

**NEW INITIATIVES TO IMPROVE  
CLINICAL OUTCOMES  
FOR WV'S ELDERLY**

S. M. Neitch, MD, FACP, AGSF  
MU/JCESOM

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**New Initiatives:  
Improving Clinical Outcomes For WV's Elderly**

- **Goal:**
  - Review new initiatives designed to improve clinical outcomes for WV's elderly, and explore other areas of need of attention
- **Objectives:**
  - Describe the CIRAC program (Cognitive Impairment Recognition in Acute Care), including rationale, implementation, and outcomes
  - Describe the RBADS (Rational Benzodiazepine Avoidance and De-prescribing Strategies) program, including expectations for outcomes
  - Describe the "ICOG" initiative and invite attendees to review their own experiences with poor clinical results in elderly West Virginians
    - Explore factors which may be amenable to clinical interventions
    - Propose next steps for ICOG to consider

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**New Initiative #1 - CIRAC**

- **Cognitive Impairment Recognition in Acute Care**
  - Why would a special initiative be needed to recognize Cognitive Impairment?
    - From the MAP (Make a Plan for WV, for care of persons with dementia) process, a huge gap in acute care of PWD was noted.
      - Up to 45% of hospitalized elders may have cognitive impairment
      - Many signs of cognitive changes are subtle and may be ignored or not recognized
      - Failure to recognize cognitive impairment in hospitalized patients leads to poor outcomes
      - And to poor transitions of care and discharge planning

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### New Initiatives - CIRAC

- Cognitive Impairment Recognition in Acute Care
  - *Why is CIRAC needed?*
  
- ~45% of hospitalized elders have cognitive impairment
  - *Due to dementia, delirium, or delirium-on-dementia*
  
- *20% to 50% of patients with CI will not have a diagnosis listed, in fact will have no notation in their chart*

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### Why dx not noted?

- A simple oversight?
  - *Can be!*
    - Pace of hospitalization
    - Reluctance to confront pt with dx
  
- More often it is because CI is not known or suspected
  - *Study of persons > 70yo with chronic heart failure, in hospital for procedure*
  - *Cardiologists suspected CI in 12%*
  - *Tested and found to have CI: 45.6%, half of them severe*

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### New Initiatives - CIRAC

- *Why is CIRAC needed?*
  
- Many signs of cognitive changes are subtle and may be ignored or not recognized
  - *Why?*
    - Patient-based reasons
    - System-based reasons
  
- *If the behavior is one of the below, it is readily recognized:*
  - Elderly patient asks for "Mommy"
  - Pt. cannot carry on a simple conversation
  - Is repetitive
  - Pt. cannot be awakened
  - Pt. acts paranoid, is having hallucinations, talks "out of their head"

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- If the behavior is, rather, one of these, it may **not** be recognized as evidence of CI:

- Pt. described as "Poor Historian"
- When given food tray, pt. makes no attempt to eat, or is "flustered" by the tray set-up, especially if more than once
- Pt. repeatedly fails to follow instructions or answer questions
- Person appears "bewildered"
- Pt. unexpectedly wets or soils bed
- Pt. becomes extremely agitated over a small matter

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■ Other than signs being subtle, why else might CI not be recognized?

- Attribution of sx/sx to aging
- Attribution of sx/sx to cantankerousness
- Patients may be superficially intact

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### New Initiatives - CIRAC

- Why is CIRAC needed?
  - System-based reasons for failure to recognize?
    - **"Fog is more dangerous than dark, as it gives the illusion of seeing."** Aleksandra Ninkovic

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- Fog is produced in healthcare by:
  - Shortened LOS
  - More procedures during a shortened LOS
  - Fragmented care teams
  - EHR
  - Even....architecture and design

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### New Initiatives - CIRAC

- Why is CIRAC needed?
  - Failure to recognize cognitive impairment in hospitalized patients leads to **poor outcomes**
    - *Inappropriate treatment (of the primary condition and the CI)*
      - Ex: Agitated pt. treated with benzodiazepine
      - Ex: Pt. can't confirm meds, so old list used
    - *Inappropriate testing, wrong diagnostic decisions*
    - *Failure of patients to be adequately nourished and hydrated*
    - *Patient and family dissatisfaction*
    - *Increased patient agitation, Increased rate of falling, Increased polypharmacy*

