Geriatric Emergency Departments
Fact, Fiction or Future?
&
How Do We Get There?

Hartford / ADGAP Leadership Retreat
January 19, 2013
Hotel Del Coronado, Coronado CA

Kevin Biese MD, MAT
Associate Professor and Residency Director of Emergency Medicine
Clinical Associate Professor of the Center for Aging and Health
University of North Carolina School of Medicine, Chapel Hill NC

Ula Hwang, MD, MPH
Associate Professor of Emergency Medicine
Brookdale Department of Geriatrics and Palliative Medicine
Mount Sinai School of Medicine, New York NY

Geriatrics Research, Education and Clinical Center
James J. Peters VAMC, Bronx NY
The “Silver Tsunami”

2011 was first year the Baby Boomers entered the ≥65 age bracket. That was just the beginning!
Natural Disasters...
Pearl, 99, last person to remain in her evacuated high rise building. She refuses to leave her 13th floor apartment because she knows if she's removed she'll never come home. She says, with tears in her eyes that she wants to die at home.
George Goldman, 11th Floor of high rise with Jenni Griffith, working to acquire prescriptions of which he has run out.
With George's permission his expired prescriptions, he are removed.
Typical Chronic Disease Management

- **Emergency Department/Hospital Admission**
  - Treat Exacerbation
  - Functional Decline
  - Limited Patient Education

- **Community Care**
  - ER Used As Solution to Problems
  - MD Treatment When/If Office Visit Occurs
  - Patient Self-Management, Home Health Care, Long Term Care

- **Admission**
- **Readmission**
- **Discharge**
  - Fall Risk 50%
  - Quality of Life Declines

Adapted from PRHI Using Medical Homes to Reduce Readmissions
Typical Chronic Disease Management

Emergency Department/Hospital Admission

- Treat Exacerbation Functional Decline
- Limited Patient Education
- Fall Risk 50%
- Quality of Life Declines

COMMUNITY CARE

Admission
- Readmission
- ER Used As Solution to Problems
- MD Treatment When/If Office Visit Occurs
- Patient Self – Management, Home Health Care, Long Term Care

Adapted from PRHI Using Medical Homes to Reduce Readmissions
Literature Suggests

1) An ED visit is a sentinel event and marks early functional decline, leading to poor health outcomes, higher health care utilization and higher cost of care.

2) Transitions of Care are key points wherein providers have the ability to impact the trajectory of patients and improve quality of care and decrease the cost of care.

Coleman EA, et.al. Med Care 2005
Hastings SN, et.al. Med Care 2008
1) An ED visit is a sentinel event and marks early functional decline, leading to poor health outcomes, higher health care utilization and higher cost of care.

2) Transitions of Care are key points wherein providers have the ability to impact the trajectory of patients and improve quality of care and decrease the cost of care.

→ The ED as the FRONT PORCH of the hospital…

Literature Suggests

Coleman EA, et.al. Med Care 2005
Hastings SN, et.al. Med Care 2008
Improved Care Transition Management

- Emergency Room/Hospital Admission
  - CARE PROTOCOL
    - Identify Targeted Patients
    - Treat Exacerbation
  - Address Root Causes:
    - Medication skills
    - Missed preventive opportunities
    - Other
  - Improved Patient Education

- Preventable Admissions
  - Prompt Response to Exacerbations:
    - Action Plan
    - 24/7 Phone Support
  - MD Treatment
  - SW Case Manager
  - Medication Access
  - Prompt Follow-up:
    - Home Visit
    - PCP Visit

- Decrease Fall Risk 50%
- Improve Quality of Life

Adapted from PRHI Using Medical Homes to Reduce Readmissions:
http://www.chqpr.org/readmissions.html
Disconnect Between EDs and Older Adults...

