The Geriatric Emergency Department

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Chairman, Department of Emergency Medicine
Chief, Geriatrics Emergency Medicine and Palliative Medicine
St Joseph’s Healthcare System, Paterson, NJ
Chairman, Geriatric Emergency Medicine Section - ACEP
Chairman, Palliative Medicine Section – ACEP
Board of Directors, Academy of Geriatric Emergency Medicine - SAEM
Overview GED

1. Making a case for a Geriatric Emergency Department (GED)
2. GED Guidelines
3. GEDI-WISE Study
4. The Business Case
St. Joseph’s Regional Medical Center

- 641-bed tertiary care teaching hospital
- Paterson, NJ
- Emergency Department - 2014
  - 160,000 total visits/year:
    - 41,000 Pediatric Emergency Department
    - 28,000 Geriatric Emergency Department
      - 24 Bed Unit
    - 200 Emergency Department Palliative Medicine
      - 2 LSMA Rooms

- Comprehensive stroke center
- Trauma center
- Resuscitation center
- Heart Failure center
- Toxicology reference center
- Life Sustaining Management and Alternatives (LSMA)
Before we begin
Outcomes

• Increased patient satisfaction
• Higher rate of postdischarge independence
• Fewer return visits
• Lower admission and readmission rate
• Improved screening for inappropriate medications
• Increased patient volume (16% seniors treated)
# The Geriatric ED Dashboard

**Saint Joseph’s Reg Med Center - Paterson Emergency Department**  
**Geriatric Key Performance Indicator Dashboard**  
(Pts >= 65 yrs old)  
Filtered for Patients Seen in the Following ED Area:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Current Month</th>
<th>Trend</th>
<th>6 Months Avg</th>
<th>SMLY</th>
<th>Target</th>
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The data below cannot be sliced by ED area

| # of Returns in 72 Hours | 59 | 43 | 53 | 45 | 62 | 50 | 52 | 47 | 31 | 60 | 57 | 60 | 67 |
| # of Returns / All Pt Visits | 4.6% | 3.5% | 4.1% | 3.7% | 4.9% | 4.0% | 4.2% | 3.7% | 2.7% | 4.9% | 4.4% | 5.0% | 4.5% |
| # of Returns in 72 Hours who are Admitted | 17 | 21 | 19 | 20 | 23 | 20 | 21 | 16 | 10 | 18 | 23 | 15 | 34 |
| Admit % of Returns | 28.8% | 48.8% | 35.8% | 44.4% | 37.1% | 40.0% | 40.4% | 34.0% | 32.3% | 30.0% | 40.4% | 25.0% | 50.7% |
| # of Returns in 72 Hours who are Admitted / All Pt Visits | 1.3% | 1.7% | 1.5% | 1.6% | 1.8% | 1.6% | 1.7% | 1.3% | 0.9% | 1.5% | 1.8% | 1.2% | 2.3% |
| Number of 30 Day Returns after Admission | 143 | 83 | 136 | 123 | 125 | 91 | 95 | 105 | 111 | 91 | 107 | 125 | 87 |
| Heart Failure Admissions | 60 | 58 | 63 | 52 | 43 | 44 | 43 | 39 | 43 | 20 | 35 | 38 | 52 |
| # of 30-day readmissions for Heart Failure | 10 | 9 | 20 | 11 | 9 | 6 | 9 | 7 | 10 | 5 | 9 | 4 |
| Heart Failure Readmission Rate | 17% | 16% | 32% | 21% | 21% | 14% | 21% | 18% | 16% | 50% | 14% | 24% | 8% |
| Pneumonia Admissions | 9 | 4 | 10 | 5 | 7 | 8 | 6 | 8 | 9 | 13 | 14 | 4 | 4 |
| # of 30-day readmissions for Pneumonia | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 7 | 1 | 1 |     |     |     |     |     |
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<tr>
<td># of 30-day readmissions for Pneumonia</td>
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</tbody>
</table>
• Mrs. Smith is a 78 y/o functionally independent senior. She lives alone and daughter lives 2 blocks away.

• This AM, Mrs. Smith hurt her ankle going down the steps. Has difficulty ambulating.

• Alternative scenario – Weak and Dizzy
The Geriatric ED Difference

Adult ED
• H and P
• Order X-Ray

Geriatric ED
• H and P
• Order X-Ray
The Geriatric ED Difference

**Adult ED**
- H and P
- Order X-Ray
- Reevaluation
- Discharge

**Geriatric ED**
- H and P
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The Geriatric ED Difference

**Adult ED**
- H and P
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- Discharge

**Geriatric ED**
- H and P
- Order X-Ray
- Seen by GED Team
  - PT
  - Social Work
  - Nutrition
  - Geri RN
  - Pharmacy
- Geriatric Screenings
- Discharge Planning
- Care Transition
The Geriatric ED Difference

Adult ED
• H and P
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- Geriatric Screenings
- Discharge Planning
- Care Transition
- Home Assessment

Also Senior Patient Has Phone Reassessment on Day 1, 3, and 7
Why?

- 79 million Baby Boomers become 65
- Age 65 and over have increased healthcare needs
- ED utilization of seniors
- Contributing factors
- Outcomes
- Paradigm shift
- More likely to fill out patient satisfaction surveys
- More likely to be dissatisfied
- VALUE-BASED PURCHASING
Population ≥65 years by size and % of total population

Sources: U.S. Census Bureau, decennial census of population, 1900 to 2000; 2010 Census Summary File 1.
Geriatric ED utilization rates

- 7x more usage of ED services
- 43% of all admissions
- 48% of all Critical Care admissions
- 20% longer length of stay
- 50% more lab
- 50% more radiology
- 400% more social service interventions

CMS 2008 Data Set
Contributing Factors

1. Shrinking primary care pool
   • Deficit of 25,000 Gerontologists by 2030
     – FP Residents Decreased by 50%
     – IM Residents choosing Primary Care dropped from 54% to 22%

2. Lack of financial incentives
   • Medicare is primary insurance of the elderly
   • Medicare pays 25-31% less than private insurers

3. Complexity of care
   • Multiple chronic diseases compounded by social issues
   • Outpatient management issues
     – Cognition
     – Mobility
     – Transportation
     – Subspecialist availability

