Northern New England Network Older Adult Project ECHO

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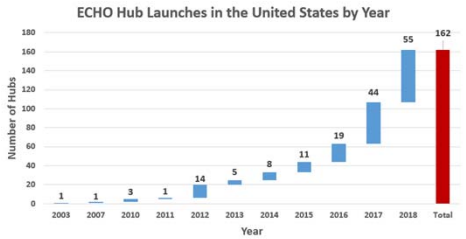
Project ECHO® (Extension for Community Healthcare Outcomes)

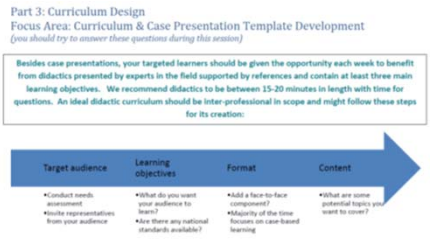
- ECHO: Both an ***acronym and metaphor*** for multiplying knowledge and expertise
- Launched in 2003 by Sanjeev Arora MD, UNM liver specialist, as way to reach more patients with Hepatitis C
- Process by which highly specialized knowledge can be disseminated to underserved populations worldwide
- Outcome studies support methodology as having effects similar to in-person academic subspecialty consultation
- Values: Reach the underserved, demonopolize knowledge, trust and respect, teamwork, excellence and accountability, innovation and learning, joy of work

Project ECHO is Proliferating



From https://echo.unm.edu/

ECHO Application



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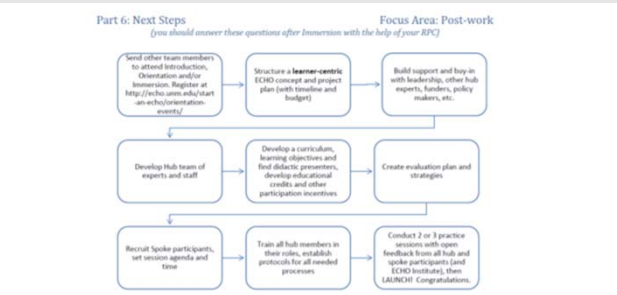

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Project ECHO in Maine

- Northern New England Network: Compassionate opioid tapering, Perinatal addiction, Geriatrics
- MaineHealth: Hepatitis C/Infectious disease, Diabetes, Palliative care
- Partnerships for Health: Asthma/Immune disorders

UNM HEALTH SCIENCES CENTER Project ECHO® (Extension for Community Healthcare Outcomes)

Northern New England Project ECHO

HRSA Grant D06RH31043 Rural Health Network Development Program

Coordinating Center:
Quality Counts
Collaborators:
University of New England
Maine Area Health Education Center
Northeast Telehealth Resource Center
New Hampshire Citizens Health Initiative
Vermont Program for Quality in Healthcare
New Hampshire Area Health Education Center
University of Vermont Office of Primary Care & Area Health Education Center

QUALITY COUNTS
A Qualidigm Company

Northern New England Older Adult ECHO

- Eight sessions from October 2018 through June 2019
- Quality Counts team at "HUB": Lise Tancrede, Jonathan Church, Jessica Reed, Lisa Tuttle, Pieter Tryzelaar
- Faculty: Cliff Singer (Faculty lead, geriatrician/psychiatrist), Annette Beyea (geriatrician), Michael Brodeur (pharmacist), Emily Haigh (psychologist), Gene Harkless (geriatric nurse practitioner), Jessica Reed (geriatric nurse practitioner), Jennifer Seher (social worker), John Wilcox (OT)
- Guest faculty: Jess Mauer, Roger Renfrew, Elizabeth Hart, Terry Rabinowitz

NNE Older Adult ECHO Session

Typical participants: 3-4 QC staff, 8 faculty, 50-75 participants at 25-30 sites via ZOOM® teleconferencing

Pre-session

Post-session

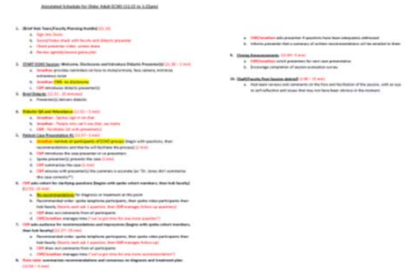
Didactic presentation 30 min.

Case Presentation and discussion 60 min.