Space designed for ED priorities of rapid patient evaluation and turnover, privacy forsaken for maximal use of space, crowding of narrow beds, shiny linoleum floors for quick cleanup...
The Geriatric Emergency Department

Ula Hwang, MD, MPH,*† and R. Sean Morrison, MD††

With the aging of the population and the demographic shift of older adults in the healthcare system, the emergency department (ED) will be increasingly challenged with complexities of providing care to geriatric patients. The special care needs of older adults unfortunately may not be aligned with the priorities for how ED physical design and care is rendered. Rapid triage and diagnosis may be impossible in the older patient with multiple comorbidities, polypharmacy, and functional and cognitive impairments who often presents with subtle clinical signs and symptoms of acute illness. The use of Geriatric Emergency Department Interventions, structural and process of care modifications ad-

may help to address these challenges and thereby improve the quality of care of elderly people in the ED.

OLDER ADULTS AND THE ED
Although the aging population will affect all areas of health care, the ED is likely to be disproportionately affected. In 2002, approximately 58% of 75-year-olds had at least one visit to an ED, as compared to 39% of those of all ages, and ED use increased with increasing age.3 Once in the ED, older patients are more likely to have an emergent or urgent condition, be hospitalized, and be admitted to a critical care

• Paradigm shift of ED physical design and care (Pediatric ED)
• Geriatric ED Interventions (GEDIs)
  – Structural modifications: lighting, flooring, hearing assist devices, clocks
  – Process of care modifications: screening for cognitive impairment, adverse health outcomes (e.g., ISAR, TRST, BRIGHT), nursing discharge coordinator
• Difficulty publishing in 2005-6 (published in 2007)
Geriatric Emergency Departments