4. ED most appropriate venue
   • One-stop shopping
     – Labs, X-ray, specialists
   • Not more expensive
Contributing Factors

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Story of two patients
ED work-up vs Outpatient work-up.
Current model: poor outcomes for seniors

1. Delay in diagnosis & treatment
   - Acute MI
   - Sepsis
   - Appendicitis
   - Ischemic bowel

2. Unsuspected diagnosis
   - Delirium
   - Depression
   - Cognitive impairment
   - Drug & alcohol
   - Elder abuse
   - Polypharmacy

3. Under-treatment
   - Low rate of PCI in MI
   - TPA in stroke
   - Less surgical intervention
   - Inadequate pain management

4. Over-treatment
   - High rate of Foley cath
   - Adverse drug events
   - Overuse of sedation
Two paradigms

Non-geriatric ED Patient

- Single complaint
- Acute
- Diagnose and treat
- Rapid disposition

Geriatric ED Patient

- Multiple problems
  - Medical
  - Functional
  - Social
- Acute on chronic, subacute
- Control symptoms, maximize function, enhance quality of life
- Continuity of care
The GED Guidelines
More than 80 Geriatric EDs and growing…

…finally there is a standard.

Accreditation Standard and Minimal Requirements Development…

- ACEP
- AGS
- ENA
- SAEM
- AIA

JCAHO and DNV
# The Geriatric Emergency Department Guidelines

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Goal and program definition

- Marketing
- Quality
- Meeting community need
- What age
- Nursing home
- Decrease or increase admissions
- Decrease readmissions

Improving Health Care and Emergency Care for “Functionally Independent” Seniors
Goal and program definition

- Marketing
- Quality
- Meeting community need
- What age
- Nursing home
- Decrease or increase admissions
- Decrease readmissions

Improving Health Care and Emergency Care for “Functionally Independent” Seniors
Am I old? *Keep me functional and independent!*

**Healthy**
- Feel great
- Exercise daily
- Eat right
- Drink socially
- Very social

**Controlled Health Issues**
- MI within past six months
- High BP
- High cholesterol
- Prostate Cancer
- Osteoarthritis
- On six medications
- Countless vitamins
- Contact lenses
- Hearing aids
What is a Geriatric ED?
10 Facets of a Geriatric ED

1. Physical plant
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Observation and extended home observation
10. Palliative care
1. Physical plant

- Separate unit? Process? Universal Design?
- Thick mattresses or hospital beds
- Quieter, less crazy environment
- Non-slip floors
- Non-glare floors
- Limiting tethers
- Handrails
- Corridors safe for walking
- Lighting
- Sound proofing
- Family friendly
BECAUSE MY MOM AND HER FRIENDS SAY SO!

• Less Afraid
• Better History
• Won’t Lie
"If you don’t have space for a Geriatric ED…. make your entire ED a Geriatric ED."

"If the ED is designed for the most frail and vulnerable ..... it will work for the strongest."
2. Quality initiatives

- Drug interactions
  - 5 Meds = 70% chance of drug interactions
  - 7 Meds = 100% chance of drug interaction
- Falls risk assessment
  - Get-up-and-go testing
- Beers criteria
  - AGS 2012
  - Potentially inappropriate medication use in older adults
- Advancing ESI criteria for elderly*
- Liberal EKG policy*
- Abdominal pain awareness*
- Relooking at ESI Triage criteria for elderly*
- Screening Tools
Get Up And Go Test...

Get up and go testing

**Instructions:**
Ask the patient to perform the following series of maneuvers:
1. Sit comfortably in a straight-backed chair.
2. Rise from the chair.
3. Stand still momentarily.
4. Walk a short distance (approximately 3 meters).
5. Turn around.
6. Walk back to the chair.
7. Turn around.
8. Sit down in the chair.

**Scoring:**
Observe the patient's movements for any deviation from a confident, normal performance. Use the following scale:

1 = Normal  
2 = Very slightly abnormal  
3 = Mildly abnormal  
4 = Moderately abnormal  
5 = Severely abnormal

"Normal" indicates that the patient gave no evidence of being at risk of falling during the test or at any other time. "Severely abnormal" indicates that the patient appeared at risk of falling during the test. Intermediate grades reflect the presence of any of the following as indicators of the possibility of falling: undue slowness, hesitancy, abnormal movements of the trunk or upper limbs, staggering, stumbling.

A patient with a score of 3 or more on the Get-up and Go Test is at risk of falling.

**Source:**
American Geriatrics Society Beers Criteria 2012
Source: http://tinyurl.com/BeersMeds2012

AGS BEERS CRITERIA
FOR POTENTIALLY INAPPROPRIATE MEDICATION USE IN OLDER ADULTS

FROM THE AMERICAN GERIATRICS SOCIETY

This clinical tool, based on The AGS 2012 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults (AGS 2012 Beers Criteria), has been developed to assist healthcare providers in improving medication safety in older adults. Our purpose is to inform clinical decision-making concerning the prescribing of medications for older adults in order to improve safety and quality of care.

Originally conceived of in 1991 by the late Mark Beers, MD, a geriatrician, the Beers Criteria catalogues medications that cause adverse drug events in older adults due to their pharmacologic properties and the physiologic changes of aging. In 2011, the AGS undertook an update of the criteria, assembling a team of experts and funding the development of the AGS 2012 Beers Criteria using an enhanced, evidence-based methodology. Each criterion is rated (quality of evidence and strength of evidence) using the American College of Physicians’ Guideline Grading System, which is based on the GRADE scheme developed by Guyatt et al.

The full document together with accompanying resources can be viewed online at www.americangeriatrics.org.

INTENDED USE
The goal of this clinical tool is to improve care of older adults by reducing their exposure to Potentially Inappropriate Medications (PIMs).

- This should be viewed as a guide for identifying medications for which the risks of use in older adults outweigh the benefits.
- These criteria are not meant to be applied in a punitive manner.
- This list is not meant to supersede clinical judgment or individual patient’s decisions and needs.
- Prescribing and managing disease conditions should be individualized and involve shared decision-making.
- TIPS (Tool to Identify Potentially Inappropriate Prescriptions) also underscore the importance of using this tool in conjunction with the use of non-pharmacological approaches and having economic and organizational incentives for this type of model.
- Implicit criteria such as the STOPP/START criteria and Medication Appropriateness Index should be used in a complementary manner with the AGS 2012 Beers Criteria to guide clinicians in making decisions about safe medication use in older adults.