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New Initiatives - CIRAC

- *Why is CIRAC needed?*

- Failure to recognize leads to poor transitions of care and poor discharge planning
  
- "The results of a poor transition of care are rarely seen by the discharging provider."
  - Cotter, Smith, Boling "Transitions of care: the next major quality improvement challenge" *British Journal of Clinical Governance* 7:3, 2002

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New Initiatives - CIRAC

- *Failure to recognize leads to poor transitions of care and poor discharge planning*

- What happens if a patient with cognitive impairment is sent home, but nobody knows they are impaired?

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New Initiatives - CIRAC

■ The process of CIRAC

- *UNIVERSAL OBSERVATIONS*

- **All** staff are taught the sx/sx of cognitive impairment (the "red flags")

- *See Something/Say Something*

- **All** staff relay their observations to clinical persons who can proceed with evaluation and treatment

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**CIRAC**

- To do CIRAC in your facility:
  - Toolkit available at
  - [http://www.alz.org/wv/in\\_my\\_community\\_104039.asp](http://www.alz.org/wv/in_my_community_104039.asp)
    - ...wv/in\_my\_community\_104039.asp
  - Alternatively, you may go to [www.alz.org/wv](http://www.alz.org/wv) and click on Professional Training and then on Acute Care Resources.

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**New Initiatives:  
Improving Clinical Outcomes For WV's Elderly**

**New Initiative #2 - ICOG**

- Since the early 80's, Geriatrics Education has been a recognizable entity in WV

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**Geriatrics Education Initiatives in WV**

Organization	Activity	Time
Medical schools	Education (students, residents, occasionally fellows, including CRIT/GRIT)	Ongoing
Schools of Nursing, Social Work, Pharmacy, Dentistry, etc	Discipline-specific professional education	Ongoing
WVGS, NASW-WV, WV ACP, WV AFP, WVMS, WVCEOLC, etc	CE, CME	Ongoing
WV GEC	Wide-ranging multi-professional Geriatric Education efforts (including "AGES")	1990's - 2016
WV Partnership for Elder Living	Initiatives to "foster West Virginians" opportunities to live and age with dignity and purpose"	2010 - present
Alzheimer's Assoc., AARP, Catholic Charities, few others	Lay education	Ongoing
Bureau of Seniors Services, WV Medical Institute	State agency and institutional education	Ongoing

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- What are benzodiazepines?
  - "Benzos" or "BZDs"
- "Sedative-hypnotic agents" in clinical use since the 1960s. The first benzodiazepine was discovered serendipitously in 1954 by an Austrian scientist. Three years later, it was marketed under the brand name Librium.
- BZDs are used for **sedation** and to treat **anxiety, seizures, withdrawal** states, insomnia, and drug-associated agitation. Due to their many uses, BZDs are widely prescribed and nearly 50 different agents are available worldwide.

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- Benzodiazepines have been found to be **efficacious** in the treatment of generalized anxiety disorder (GAD), leading to a **reduction of emotional and somatic symptoms** within **minutes to hours**.
- If taken alone, BZDs have low potential to cause death by overdose.

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- So, what's not to like??

- With long-term use or higher dosages - Increased incidence of:
  - Cognitive Impairment
  - Delirium
  - Falls
  - Fractures
  - Motor vehicle accidents

American Geriatrics Society updated Beers Criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc. 2012; 60(4):616-31.

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- Also increased over time:
  - 50% increase in incidence of dementia
  - 200% increase in mortality

- Billoti de gage S, Bégaud B, Bazin F, et al. Benzodiazepine use and risk of dementia: prospective population based study, *BMJ*. 2012; 345:e6231.

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- Are Benzos over-prescribed?
  - *What do you think?*

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Are Benzos over-prescribed?