1. Hadassah-Hebrew University Medical Center, Mount Scopus, Jerusalem (in 2008, wrote they had one “operating for a decade”)
2. Holy Cross Hospital, Silver Springs, MD (part of Trinity Health) – “Senior ED” 11/2008
3. Saint Joseph’s Regional Medical Center, Paterson, NJ – 14 bed ED, (Chair – Mark Rosenberg rosenbem@sjhmc.org) 1/2009
4. Memorial Hermann Southwest Hospital, Houston, TX
5. Des Peres Hospital, St. Louis, MO, Deborah Wilke RN, Raana Postingle MD directors, opened Feb 2010
6. [Cornell-Weil Medical Center, NY, NY] – 15 bed GEM ED in 2005
7. Regional Geriatric Programs of Ontario, 2009 with Geriatric Emergency Management (GEM) model to link an ED visit of a frail senior to supportive health care services
8. Kansas, Witchita – Galichia Heart Hospital “Senior ER” 8/09
9. Michigan Trinity Hospital – “marketing the Senior ED” – Ann Arbor and all Trinity ED’s in Michigan – separate wings, - Trinity Health Systems plans to open 19 centers by 2013 in 7 states (MD, Mich, Iowa, Tx, Colorado, MD (part of Silver Springs Holy Cross), Louisiana) – George C. “Senior emergency departments” CMAJ, 2011:183:E613-E614. in Ann Arbor, Livingston, Livonia (11/10), Oakland, Port Huron
10. St. Mary Mercy Hospital, Saline, MI
13. Chelsea Washtenaw/Livingston County
   – L2011auren Stokes, media relations contact for the hospital, said the Saline Senior ER is part of a larger plan to bring a similar style of care to the region. "By Jan. 1., emergency departments at Chelsea Community Hospital, St. Joseph Mercy Ann Arbor, St. Joseph Mercy Brighton, St. Joseph Mercy Livingston, St. Joseph Mercy Oakland, St. Joseph Mercy Port Huron and St. Joseph Mercy Saline will each have a Senior Emergency Department staffed by caregivers who are specially skilled in geriatric emergency care," she said. ""St. Mary Mercy Livonia opened the doors to the health system’s first Senior Emergency Department on July 14."
   – Since July 2010, Trinity Health, which operates in seven states, has opened eight ER's in Michigan for patients age 65 and over.
14. Park Plaza Hospital and Medical Center in Houston debuted its senior ER department in October, 2010.
15. MetroHealth Geriatric Emergency Department, Cleveland, OH http://www.metrohealth.org/body.cfm?id=2367&oTopID=2363
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<th>Number</th>
<th>Location</th>
<th>Details</th>
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<tbody>
<tr>
<td>17</td>
<td>Senior ED, DUBUQUE, IOWA—Mercy Medical Center 5/2011</td>
<td>Foundation to build, 2012-2013?</td>
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<tr>
<td>18</td>
<td>Mercy Medical Center, Sioux City, IA</td>
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<td>19</td>
<td>Newark Beth Israel Medical Center (Barnabas Health), NJ 11/7/11</td>
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<td>20</td>
<td>CLEVELAND, Ohio -- University Hospitals’ Bedford and Richmond medical centers 11/20/11</td>
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<td>21</td>
<td>Ochsner Baptist Medical Center, New Orleans, LA Senior ED 7/12/11</td>
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<td>22</td>
<td>Exempla Lutheran Medical Center in Wheat Ridge, CO - Exempla Senior ER @Lutheran 11/11</td>
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<td>23</td>
<td>Baton Rouge General, Senior Emergency Room</td>
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<td>24</td>
<td>Monmouth Geriatric Emergency Medicine unit (Barnabas Health), Long Branch, NJ 1/12</td>
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<td>25</td>
<td>*Emergency Department Geriatric Centers of Excellence Program, Geriatric ED Consulting Program as part of Premier Physician Services, Dayton, OH</td>
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<td>26</td>
<td>Mount Sinai Medical Center, NY, NY, opened 2/17/12</td>
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<td>27</td>
<td>Northwestern Memorial Hospital, $1mil donation from Davee Foundation to build, 2012-2013?</td>
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<td>28</td>
<td>Jason Greenspan (Southern California contact of Chris Carpenter’s who is creating 12 Geri ED’s through his physician group?)</td>
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<td>(has already contacted Mark Rosenberg re .how to set up a Geri Ed the right way)</td>
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<td>University Medical Center of Princeton at Plainsboro’s Center for Emergency Care, UMCPP’s Geriatric Emergency Department, Craig Gronczewski, MD, Chairman of UMCPP’s Emergency Department, and Daniel M. Farber, MD, June 2012</td>
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<td>Abaris Group – registration required webinars ($295/participant) on “Preparing for the Geriatric ED”</td>
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<td>31</td>
<td>Summa Health, Akron, OH (end of 2012)</td>
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<td>32</td>
<td>St. Alphonsus Medical Center, Boise, ID</td>
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<td>33</td>
<td>Research Medical Center, Kansas City, MO</td>
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<td>34</td>
<td>Exempla, St. Josephs, Lutheran, etc., Denver, CO, part of Kaiser Permanente hospital system 10/2012 ( Kevin Baumlin presented how to open a Geriatric ED?)</td>
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<td>35</td>
<td>GEMS (Geriatric Emergency Medicine Services) via a GEMS NP. Bridgeport Hospital, Yale New Haven Health, Bridgeport CT</td>
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<td>[Lutheran Hospital, Queens, NY, in development?]</td>
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<td>[Washington University, St. Louis, MO]</td>
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<td>[Upstate Medical University, SUNY Syracuse, Syracuse, NY]</td>
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An Emergency Room Built Specially For Seniors
by JOSEPH SHAPRO

February 19, 2009

Only infants go to the emergency department at a higher rate than people 75 and older, according to a recent federal government survey. For years, many hospitals have set up separate emergency rooms just for kids. Now, Holy Cross Hospital in Silver Spring, Md., has set up an ER specifically for patients 65 and older.