The criteria are not applicable in all circumstances (e.g., patients receiving palliative and hospice care). If a clinician is not able to find an alternative and chooses to continue to use a drug on this list in an individual patient, designation of the medication as potentially inappropriate can serve as a reminder for close monitoring so that the potential for an adverse drug effect can be incorporated into the medical record and prevented or detected early.

Table 1: 2012 AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults

<table>
<thead>
<tr>
<th>Organ System/Therapeutic Category/Drug(s)</th>
<th>Recommendation, Rationale, Quality of Evidence (QE) &amp; Strength of Recommendation (SR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticholinergics (excludes TCA’s)</td>
<td>Avoid. Highly anticholinergic, clear reduction with advanced age, and tolerance develops when used as hypnotic; increased risk of confusion, dry mouth, constipation, and other anticholinergic effects/toxicity. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
</tr>
<tr>
<td>First-generation antihistamines (as single agent or as part of combination product)</td>
<td>Avoid. Use of diphenhydramine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
</tr>
<tr>
<td>Brompheniramine</td>
<td>Avoid. Use of brompheniramine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
</tr>
<tr>
<td>Chlorpheniramine</td>
<td>Avoid. Use of chlorpheniramine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
</tr>
<tr>
<td>Cymetamine</td>
<td>Avoid. Use of cymetamine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
</tr>
<tr>
<td>Cyproheptadine</td>
<td>Avoid. Use of cyproheptadine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
</tr>
<tr>
<td>Deschlorpheniramine</td>
<td>Avoid. Use of deschlorpheniramine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
</tr>
<tr>
<td>Diphenhydramine (oral)</td>
<td>Avoid. Use of diphenhydramine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
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<tr>
<td>Doxylamine</td>
<td>Avoid. Use of doxylamine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
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<tr>
<td>Drosbenazine</td>
<td>Avoid. Use of drosbenazine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
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<tr>
<td>Imipramine</td>
<td>Avoid. Use of imipramine in special situations such as acute treatment of severe allergic reaction may be appropriate. QE = High (Hydramalazine and Promethazine), Moderate (All others), SR = Strong</td>
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<tr>
<td>Anti-Parkinsonism agents</td>
<td>Avoid. Not recommended for prevention of extrapyramidal symptoms with antipsychotics; more effective agents available for treatment of Parkinson disease. QE = Moderate, SR = Strong</td>
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<tr>
<td>Benztrapone (oral)</td>
<td>Avoid. Not recommended for prevention of extrapyramidal symptoms with antipsychotics; more effective agents available for treatment of Parkinson disease. QE = Moderate, SR = Strong</td>
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<tr>
<td>Tolcapone (oral)</td>
<td>Avoid. Not recommended for prevention of extrapyramidal symptoms with antipsychotics; more effective agents available for treatment of Parkinson disease. QE = Moderate, SR = Strong</td>
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<tr>
<td>Long-acting (≥0.1 mg/day)</td>
<td>Avoid. In heart failure, higher dosages associated with no additional benefit and may increase risk of toxicity; decreased renal clearance may increase risk of toxicity. QE = Moderate, SR = Strong</td>
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<tr>
<td>Disopyramide</td>
<td>Avoid. Disopyramide is a potent negative inotrope and therefore may induce heart failure in older adults; strongly anticholinergic; other antiarrhythmic drugs preferred. QE = Low, SR = Strong</td>
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<tr>
<td>Dronedarone</td>
<td>Avoid. In patients with permanent atrial fibrillation or heart failure. Worse outcomes have been reported in patients taking dronedarone who have permanent atrial fibrillation or heart failure. In general, rate control is preferred over rhythm control for atrial fibrillation. QE = Moderate, SR = Strong</td>
</tr>
<tr>
<td>Digoxin &gt;0.125 mg/day</td>
<td>Avoid. In heart failure, higher dosages associated with no additional benefit and may increase risk of toxicity; decreased renal clearance may increase risk of toxicity. QE = Moderate, SR = Strong</td>
</tr>
<tr>
<td>Organ System or Therapeutic Category or Drug</td>
<td>Rationale</td>
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<td>--------------------------------------------</td>
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<tr>
<td>Insulin, sliding scale</td>
<td>Higher risk of hypoglycemia without improvement in hyperglycemia management regardless of care setting</td>
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<tr>
<td>Megestrol</td>
<td>Minimal effect on weight; increases risk of thrombotic events and possibly death in older adults</td>
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<tr>
<td>Sulfonylureas, long duration</td>
<td>Chlorpropamide: prolonged half-life in older adults; can cause prolonged hypoglycemia; causes syndrome of inappropriate antidiuretic hormone secretion. Glyburide: greater risk of severe prolonged hypoglycemia in older adults</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>Metoclopramide: can cause extrapyramidal effects including tardive dyskinesia; risk may be even greater in frail older adults</td>
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<tr>
<td>Mineral oil, oral</td>
<td>Potential for aspiration and adverse effects; safer alternatives available</td>
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<tr>
<td>Trimethobenzamide</td>
<td>One of the least effective antiemetic drugs; can cause extrapyramidal adverse effects</td>
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<tr>
<td>Pain</td>
<td>Meperidine: not an effective oral analgesic in dosages commonly used; may cause neurotoxicity; safer alternatives available</td>
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<tr>
<td>Non-COX-selective NSAIDs, oral</td>
<td>Increases risk of GI bleeding and peptic ulcer disease in high-risk groups, including those aged &gt; 75 or taking oral or parenteral corticosteroids, anticoagulants, or antiplatelet agents. Use of proton pump inhibitor or misoprostol reduces but does not eliminate risk. Upper GI ulcers, gross bleeding, or perforation caused by NSAIDs</td>
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Reglan
What are your Quality Metrics

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<th>GLOBAL MEASURES</th>
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Figure 2. Sample Geriatric ED Quality Assessment Instrument (Dashboard)
Evidence Based Screening Tools