- Across all age groups, BZD prescriptions have tripled and fatal overdoses have quadrupled in the past 20 years.
- BZD associated overdose deaths rose from 0.58 per 100,000 in 1999 to 3.07 per 100,000 in 2013.
  - *The rise in the rate leveled off somewhat after 2010, but not in persons over 65 years old.*
- Remember, these OD deaths are almost always caused by “co-ingestion” of BZD plus... alcohol, opioid, etc.

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Are Benzos over-prescribed?

- Opioid prescribing rates peak by age 64 in most states, but BZD prescribing rates continue to increase with age.
- In West Virginia, for 1 of every 5 days of opioid treatment, the patient is also taking a BZD.
- BZD prescribing patterns (increasing rx rates with increasing age) are not consistent with the fact that a diagnosis of anxiety is most commonly documented in persons aged 30-44.

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Are Benzos over-prescribed?

- A study of West Virginia drivers over 65 years of age who had collisions showed that:
  - 17% of those who were tested for drugs immediately after the crash had BZDs in their system
  - Only 48% of BZD-positive drivers had valid prescriptions.
- Alprazolam (Xanax) is the most commonly prescribed BZD in West Virginia, and tied for second are clonazepam (Klonopin) and lorazepam (Ativan).

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Are Benzos over-prescribed?

- In a very small chart review study at one generalist practice in WV, the physicians estimated that 19% of their patients between 65 and 90 years of age had active BZD prescriptions
  - In fact, 31.5% did
- **The actual rate of prescribing of BZDs to those over 65 years of age in WV in 2015 was 1,067.29 prescriptions per 1000 residents.**

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**Why** are Benzos over-prescribed?

- Are there differences in prescribing rates in different areas of the state, different types of practices, with different diagnoses?
- Is there an identifiable rate of diversion of BZD prescriptions written for elderly patients?
  - *And are prescribers appropriately monitoring for diversion?*
- Are patients and prescribers fully aware of the indications for BZDs, warnings regarding use in the elderly, and proven ways to safely discontinue them?

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**Why** are Benzos over-prescribed?

- If we assume that the medications are being prescribed for anxiety, why is the incidence of anxiety so high?
  - *Are there identifiable features of the lives of many elderly in this state contributing to the high rate of prescribing?*
  - *If so, are there mitigating procedures or factors which might be instituted?*

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Other questions about benzos

- What is the rate of adverse reactions?
- Does BZD use contribute to hospital admission and readmission?
- Does BZD use contribute to excess ICU use by those of advanced age with multiple morbidities?

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New Initiative #3 - RBADS

- Rational Benzodiazepine Avoidance and De-Prescribing Strategies
- Grant from Benedum Foundation to ICOG to study the questions we have just posed
  - Will include primary care sites, long-term care sites, and hospitals
  - Will include data gathering and education
  - Portions of the education will be delivered via "ECHO"
    - ECHO = Extension for Community Healthcare Outcomes

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**Project ECHO®:**  
Right Knowledge. Right Place. Right Time.

Project ECHO (Extension for Community Healthcare Outcomes) is a movement to democratize knowledge and amplify local capacity to provide best practice care for underserved people all over the world. The ECHO model™ is committed to addressing the needs of the most vulnerable populations by equipping communities with the right knowledge, at the right place, at the right time.

**Project ECHO is a movement to improve the lives of people all over the world.**

**Moving Knowledge Not People**  
Project ECHO transforms the way education and knowledge are delivered to reach more people in rural and underserved communities. This low-cost, high-impact intervention is accomplished by linking inter-disciplinary specialist teams with multiple primary care clinicians through teleECHO™ clinics. Experts mentor and share their expertise across a virtual network via case-based learning, enabling primary care clinicians to treat patients with complex conditions in their own communities. People get the high-quality care they need, when they need it, close to home.

**What is the ECHO Model?**

The infographic shows a central 'LEARNING LOOP' involving 'SPECIALIST TEAMS' and 'LOCAL PRIMARY CARE TEAMS'. This loop is supported by 'PATIENTS' and 'FAMILIES' at the bottom, and 'TELEHEALTH' and 'TELEPHYSICIAN' at the top.

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New Initiatives #4 through...

- Your turn: What else do we need to do?

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