The ER opened last November and takes older patients, unless they’re considered trauma patients. When the hospital decided last year to build the separate emergency room, Dr. James Del...
Separate Emergency Center for Older Patients Leads to High Levels of Patient Satisfaction, Detection of Polypharmacy, Increased Volume of Patients, and Low Rate of Return Visits

Snapshot

Summary
Holy Cross Hospital established a separate senior emergency center to treat patients 65 and older who are experiencing acute, but not life-threatening health problems. The center has several physical features intended to make seniors' stays more comfortable and safe, such as separate rooms, thicker mattresses, special lighting, reduced-glare floors, and a blanket warmer. In addition, all staff have received specialized training in geriatrics.
Preliminary Outcomes

- Increased patient satisfaction
- Higher rate of postdischarge independence in ADLs
- Fewer return visits
- Lower readmission rate
- Improved screening for inappropriate medications
- Increased patient volume (16% seniors treated)
GEDI WISE

Geriatric
Emergency
Department
Innovations in care through
Workforce,
Informatics, and
Structural
Enhancements
Grant funded:

• Health Care Innovation Award

• The Center for Medicare & Medicaid Innovation (aka, the *CMS Innovation Center* or **CMMI**)

• CMMI identifies, tests, and spreads new ways to pay for and deliver care to all Americans
Better Health care:
Improve individual patient experiences of care along the Institute of Medicine’s six domains of quality: Safety, Effectiveness, Patient-Centeredness, Timeliness, Efficiency, and Equity

Better Health:
Encourage better health for entire populations by addressing underlying causes of poor health, such as physical inactivity, behavioral risk factors, lack of preventive care and poor nutrition

Lower Costs for Beneficiaries:
Lower the total cost of care resulting in reduced monthly expenditures for each Medicare, Medicaid or CHIP beneficiary by improving care, ultimately enhancing the health care system
GEDI WISE Aims

• **Aim 1 (Better Health Care)**
  Improve the quality of *geriatric* emergency patient care with better:
  - care transitions
  - coordination of patient care
  - detection of adverse events
  - pain care
  - delirium and fall risk screening
  - advanced care planning

• **Aim 2 (Better Health)**
  Improve health outcomes in older adults who receive GEDI WISE
  - quality of life and patient satisfaction
  - reduce functional decline, delirium, depression, pain, falls, etc.

• **Aim 3 (Lower Costs)**
  - ↓ annual rates of hospitalization
  - ↓ 30-day readmission
  - ↓ ED visits and revisits
  - ↓ number of ICU days
GEDI WISE

• WHY The number of older adults with ED visits has doubled over the last decade. The special care needs of older adults are not well aligned with current priorities for ED physical plant design and how care is presently rendered in most emergency departments.

• WHERE

   Chicago, IL  Paterson, NJ  New York, NY

   Northwestern Memorial Hospital  St Joseph’s Regional Medical Center  Mount Sinai Hospital

• HOW GEDI WISE is an integrated multidisciplinary approach that incorporates workforce education, training, and expansion; evidence-based geriatric specific clinical protocols; informatics support for patient monitoring and clinical decision support; and structural enhancements to improve patient safety and satisfaction.

• WHO 45,000 Medicare beneficiaries per year who present to these EDs at the 3 sites (>10,000 at Mount Sinai)

• WHEN July 1, 2012 – June 30, 2015

• BOTTOM LINE Conservative average cost saving of $297.22 pr/beneficiary, pr/yr OR >$13 million in savings annually by reducing total cost of care OR >$40 million in cost of care savings over three years
GEDI WISE

• St. Josephs Regional Medical Center
  – Most “mature” of 3 Geriatric EDs (2009)
  – State of the art Geriatric ED
  – Advanced innovations in care

• Northwestern Memorial Hospital
  – Spring 2013 launch of “GEDI WISE RN liaison”
  – Work alongside ED clinical team and provide enhanced geriatric ED screenings
The GEDI WISE Workforce plan includes:

- *Retraining* and *updating* the skills of geriatric care of all ED physicians, nurses and other staff
- *Adapting* the use of current inpatient *multidisciplinary team-based care* to the ED setting
- Increasing appropriate outpatient use of community resources
- *Expansion of the workforce*
Workforce at Mount Sinai