- ISAR  Seniors at Risk
- CAM-ICU  Delirium
- Fact-G  Cancer
- CSI  Care Giver Strain
- PHQ-9  Depression
- Short Blessed
- Katz ADL
- Get Up and Go Testing
### Screening Tools

**CAM-ICU**

The 6th VS
BP, P, RR, Temp, Pulse Ox, CAM

#### CAM-ICU Worksheet

<table>
<thead>
<tr>
<th>Feature 1: Acute Onset or Fluctuating Course</th>
<th>Score</th>
<th>Check here if Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the pt different than his/her baseline mental status? OR Has the patient had any fluctuation in mental status in the past 24 hours as evidenced by fluctuation on a sedation scale (i.e., RASS), GCS, or previous delirium assessment?</td>
<td>Either question Yes →</td>
<td>□</td>
</tr>
</tbody>
</table>

**Feature 2: Inattention**

**Letters Attention Test** (See training manual for alternate Pictures)

**Directions:** Say to the patient, “I am going to read you a series of 10 letters. Whenever you hear the letter ‘A,’ indicate by squeezing my hand.” Read letters from the following letter list in a normal tone 3 seconds apart.

SAVEAHAART

Errors are counted when patient fails to squeeze on the letter “A” and when the patient squeezes on any letter other than “A.”

<table>
<thead>
<tr>
<th>Number of Errors &gt;2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

**Feature 3: Altered Level of Consciousness**

Present if the Actual RASS score is anything other than alert and calm (zero)

<table>
<thead>
<tr>
<th>RASS anything other than zero</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

**Feature 4: Disorganized Thinking**

**Yes/No Questions** (See training manual for alternate set of questions)

1. Will a stone float on water?
2. Are there fish in the sea?
3. Does one pound weigh more than two pounds?
4. Can you use a hammer to pound a nail?

Errors are counted when the patient incorrectly answers a question.

**Command**

Say to patient: “Hold up this many fingers” (Hold 2 fingers in front of patient) “Now do the same thing with the other hand” (Do not repeat number of fingers) "If pt is unable to move both arms, for 2nd part of command ask patient to "Add one more finger"

An error is counted if patient is unable to complete the entire command.

<table>
<thead>
<tr>
<th>Combined number of errors &gt;1</th>
<th>□</th>
</tr>
</thead>
</table>

#### Overall CAM-ICU

Feature 1 plus 2 and either 3 or 4 present = CAM-ICU positive

<table>
<thead>
<tr>
<th>Criteria Met</th>
<th></th>
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<tbody>
<tr>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Criteria Not Met</th>
<th>□</th>
</tr>
</thead>
</table>

CAM-ICU Positive (Delirium Present)
CAM-ICU Negative (No Delirium)

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### THE ISAR TOOL: Initial Screening Questionnaire

To be completed by the staff with the patient or caregiver.

#### PLEASE ANSWER YES OR NO TO EACH OF THESE QUESTIONS

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Before the illness or injury that brought you to the Emergency, did you need someone to help you on a regular basis?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Since the illness or injury that brought you to the Emergency, have you needed more help than usual to take care of yourself?</td>
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<tr>
<td>3. Have you been hospitalized for one or more nights during the past 6 months (excluding a stay in the Emergency Department)?</td>
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<tr>
<td>4. In general, do you see well?</td>
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<tr>
<td>5. In general, do you have serious problems with your memory?</td>
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<tr>
<td>6. Do you take more than three different medications every day?</td>
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</tbody>
</table>

**TOTAL:**
These scales and criteria are used by doctors and researchers to assess how a patient’s disease is progressing, assess how the disease affects the daily living abilities of the patient, and determine appropriate treatment and prognosis. They are included here for healthcare professionals to access.

## ECOG PERFORMANCE STATUS*

<table>
<thead>
<tr>
<th>Grade</th>
<th>ECOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Fully active, able to carry on all pre-disease performance without restriction</td>
</tr>
<tr>
<td>1</td>
<td>Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work</td>
</tr>
<tr>
<td>2</td>
<td>Ambulatory and capable of all selfcare but unable to carry out any work activities. Up and about more than 50% of waking hours</td>
</tr>
<tr>
<td>3</td>
<td>Capable of only limited selfcare, confined to bed or chair more than 50% of waking hours</td>
</tr>
<tr>
<td>4</td>
<td>Completely disabled. Cannot carry on any selfcare. Totally confined to bed or chair</td>
</tr>
<tr>
<td>5</td>
<td>Dead</td>
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</tbody>
</table>

## Caregiver Strain Index (CSI)

I am going to read a list of things that other people have found to be difficult. *Would you tell me whether any of these apply to you?* (GIVE EXAMPLES)

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes = 1</th>
<th>No = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep is disturbed (e.g., because . . . is in and out of bed or wanders around at night)</td>
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<tr>
<td>It is inconvenient (e.g., because helping takes so much time or it’s a long drive over to help)</td>
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<tr>
<td>It is a physical strain (e.g., because of lifting in and out of a chair; effort or concentration is required)</td>
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<tr>
<td>It is confining (e.g., helping restricts free time or cannot go visiting)</td>
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<tr>
<td>There have been family adjustments (e.g., because helping has disrupted routine; there has been no privacy)</td>
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<tr>
<td>There have been changes in personal plans (e.g., had to turn down a job; could not go on vacation)</td>
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<tr>
<td>There have been emotional adjustments (e.g., because of severe arguments)</td>
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<tr>
<td>Some behavior is upsetting (e.g., because of incontinence; . . . has trouble remembering things; or . . . accuses people of taking things)</td>
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<tr>
<td>It is upsetting to find . . . has changed so much from his/her former self (e.g., he/she is a different person than he/she used to be)</td>
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<td>There have been work adjustments (e.g., because of having to take time off)</td>
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<tr>
<td>It is a financial strain</td>
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<tr>
<td>Feeling completely overwhelmed (e.g., because of worry about . . .; concerns about how you will manage)</td>
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**Total Score** (Count yes responses. Any positive answer may indicate a need for intervention in that area. A score of 7 or higher indicates a high level of stress.)
## Screening Tools