Welcome & attendance

Structured process facilitated at the HUB:
Participant presents case (5 min)
Faculty leader summarizes
Participants ask questions
Faculty ask questions
Participants offer recommendations
Faculty offer recommendations
Scribe summarizes recommendations

Annotated Schedule for Session



NNE Project ECHO:
Older Adult Didactic & Case Overview

Annette Beyea, DO, MPH
Geriatric Medicine
Maine-Dartmouth Family Medicine Residency

Didactic Curriculum

- Topics selected by initial survey of providers in writing the grant
- Some modifications based on faculty expertise and faculty input into a more well-rounded initial curriculum
- Assumption in the beginning that there would be an additional year in which to cover other topics

Didactic Sessions

- Autonomy, safety, and capacity
  - Gene Harkless DNSc, APRN, Department of Nursing, UNH
- Advance care planning (ACP)
  - Elizabeth Balsam Hart, MD, Director of Medical Services, Androscoggin Home Healthcare + Hospice
- Caregiver Burden
  - Terry Rabinowitz, MD, DDS, Larner College of Medicine at the University of Vermont
- Depression
  - Emily Haigh, PhD, The University of Maine
- Driving assessments
  - John Wilcox, OTD, University of New Hampshire
- Gait instability and falls
  - Annette Beyea, DO, MPH, Geriatric Medicine Fellowship, Maine-Dartmouth
- Multimorbidity
  - Roger Renfrew, MD, FACP
- Polypharmacy
  - Michael.Brodeur, Pharm D

Case Presentation Template

- Primary question for discussion
- Demographics & HPI
- Current challenges
- Mental health history
- Medical history
- Relevant social history
- Medications
- Pertinent exam findings and assessments
  - Including screening tool assessments: --FRAIL, Mini-Cog, PHQ-9, MMSE, MoCA, other
- Relevant diagnostics
  - Labs, neuroimaging

Typical Faculty Recommendations

Addressed the following:

- Assessment and management of geriatric syndromes
  - Depression, dementia, delirium, falls, frailty, polypharmacy and adverse drug effects (ADEs), multimorbidty
- Management guidelines in older adults
  - e.g., hypertension and diabetes
- Goals of care and advanced care planning and directives
- Care coordination and resource navigation
- Resources for additional information

Example 1: Case Presentation

- **Primary Question for Discussion:** How do we make decisions regarding de-prescribing in older adults with chronic disease? Do general adult clinical practice guidelines apply to older patients?
- **Demographic & HPI:** 85 year old female referred for pharmacy consult for diabetes education and management following an ED visit for hypoglycemia. She has had worsening diabetes control over the past year with recent A1c 8.2% in 8/18 vs. 7.1% in 1/18. Patient is up to date on labs and screening but is due for A1c. She lives in RCF. Has caregivers 2 hrs. AM & 2 hrs. PM.
- **MH Hx**: Depression, anxiety, MCI
- **PMHx:** DM II, hyperlipidemia, peripheral neuropathy, hypertension

Medications:

- Metformin 1000 mg BID
- Glyburide 5 mg BID
- cholecalciferol 2000 IU daily
- Melatonin 5 mg qhs prn
- MVI and Calcium 500 mg daily
- Losartan 100 mg daily
- ASA 81 mg daily
- Probiotic daily
- Omeprazole 20 mg daily
- Metoprolol tartrate 100 mg BID
- Cinnamon 1000 mg daily
- Amlodipine 10 mg daily
- Insulin lispro 0-10 units TID ac (pt only taking w/ breakfast and supper)
- mirtazapine 7.5 mg hs

Relevant SH:

- Marital Status: Widowed 2013
- Lives with: Alone; Long term CGs and nurse
- Children: One daughter; Step children with difficult relationship
- Occupation: Retired; Volunteered at church groups
- Nutrition: Healthy eating when accompanied by care givers;
- Exercise: No formal attention to exercise; walking in home; fall risk; Hx of knee and joint pain
- Smoking: Former smoker, 1 PPD, Quit ~ 1978
- Alcohol: Abstains
- Illicit drugs: No
- Depression: Over the past 2 weeks down, depressed, or hopeless OR little interest or pleasure in doing things? No
- Do you feel safe at home: Yes
- Religious/Spiritual Preference: Congregational
- Transportation: CG
- Medication Management: Takes medications by self with set up assistance from CG