• Multidisciplinary Geriatric centered ED team:
  – Geriatric ED physician
  – Geriatric ED nurse coordinator
  – GEDI WISE nurse practitioner (care transitions)
  – Geriatric ED social worker (care transitions)
  – ED-savvy geriatrician (Geriatric Liaison)
  – Geriatric ED pharmacist
  – Geriatric ED physical therapist
  – CARE (Care And Respect for Elders) volunteers

All work together to provide more comprehensive care to older patients
Workforce at Mount Sinai

• **Multidisciplinary** Geriatric centered ED team:
  – Geriatric ED physician
  – **Geriatric ED nurse coordinator**
  – GEDI WISE nurse practitioner (care transitions)
  – Geriatric ED SOCIAL WORKER (care transitions)
  – ED-savvy geriatrician (Geriatric Liaison)
  – Geriatric ED pharmacist
  – Geriatric ED physical therapist
  – CARE (Care And Respect for Elders) volunteers

*All work together to provide more comprehensive care to older patients*
What is Medical Informatics?

What is Medical Informatics?

Informatics at Mount Sinai

- Deals with the resources and methods to improve
  - retrieval
  - storage
  - use
  of digital information in medicine
Informatics at Mount Sinai

How will GEDI WISE use informatics?

• Electronic Medical Record (EMR) system (EPIC)
  – Inform and guide *clinical decision making*
  – Example:
    Alerts for patients with frequent ED visits, recent hospitalizations, and high-risk conditions

• Health information exchange
  – Monitoring and *event notification*
  – Example:
    A Mount Sinai Geriatric ED patient discharged home with prescription goes to another ED 2 days later → an event notification is sent to Mount Sinai GEDI WISE staff about this ED visit and they assist with medical management
Enhancements to the Geri-ED space include:

- Non-slip, non-glare floors
- Recliners
- Diurnal lighting
- Thicker mattress pads
- Noise reduction rooms
- Hearing and visual assist devices
- Enhanced *(larger font)* signage and instructions
- Ambulation-assist hand rails along the walls

Geri ED Building Blocks: Improved Transitions

- **Phone Call Follow Up**
  - Increase likelihood of seeing PCP at 5 days
  - Decrease likelihood of readmission at 35 days

- **UNC ED current Geri Transitions Program**
  - Phone call follow up 65-74 years old
  - Two day appointment geriatric clinic 75 and older
UNC Transitions Unit: In Development

- Different Model of Geriatric ED
- A geriatric focused ED run Transitions Unit
- Modification of Leicester England Frailty Unit
- Goal is to enhance transitions by wrapping services around vulnerable older population
  - Case managers are the key
- Also affords opportunities for geriatric consults plus other consults as indicated
UNC Transition Unit

All adult patients go to ED

“Avoids triage failures in older adults”

- Well: DC to home setting
- Subacutely Ill: Transitions Unit
- Acutely Ill: Admission

Platts – Mills TF Acad Emerg Med 2010
Making the Case for Geriatric EDs

• Necessary vs. Necessity
  – Option? vs. All ED need to be “geriatricized”?

• ACEP, AGEM-SAEM, ENA, AGS task force initiative developing Geriatric ED criteria

• The bottom line...
  – Patient-centered
  – Reduced hospital admissions/readmissions
  – Reduced ED visits
  – Reduced hospital LOS
How are We Going to Get There?

http://www.flickr.com/photos/hikingartist/4193332430/sizes/l/in/photostream/
Training the Workforce: Collaboration is Key

- Medical students
- Geriatrics in ED residencies
- Geriatric EM fellowships
- CME for practicing EM physicians
- Educating non-physician team members
Medical Students

• Making progress
• 26 Minimum Geriatric Competencies\(^1\)
• Geriatric clinical rotations in 2010\(^2\)
  – 27% required
  – 87% elective
  – Similar to 2005

1 Leipzig Acad Med 2009
2 Bragg JAGS 2012
Residents

EDUCATIONAL ADVANCE

Development of Geriatric Competencies for Emergency Medicine Residents Using an Expert Consensus Process

Teresita M. Hogan, MD, Eve D. Losman, MD, Christopher R. Carpenter, MD, Karen Sauvigne, MA, Cheryl Irmiter, PhD, Linda Emanuel, MD, PhD, and Rosanne M. Leipzig, MD

Abstract

Background: The emergency department (ED) visit rate for older patients exceeds that of all age groups other than infants. The aging population will increase elder ED patient utilization to 35% to 60% of all visits. Older patients can have complex clinical presentations and be resource-intensive. Evidence indicates that emergency physicians fail to provide consistent high-quality care for elder ED patients, resulting in poor clinical outcomes.