### Katz ADL

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Bathing</strong> (spoon bath, tub bath, or shower) Receives either no assistance or assistance in bathing only one part of body</td>
<td>YES</td>
</tr>
<tr>
<td>2. Dressing - Gets clothes and dresses without any assistance except for tying shoes.</td>
<td>NO</td>
</tr>
<tr>
<td>3. Toileting - Goes to toilet room, uses toilet, arranges clothes, and returns without any assistance (may use cane or walker) for support and may use bedpan/urinal at night.</td>
<td>NO</td>
</tr>
<tr>
<td>4. Transferring - Moves in and out of bed and chair without assistance (may use cane or walker).</td>
<td>NO</td>
</tr>
<tr>
<td>5. Continence - Controls bowel and bladder completely by self (without occasional &quot;accidents&quot;).</td>
<td>NO</td>
</tr>
<tr>
<td>6. Feeding - Feeds self without assistance (except for help with cutting meat or buttering bread).</td>
<td>NO</td>
</tr>
</tbody>
</table>

### Lawton-Brody Instrumental Activities of Daily Living Scale (I.A.D.L.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td><strong>A. Ability to Use Telephone</strong></td>
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<tr>
<td>1. Operates telephone on own initiative-looks up and dials numbers, etc.</td>
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<td>2. Dials a few well-known numbers</td>
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<tr>
<td>3. Answers telephone but does not dial</td>
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<tr>
<td>4. Does not use telephone at all</td>
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<tr>
<td><strong>B. Shopping</strong></td>
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<tr>
<td>1. Takes care of all shopping needs independently</td>
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<tr>
<td>2. Shops independently for small purchases</td>
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<tr>
<td>3. Needs to be accompanied on any shopping trip</td>
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<td></td>
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<tr>
<td>4. Completely unable to shop</td>
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<tr>
<td><strong>C. Food Preparation</strong></td>
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<tr>
<td>1. Plans, prepares and serves adequate meals independently</td>
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<tr>
<td>2. Prepares adequate meals if supplied with ingredients</td>
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<tr>
<td>3. Heats, serves and prepares meals, or prepares meals, or prepares meals, but does not maintain adequate diet</td>
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<tr>
<td>4. Needs to have meals prepared and served</td>
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<td><strong>D. Housekeeping</strong></td>
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<td>1. Maintains house alone or with occasional assistance (e.g. &quot;heavy work domestic help&quot;)</td>
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<tr>
<td>2. Performs light daily tasks such as dish washing, bed making</td>
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<tr>
<td>3. Performs light daily tasks but cannot maintain acceptable level of cleanliness</td>
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<td>4. Needs help with all home maintenance tasks</td>
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<td>5. Does not participate in any housekeeping tasks</td>
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<tr>
<td><strong>E. Laundry</strong></td>
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<td>1. Does personal laundry completely</td>
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<tr>
<td>2. Launders small items-rinse stockings, etc.</td>
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<tr>
<td>3. All laundry must be done by others</td>
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<tr>
<td><strong>F. Mode of Transportation</strong></td>
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<tr>
<td>1. Travels independently on public transportation or drives own car</td>
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<td>2. Arranges own travel via taxi, but does not otherwise use public transportation</td>
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<td>3. Travels on public transportation when accompanied by another</td>
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<tr>
<td>4. Travel limited to taxi or automobile with assistance of another</td>
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<tr>
<td>5. Does not travel at all</td>
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<td><strong>G. Responsibility for Own Medications</strong></td>
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<tr>
<td>1. Is responsible for taking medication in correct dosages at correct time</td>
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<tr>
<td>2. Takes responsibility if medication is prepared in advance in separate dosage</td>
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<tr>
<td>3. Is not capable of dispensing own medication</td>
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<tr>
<td><strong>H. Ability to Handle Finances</strong></td>
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<tr>
<td>1. Manages financial matters independently (budgets, writes checks, pays rent, bills, goes to bank), collects and keeps track of income</td>
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<tr>
<td>2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.</td>
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<tr>
<td>3. Incapable of handling money</td>
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Screening Tools – Mini Cog

Figure 1. The Mini-Cog scoring algorithm. The Mini-Cog uses a three-item recall test for memory and the intuitive clock-drawing test. The latter serves as an "informative distractor," helping to clarify scores when the memory recall score is intermediate.

Reference
3. Staff and provider education

- All staff
- Needs assessment through a quality program
- Geriatric curriculum (ACEP, SAEM, ENA)
  1. Physiology of aging
  2. Abdominal pain
  3. Falls and trauma
  4. Infectious disease
  5. The dizzy patient
  6. Pharmacology
  7. Chest pain and dyspnea
  8. End of life
  9. Delirium
  10. General assessment

Search Google: ACEP Geriatric Videos
4. Operations

- Geriatric triage screening
- Geriatric palliative care program
- Medication reconciliation and interaction screening
- **Two-step call back program**
  - Step One – ED Visit
  - Step Two – Follow-up Program
The Two Step Process

EMS

Walk in

Triage and Step One Screening

Registration

Age >65 ESI = 1 or 2

Stabilized Adult ED

Age >65 ESI = 3,4 or 5

Geriatric Emergency Dept

GED Team Coordinates Resources and Screenings

Admit to Hosp

Age 55-65 and ED special needs

Discharge with “Two Step Process” Follow Up
• Prevent functional decline within 30 days of ED discharge
• Called by Geriatric Team within 24 hours of ED Discharge
• Risk screening tools used
• Need assessment
• Medication Review
• Hospital and community resources coordinated
• Primary care doctor notified
Step two call back screen

Role of patient call backs

• Five concerns:
  – Status
  – Meds
  – PMD
  – ADL
  – Support

Prescribe Wellness
5. Coordination of hospital resources

- Social workers
- Case managers
- Physical therapy
- Pharmacist
- Toxicologist
- Telemed
6. Coordination of community resources

- Acute Rehab
- Nursing Home
- LTAC
- SNF
- Home Care
- EMS
- Hospice
- Adult Day Care
- Respite Care
- Visiting Angels
- County Resources

Make a list!
7. Staffing enhancements

- Program coordinator
- RN Champion*
  - Nurse Coordinator
  - Geriatric Nurse Practitioner
- Physician Champion*
  - Medical Director
  - EM/IM
  - Fellowship Trained
- Social worker
- Case manager
- Pharmacist
- Toxicologist
- Physical therapist
8. Patient satisfaction: Value Based Purchasing