Faculty Recommendations for Case 1

Assessment and management of geriatric syndromes

- Assess cognitive and overall function
  - Including history from informant
  - Assess compliance with medications
- Polypharmacy and ADEs
  - Sulfonylurea – replace with glipizide and discontinue pre-meal insulin
  - Change metformin to ER and check vitamin B12
  - Change metoprolol to ER if even indicated as no documented history of CAD, a fib, and not first line agent for htn
  - Consider tapering PPI
  - Simplify multivitamin, probiotic, calcium, Vitamin D to reduce pill burden

1st Case Faculty recommendations cont'd

Management guidelines and targets in older adults

- Target A1c 7.5-8 and possibly even 8-8.5 pending cognitive and overall function, life expectancy
- Hypoglycemia is the primary concern

ACP and goals of care

- Talk with patient about her preferences and goals
  - Reimbursable visit
- Confirm patient has advance directive, POA, and determine daughter's level of involvement

Example 2: Case Presentation

- **Primary Question for Discussion:** What is the target for systolic BP control in an 81 year old woman? 150 or 160 mmHg? How low to allow diastolic pressure? Until symptomatic w low BP?
- **Demographics & HPI:** 81 year old female with difficult to control systolic hypertension. 10 yrs ago she had only "white coat" hypertension with better BP at home. Her BP lately has ranged 156-175/64-78 and pulses of 50-62. Pulse pressures have ranged from 92-103; mean 97.4.
  - BP during recent hospital admission was better.
- **Current Challenges:** Improve BP control with less risk of hypotension.

2nd Case Presentation con't

- **MH Hx:** No hx
- **PMHx:** Hypertension, Chronic Kidney Disease stage 3, anxiety, Left hip fracture with ORIF 4/19/2016 with subsequent joint space infection, Chondrosarcoma Left humerus with surgical removal and insertion of prosthetic joint/bone 7/18/18, NSTEMI, history of falls ("I am clumsy"), hypercalcemia 10.5 with normal PTH, subclinical hyperthyroid TSH=5.94.
- **Relevant SHx:** Lives alone, independent, widowed in 2013, used to go out dancing until hip fx 2016
- **Medications**: Amlodipine 5mg BID, atenolol 50 mg BID, furosemide 10mg daily. Lisinopril 10mg daily recently restarted. Doxycycline for joint space infection prophylaxis

Faculty Recommendations for 2nd Case

Management guidelines in older adults

- BP goal in older adults is <150/90 (HYVET trial) and targets can be as low as <130/80 (SPRINT trial) for healthier, community-dwelling older adults (mean age 67 in SPRINT).
  - Evidence in persons >80 years old not as robust
  - Not generalizable to all older adults
- Attempt to avoid excessive reductions in diastolic blood pressure (i.e., <60–65 mmHg), especially in individuals with CAD (INVEST). However, the significance of these concerns remains controversial as J-shaped curve in relation to mortality likely due to poor health.
- Systolic blood pressure remains a stronger predictor of adverse outcomes than DBP in older hypertensive adults

2nd Case Faculty Recommendations con't

Goals of care and advance care planning

- Clinicians must consider medical comorbidities, goals of care, and when goal of 150/90 is appropriate,
- Antihypertensive titration should include close monitoring of symptoms (i.e., dizziness, change in cognition, falls), orthostatic BPs, pulse pressure.
- Ultimately, there is not a one-sized fits all approach and the treatment of hypertension presents an opportunity to engage our patients in shared decision-making.

Summary of Faculty Recommendations for All Cases

Care coordination and resource navigation

- Seek assistance of a private geriatric care manager
- Assess patient's social system in the community
- Refer to Senscio Systems – pilot project – must be dual MaineCare and Medicare eligible
- Recommend resources about care giving and counselors
- Connect patient with support groups (i.e., SAVVY Caregiver), Alzheimer's Association, and Area Agency on Aging
- Do home safety evaluation
- Get more support in the home
- Refer to Maine Division for the Blind and Visually Impaired
- Refer to Veterans helping Veterans
- Engage Habitat for Humanity for home modifications

Summary of Faculty Recommendations II

Assessment and management of geriatric syndromes – cognitive impairment

- Moca - https://www.mocatest.org/
  - MOCA for legally blind, MOCA basic for ≤6 grade education, alternate versions available
- Consider a sleep study to rule out OSA or identify REM sleep disorder
- Evaluate for CV risk including AFIB – ECG, Holter Monitor, echocardiogram
- MRI to evaluate for chronic small vessel disease, lacunae, cortical/subcortical atrophy
- Perform AMPS Assessment: (Assessment of Motor and Process Skills (AMPS): ADL activities to gauge independence
- Photo album at bedside if facility, engage with patient about preserved memories