Objectives: The objective was to develop a consensus document, “Geriatric Competencies for Emergency Medicine Residents,” by identified experts. This is a minimum set of behaviorally based performance standards that all residents should be able to demonstrate by completion of their residency training.

Methods: This consensus-based process utilized an inductive, qualitative, multiphase method to deter-
Residents

• Curricula have been created
  – POGOe, MedEdPortal
  – 72 hits searching “Emergency” in POGOe
  – High fidelity simulations, interactive lectures, minimum competencies
Resident Education at UNC

- Geriatrics is core component of curriculum
  - 6 interactive lectures
  - 7 high fidelity simulations
  - Delirium training using standardized patients
  - Interactive sessions such as the Abdominal Pain Game
Residents

– Challenge is to create curriculum easily inserted into current EM curricula

  • Insertable slides for topics already being taught (trauma, chest pain, abdominal pain, etc)

  • Assessment forms reflecting Milestone criteria

  • Geriatrics by stealth

  • Good care of the elderly is good care period
EMERGENCY MEDICINE CORE CONTENT

Effect of a Geriatric Curriculum on Emergency Medicine Resident Attitudes, Knowledge, and Decision-making

Kevin J. Biese, MD, MAT, Ellen Roberts, PhD, MPH, Michael LaMantia, MD, Zeke Zamora, MD, Frances S. Shofer, PhD, Graham Snyder, MD, Amar Patel, MS, David Hollar, PhD, John Steve Kizer, MD, and Jan Busby-Whitehead, MD

Abstract

Objectives: Despite an increasing number of elderly emergency department (ED) patients, emergency medicine (EM) residency training lacks geriatric-specific curricula. The objective was to determine if a 1-year geriatric curriculum, designed for residents, would affect residents’ attitudes, knowledge, and decision-making for older patients seen in the ED.

Methods: The authors created a geriatric curriculum for EM residents composed of six lectures on the following topics: trauma, abdominal pain, transitions of care, medication management, iatrogenic injuries, and confusional states. A second component of the curriculum included seven high-fidelity simulation skills training sessions on aortic aneurysm, salicylate toxicity, drugs of abuse, infection from a posterior pressure ulcer, medication-induced elevated prothrombin time resulting in gastrointestinal bleeding, mesenteric ischemia, and myocardial infarction.
Geri – EM Fellowships

• 3 active (non ACGME) fellowships
  – Cornell, Beaumont Hospital Detroit, UNC Chapel Hill

• Clinical emphasis
  – Geriatric syndromes
  – Exposure to multiple care settings
  – Foster improved transitions of care
Geri – EM Fellowships

- 1 or 2 year models
  - 2 years with MPH

- Need active collaboration with Geriatrics Division/Department

- Society Academic Emergency Medicine has asked us to standardize Geri - EM fellowships
CME for practicing EM physicians: Critical Current Need

- Concern: Many institutions starting Geriatric EDs, few practicing EM physicians have specific knowledge in geriatric syndromes and care needs

- Goal: Start a mini-course in Geriatric EM to train local champions and help these individuals have a network they can work with
  - Modeled after Reynolds “mini – fellowships” in geriatrics
  - Thanks to Rosanne Leipzig and Reynolds Foundation for mentorship and support
Geriatric Training beyond MDs

- GENE – online geriatric emergency nursing education
- Reach out to physician extenders
- More resources needed
Thank you for your attention!

kbiese@med.unc.edu
ula.hwong@mounstsinai.org
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• Kristen Ruck for assistance preparing presentation