• Addressing by preferred name
• Patient liaison
• Blankets
• Nutrition
• Space for Family
• Internal waiting room
• Reading glasses
• Hearing assist devices
• Holistic Medicine
Holistic Medicine

- Reiki Energy
- Pranic Healing Energy
- Aroma Therapy
- Acupressure
- Music Therapy
- Medical Harp Therapy
- Light Therapy
Pranic Healing

Start 1:05
Harp
Highlights of Responses:

FROM PATIENTS:
- “The music is so soothing! It makes me want to fall asleep. I’ve never heard of something like this in a hospital!”
- “That makes my soul feel so sweet inside!”
- “Music is my stress reliever!”
- “It must be so rewarding to bring smiles to so many people.”
- “You have gentle fingers. God bless you for playing for me!”
FROM VISITORS:

- "What a wonderful idea, to have a harpist playing in the ED! Your music is wonderful."
- "That's so peaceful and calming."
- "This is the music of the angels!"
- "The music is really helping to calm me. Thank you for listening and playing for me."
- "You inspire me. The harp music is so beautiful."

FROM STAFF:

- "I wish they'd play harp music during our lunch breaks!"
- "It would be so wonderful to have this relaxing music while taking a bath."
- "It just makes you take a step back and relax."
- "Those who play the harp are angels."
Live Harp Music in a Geriatric Emergency Department: A qualitative study of perception of care and benefits.

Mark Rosenberg, DO FACEP  
Chairman, Emergency Medicine  
St. Joseph’s Regional Medical Center  
Paterson, NJ

Lynne Rosenberg, PhD  
Practical Aspects LLC, Denville NJ

Marianna Karounos, DO  
Chief Geriatric Emergency Department  
St. Joseph’s Regional Medical Center  
Paterson, NJ

Manjushree Matadial, DO  
St. Joseph’s Regional Medical Center  
Paterson, NJ

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Paterson, NJ

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St. Joseph’s Regional Medical Center  
Paterson, NJ

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Bedside Harp, Inc.  
Bensalem, PA
Abstract

Objectives: to determine if the presence of a live harpist in the Geriatric Emergency Department was beneficial to patients and their families.

Methods: Study employed a qualitative design utilizing an interview methodology with a convenience sample. Recruitment for potential participants began when the harpist completed the music session and left the patient area. Descriptive statistics were used to provide numbers and percentages of the demographic characteristics as well as the Likert scale responses to each survey question.

Results: There were 61 survey participants (36 females; 25 males). Participants responded that live harp music made them feel relaxed (90%; 55); calm (91.8%; 61) and less anxious (49; 80.3%). The majority (83.6%) responded that the music was valuable to them and 58 (95.1%) participants would recommend the music to someone in their situation.

Conclusions: This qualitative study supports the presence of a live harpist in the Geriatric ED citing positive benefits to patients, family and staff. Participants reported less anxiety and that music served as a distraction during their time in the ED. An overwhelming majority would recommend the use of live music to others in this setting. The addition of this modality adds little cost yet yields enormous benefits in terms of improved patient and family perception of care while decreasing stress and anxiety. As an added indirect benefit, live harp music may also exert a similar effect on the emergency staff.
Results

“After listening to the live harp music today I feel... RELAXED

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>Relaxed</td>
<td>26.23% (16)</td>
<td>63.93% (39)</td>
<td>4.92% (3)</td>
<td>3.28% (2)</td>
<td>1.64% (1)</td>
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</table>

“After listening to the live harp music today I feel... CALM

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<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>Calm</td>
<td>27.9% (17)</td>
<td>63.9% (39)</td>
<td>8.2% (5)</td>
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</table>

“After listening to the live harp music today I feel... LESS ANXIOUS

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Anxious</td>
<td>23% (14)</td>
<td>57.4% (35)</td>
<td>18% (11)</td>
<td>1.6% (1)</td>
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</table>

“On a scale of 1 to 5, how valuable was the live harp music to you today with one of being valuable at all and five being very valuable?”

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<thead>
<tr>
<th></th>
<th>5 (Very valuable)</th>
<th>4 (Moderately Valuable)</th>
<th>3 (Neutral)</th>
<th>2 (Minimally Valuable)</th>
<th>1 (Not valuable at all)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How Valuable</td>
<td>52.45% (32)</td>
<td>31.15% (19)</td>
<td>14.8% (9)</td>
<td>1.6% (1)</td>
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Conclusions: This qualitative study supports the presence of a live harpist in the Geriatric ED citing positive benefits to patients, family and staff. Participants reported less anxiety and that music served as a distraction during their time in the ED. An overwhelming majority would recommend the use of live music to others in this setting. The addition of this modality adds little cost yet yields enormous benefits in terms of improved patient and family perception of care while decreasing stress and anxiety. As an added indirect benefit, live harp music may also exert a similar effect on the emergency staff.
Light Therapy

Light Therapy
9. Observation and extended home observation

- **Observation care in the Geriatric ED**
  - Decreases the need for admission
  - Admitted patient are better packaged

- **Extended home observation**
  - Visiting nurse
  - Paramedics
  - Return ED visit

- **Longevity Assessment Program for Seniors (LAPS)**
10. Geriatric palliative care, Is it Possible in the ED?

Trajectories of Dying

- Heart attack
- Stroke
- Lung Cancer
- Brain Cancer
- Heart Failure
- Kidney Failure
- Dementia
- Parkinson’s disease

*Figure 1. Trajectories of dying. Reproduced with permission of Blackwell Publishing (Lunney JR, Lynne J. Hogan C. Profiles of older Medicare descendants. JAGS. 2002;50;1108-1112).*
“Life Sustaining Management and Alternatives”

• A exam room designed for Dying
• A Protocol for the Dying Patient
• Considerations
  – Near Nurses Station
  – Quiet
Have a Protocol

Life Sustaining Management Alternative (LSMA) Room Protocols

**Purpose:** To provide the patient and their family with dignity and respect, at the patient’s end of life. This will be provided through a peaceful and caring environment, with excellent medical and nursing care.

Patients will be moved to room 50 or 51 if the following criteria is met:

- Patient and/or family agrees to Hospice admission.
- Patient and/or family is aware the patient will expire in a short time frame.
- Patient and/or family have a consult with the palliative team or ED physician.