Summary of Faculty Recommendations III

Assessment and management of geriatric syndromes – BPSD

- Trial Music and Memory Program: create personalized playlist for calming, distracting and engaging him
- Behavioral Activation: Identify activities – iPad - books on tape to reduce agitation
- Identify triggers and avoid
- Educate staff about redirecting conversations that honor resident needs and enter a nonthreatening reality - "the nurses are helping you until you feel better"
- Engage local police in safety plan for dementia with BPSD if necessary
- Schedule Tylenol to address any untreated pain
- Consider using Routine Task Inventory Tool to identify specific cognitive level to assist with determining appropriate activities in which to engage (i.e., crafts)
- When using citalopram, ensure electrolytes are normal and consider ECG for baseline QT if consistent with goals of care

Summary of Faculty Recommendations IV

Assessment and management of geriatric syndromes – falls, osteoporosis

- Refer the patient to Matter of Balance, TJQMBB (evidence →31% reduction in falls) to reduce fall risk
- Refer to PT
- Modify environment to reduce risk of falls
- Assess for assistive equipment needs and/or appropriate use
- Avoid benzos, higher doses of trazodone, and other sedating medications to reduce fall risk
- Refer to Endocrinology with osteoporosis and history of gastric bypass
- IV Reclast is an option when intolerant of oral bisphosphonates; renally dose

Summary of Faculty Recommendations V

Assessment and management of geriatric syndromes - polypharmacy and ADEs

- Discuss with patient's primary about rationale for ASA twice a day and why patient is on Xarelto (Rivaroxaban 20mg daily) and ASA
- Use dual platelet therapy cautiously and question whether necessary
- Carafate could be affecting absorption of bisphosphonate
- Consider discontinuing PPI
- Avoid chronic NSAID (CVD, GIB, renal risks)
- Consider transition from SSRI to SNRI like venlafaxine or duloxetine for chronic pain.
- Consider pill pack and engaging UNE College of pharmacy to fill pill boxes
- Discontinue oxybutynin and try mirabegron (Myrbetriq) if even needed for urinary incontinence. Schedule voiding.
- Recommend long acting muscarinic agonist versus Spiriva (easier than Spiriva) given dexterity issues

Summary of Faculty Recommendations VI

Assessment and management of geriatric syndromes – mental health

- Don't confuse social isolation or other situational issues with mood disorder
- Consider pet therapy including individualized animatronic if facility setting
- Consider CBT - **PNES:** Pilot RCT (CBT vs Sertraline) for PNES found that CBT outperforms Sertraline
  - https://jamanetwork.com/journals/jamapsychiatry/fullarticle/1884286
- Consider biblio-therapy
- Screen for domestic violence
- In psychiatric emergency,
  - Safety risk to self and others due to delusions, aggression - advocate for an immediate, very aggressive intervention approach
  - Declare emergency guardianship and have police take to the ER for a non-voluntary psychiatric hospitalization and antipsychotic injections
- Unable to assess dementia in patient with active psychosis and history of PTSD, borderline personality; manage psychotic symptoms first

Summary of Faculty Recommendations VII

Goals of care and ACP

- Identify HCPOA
- Discuss goals and preferences for life sustaining treatments
- Complete DNR or POLST if would not be surprised patient passed away in upcoming year
- Assess motivation to stay mobile and personal activity goals
- Palliative Care Consult to discuss end goals and how patient views quality of life, and to assist with symptom management – sleep, pain, etc. as clearly affecting quality of life
- Recommend book called "Being Mortal" and video aired on PBS.

Mid-Session Participant Feedback

- More discussion diagnosing different types of dementia and treatment
- Adult protective services referrals
- More on mental health topics esp. depression and anxiety
- Transitions of care from one health care setting to another or to home
- Diet and lifestyle interventions for health
- Choosing antidepressants in older adults
- Addressing polypharmacy
- Substance use disorder in older adults
- Social isolation and health effects

Challenges

- Aligning learning objectives with sessions
- Balancing participant and faculty input
- Keeping the faculty leader on script
- Soliciting cases!
  - People reluctant to present-why?
- Making commitment to ECHO sessions
  - 90 minutes out of the day
  - Multiple ECHOs and other educational needs

Epilogue

- Final session Thursday June 27th
- Participant feedback still being collected
- Future: Mental health focused on community agencies and providers (NNE Project ECHO) and dementia-focused (MaineHealth) ECHO's are being planned

Questions and Comments