotics.

Case Study (conclusion…)

- ACE Consult: Interview with Ms. F. revealed she had no recollection of the previous 72 hours, which was frightening to her, as she has never experienced an episode like this before. The last thing she recalled was needing to use the bathroom but being told to stay in bed, which she thought was silly. Within 5 minutes of asking targeted questions, Ms. F. reveals that she independent of all instrumental and basic ADLs, including driving, ambulating independently with no assistive device; no history of falls, nor any concern for dementia, corroborated by asking family separately from Ms. F.: "she's sharp as a tack!"
- Due to Ms. F.'s prolonged hospitalization and bedrest, she was discharged to a short-term rehabilitation facility due to deconditioning.

Could many - if not all - of the complications experienced by Ms. F. during her hospitalization have been avoided? Yes.

With older adults in the hospital, making the effort to learn more about your patient and NOT just prescribe a medication, can make the difference between life and death. Think about the care that you provide, and remember that the best treatment for delirium is PREVENTION.

With special thanks to the following, who contributed their expertise and perspective in the development of this module, and their continued time and energy toward the best care of our older adults:

Sharon Brangman, MD – *Division Director, Geriatrics*

Gene Latorre, MD – *Neurology*

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Upstate Clinical Manual Links

Policy:

CM D-15: Delirium Prevention & Management of the Adult Med-Surg Units:

(link)

Procedure:

CM D-15A: Delirium Screening, Prevention, & Management Interventions for the Adult Medical / Surgical Patient:

(link)