*Patient will reside in one of these rooms until a Hospice bed is available or patient expires.*

If a patient meets the above criteria, the nurse is to open a room immediately and accept the patient regardless of which ED physician is assigned to them.

When a patient is assigned to a LSMA room, the follow should be performed ASAP:

- Unnecessary medical equipment removed from room (rolling cabinets, biohazard can, etc)
- Extra chairs provided to family
- Lighting dimmed to family’s desired setting
- TV channel should be placed on 54, the serenity channel
- Allow additional family at bedside – as long as it does not interfere with patient care.
- Call for clergy, if desired by family.
- Provide comfort care for family as well as patient (tissues, juice, etc)
- If a patient liaison is present, inform them to provide additional time for the family
- Be observant of the noise level at the nurse’s station

Additional care that will be needed:

- Turn patient q2h – as indicated
- Oral care q2h - as indicated
- Discontinue vital signs
- Discontinue cardiac monitoring
- Discontinue labs and radiological studies
- Foley catheter as needed for urinary retention
- Consider discontinuing IV fluids or titrating down – prevent edema and congestion
- Rounding q30 minutes
- Avoid suctioning when possible

*Please allow family to enter and leave through outpatient registration entrance.*
Include Medication

Please ensure that you assess for the following:

1. Pain and Dyspnea
   - Consider Morphine IV drip or Morphine IV bolus – with document a reason for each bolus or titration
2. Nausea/Vomiting
   - Consider Zofran IV and/or Prochlorperazine PR
3. Anxiety/Agitation/Depression
   - Lorazepam IV or PO
4. Delirium
   - Haldol 0.5-1 mg IM
5. Terminal Congestion/Death Rattle
   - Atropine 1% Ophth solution: 2 drops SL q6h or Scopolamine patch 1.5mg
   - Artificial Tears 2 drops OU q2h may be needed
09/03/13- Patient is a 45 yo M with a medical history of Seizure disorder, Mental Retardation, Spastic Athetoid Quad, GERD and Dysphagia. Peg tube in place. Patient was a resident of Christian Healthcare Care Center.

Patient presented to ED with SOB, aspiration pneumonia, GI bleed and sepsis.

Patient was initially intubated and started on an epi drip in ED.

Palliative consult was obtained and mother decided that she just wanted patient to be comfortable and did not want life support.

Patient remained on ventilator until family arrived. LSMA protocols were started. Patient received morphine IVP. Patient transferred to LSMA room and was extubated. Patient also received Atropine SL, Versed, and an additional dose of Morphine as needed for symptom management.

Patient was pronounced at 1100 with all family at bedside.
Sept 12, 2013

Dear Mr. Schultz,

My son, Stephen McHone, died last Tuesday, September 3rd in the Emergency Dept.

Words cannot adequately relate my gratitude to you with regard to the dignity, reverence and kindness that you gave to the process of Stephen’s passing. I will never forget it. Thank you.

Sincerely,

[Signature]
“I have been practicing emergency medicine for more than 30 years. This may be the most moving day in my career. I treated the patient as a person and I felt more like a doctor.”
Nursing Comments

- We made a difference today (tears)
- Wow
- I am so proud to be part of this team.
- That is how I want to be treated.
Program Development Costs
How Much Do You Want to Spend

- $10,000
- $50,000
- $750,000
- $2,400,000
- $10,000,000
Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care
Environment of Care

• Separate unit? Process? Universal Design?
• Thick mattresses
• Non-slip; Non-glare floors
• Limiting tethers
• Handrails
• Lighting
• Sound proofing
• Family friendly
Environment of Care

• Separate unit? Process? Universal Design?
• Thick mattresses - $ 450 each
• Non-slip; Non-glare floors
• Limiting tethers
• Handrails
• Lighting
• Sound proofing
• Family friendly
Environment of Care

- Separate unit? Process? Universal Design?
- Thick mattresses - $450 each
- Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
- Limiting tethers
- Handrails
- Lighting
- Sound proofing
- Family friendly
• Separate unit? Process? Universal Design?
• Thick mattresses - $ 450 each
• Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
• Limiting tethers - $ 0
• Handrails
• Lighting
• Sound proofing
• Family friendly
Separate unit? Process? Universal Design?
Thick mattresses - $ 450 each
Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
Limiting tethers - $ 0
Handrails – No incremental cost in most states
Lighting
Sound proofing
Family friendly
Environment of Care

• Separate unit? Process? Universal Design?
• Thick mattresses - $ 450 each
• Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
• Limiting tethers - $ 0
• Handrails – No incremental cost in most states
• Lighting - $ 500 for each six bulb florescent fixture
• Sound proofing
• Family friendly
• Separate unit? Process? Universal Design?
• Thick mattresses - $ 450 each
• Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
• Limiting tethers - $ 0
• Handrails – No incremental cost in most states
• Lighting - $ 500 for each six bulb florescent fixture
• Sound proofing - $ 1200 at Home Depot; $ 50/Room
• Family friendly
• Separate unit? Process? Universal Design?
• Thick mattresses - $ 450 each
• Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
• Limiting tethers - $ 0
• Handrails – No incremental cost in most states
• Lighting - $ 500 for each six bulb florescent fixture
• Sound proofing - $ 1200 at Home Depot; $ 50/Room
• Family friendly – $225/Chair at Staples Office Furniture
Separate unit? Process? Universal Design?
• Thick mattresses - $ 450 each
• Non-slip; Non-glare floors – Twice cost of ‘Wax’; No stripping
• Limiting tethers - $ 0
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• Lighting - $ 500 for each six bulb florescent fixture
• Sound proofing - $ 1200 at Home Depot; $ 50/Room
• Family friendly – $225/Chair at Staples Office Furniture

Total Incremental Cost Per Room = $ 1500
10 bed unit = $15,000
1. Environment
2. **Quality initiatives**
   - Geriatric Healthcare Screenings
   - Transition of Care
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care
1. Environment
2. Quality initiatives
3. **Staff and provider education**
   - ACEP
   - ENA
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care
Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
   - Call Back Program
   - Pivot and Go Triage
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care
1. Environment  
2. Quality initiatives  
3. Staff and provider education  
4. Operational enhancements  
5. **Coordination of hospital resources**  
   - Physician Therapy, Nutrition, Social Services, Psychiatric Services  
6. Coordination of community resources  
7. Staffing enhancements  
8. Patient satisfaction extras  
9. Decreasing Admission and Readmission Strategies  
10. Palliative care
1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. **Coordination of community resources**
   - Visiting Nurses, Meal Services, Senior Day Care
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care
1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. **Staffing enhancements**
   - Navigator, Social Worker, Pharmacist, Others
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies
10. Palliative care
Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. **Patient satisfaction extras**
   - Patient Liaisons, Holistic Medicine, Vision and Hearing Assist, Blankets
9. Decreasing Admission and Readmission Strategies
10. Palliative care
1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. **Decreasing Admission and Readmission Strategies**
   - Admit to Home, Extended Home Observation
10. Palliative care
Geriatric Emergency Department Development

1. Environment
2. Quality initiatives
3. Staff and provider education
4. Operational enhancements
5. Coordination of hospital resources
6. Coordination of community resources
7. Staffing enhancements
8. Patient satisfaction extras
9. Decreasing Admission and Readmission Strategies

10. **Palliative care**
   - Protocol Driven Care System
Defining Triple Aim and Healthcare Reform
The “Triple Aim”

- Improve the patient experience of care
- Improve the health of populations
- Reduce the per capita cost of healthcare

Care Coordination/Continuum of Care
Value-Based Purchasing Roadmap

CMS quality-based payment initiatives will put more than 13% of payment at risk

<table>
<thead>
<tr>
<th>Year</th>
<th>Reporting Hospital Quality Data for Annual Payment Update</th>
<th>Value-Based Purchasing</th>
<th>Readmissions</th>
<th>Hospital-ACQUIRED Conditions</th>
<th>Meaningful Use</th>
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<tbody>
<tr>
<td>2010</td>
<td>2% of APU</td>
<td>1%</td>
<td>1%</td>
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<tr>
<td>2011</td>
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<td>1.25%</td>
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<tr>
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<td>2018</td>
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Source: Studer Group Taking You and Your Organization to the Next Level presentation
Identify how the GED meets the Triple Aim
The GEDI-WISE Validation Project
Increased patient satisfaction
Higher rate of postdischarge independence
Fewer return visits
Lower readmission rate
Improved screening for inappropriate medications
Increased patient volume (16% seniors treated)

Geriatric
Emergency
Department
Innovations in care through
Workforce,
Informatics, and
Structural
Enhancements
CMS “Innovation Award” Under the Affordable Care Act to Improve Geriatric Emergency Care

Mount Sinai has received $12,728,753 to fund a Geriatric Emergency Department Innovations in Care Program known as GEDI WISE, which will provide clinical, workforce, and informatics enhancements to geriatric emergency care that are projected to improve patient outcomes while also producing a cost savings to Medicare and Mount Sinai of over $40 million over the next three years.

New York, NY (PRWEB) June 17, 2012

The Mount Sinai Medical Center in New York today received a “Health Care Innovation Award” from the Department of Health & Human Services. The awards are designed to support innovative healthcare projects nationwide that enhance medical care while also reducing costs. Mount Sinai has received $12,728,753 to fund a Geriatric Emergency Department Innovations in Care Program known as GEDI WISE, which will provide clinical, workforce, and informatics enhancements to geriatric emergency care that are projected to improve patient outcomes while also producing a cost savings to Medicare and Mount Sinai of over $40 million over the next three years.

The number of emergency department visits by older adults has doubled over the last decade, but in most cases the special needs of older patients are not well addressed by existing emergency department care and physical designs. The result is that an increasing number of these residences after their hospital stays, and readmission rates.

Mount Sinai, which recently opened a special geriatric care suite of programs to attempt to address these issues, work best and how they can be exported to other emergency departments.

To achieve the costs savings and better patient outcomes, its emergency department staff, adding dedicated geriatric volunteer coordinators and technicians. The physical space satisfaction. And a program of data collection and analysis that transitions in the geriatric patient care process that changes the re-hospitalization.

“As the U.S. population ages and the proportion of older emergency department is situated at the crossroads of c
CMS Goals; The Triple AIM

• **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/Population 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 Goals; The Triple AIM

• **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
  - ↓ ED visits and revisits
  - ↓ 30-day readmission
  - ↓ number of ICU days
Preliminary Outcomes

- Increased patient satisfaction
- Higher rate of postdischarge independence
- Fewer return visits
- Lower admission and readmission rate
- Improved screening for inappropriate medications
- Increased patient volume (16% seniors treated)
Loss/Cost Analysis: Improving Health, Spending Less and Improving Satisfaction
# Hospital $$ at risk may climb to 13%

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Geriatric ED Continuum of Care
Geriatric ED Continuum of Care

GED as the Hub of Care
Outcomes
Preliminary Outcomes

- Increased patient satisfaction
- Higher rate of post-discharge independence
- Fewer return visits
- Lower admission and readmission rate
- Improved screening for inappropriate medications
- Increased patient volume (16% seniors treated)

Increase percent of medical beneficiaries = Increase GME reimbursement
2013 Article by M Rosenberg and L Rosenberg
Geriatric ED with Palliative Care Saves Millions

"An Integrated Model of Palliative Care in the Emergency Department"

Hospice and palliative medicine is the newest subspecialty of Emergency Medicine (EM), which concentrates on life threatening illnesses whether they are curable or not. The illnesses may include terminal illness, organ failure, and/or frailty. Palliative medicine represents "the physician component of the interdisciplinary practice of palliative care" 1.

Published work on palliative care in the ED is limited yet promising. Research supports the use of palliative care interventions early in the disease trajectory to promote quality of life as well as reduce costs associated with treatments 2,3,4,5. The ability to change the existing paradigm of care for chronic diseases such as cardiac or respiratory diseases, stroke, cancer and diabetes, is an opportunity for palliative medicine - specifically palliative care in the ED - to alter the trajectory of care. There are many ED palliative care delivery systems as providers design programs to meet the needs of diverse stakeholders resulting in three recurring models of
Thank You

1. Making a case for a Geriatric ED
2. GED Guidelines
3. GEDI-WISE Study
4. The Business Case
Questions