Improving Emergency Department Care of Older Adults in America

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Outline

• Older Adults in the Emergency Department

• Managing ED Transitions

• EQUiPPED: Enhancing Quality of Prescribing Practices in the Emergency Department

Supported by: VA Office of Geriatrics and Extended Care; VA Office of Rural Health; VA HSR&D; John A. Hartford Foundation; Agency for Healthcare Research and Quality
US Emergency Departments and Older Adults

- 106M adult ED visits in 2014
  - Age 50-69 – 26.5%
  - Age >= 70 – 16.5%

- Trends 2006 – 2014
  - Annual ED visits increased 18%
  - ED admission rates declined 9.8%

- Majority of older adults evaluated in the ED are not admitted to the hospital

US Emergency Departments and Older Adults

• EDs > 25% of all acute care outpatient visits

• Outpatient ED visits are increasingly intensive
  • Diagnostic complexity
  • New medications are frequently prescribed and chronic medications changed
  • 45-65% of older adults are prescribed at least one new medication

• Referred by primary care in high numbers

• Appropriate use

US Emergency Departments and Older Adults

- **ED returns**
  - 1 in 5 within 30 days
  - Higher risk
    - previous hospital or ED use, chronic conditions, functional disability, inadequate social resource, psychological distress
    - medication problem, incomplete understanding of discharge information

- **High engagement with Primary Care**
  - 70% had not seen outpatient provider between ED discharge and first return

US Emergency Departments and Older Adults

• Communication hurdles
  – Deficits-expected duration of sx/illness (63%), diagnosis (20%), f/u instructions (39%), return precautions (55-79%)
  – NH-ED transfers - usual mental status absent 75%, functional status absent 80%

• Medication safety
  – Incomplete or incorrect medication information at the time of hospital admission (54-60%)
  – 32% of older adults discharged from the ED were prescribed a high risk medication or did not have appropriate monitoring in next setting

US Emergency Departments and Older Adults

Time until first repeat ED visit or Hospitalization

- No new drug
- No suboptimal pharmacotherapy
- Suboptimal pharmacotherapy

ED Transitions of Care

Improving ED Transitions

Best Practices: Sending team

- Medication reconciliation
- Communicate and collaborate with practitioners across settings; structured handoffs
- Prepare patient and family/care partner- educate regarding the condition, treatment, and follow-up plan
- Attention to potential communication barriers – hearing impairment, low vision, cognition
- “Teach back”
- Give specific dates and times for follow-up appointments whenever possible
Improving ED Transitions

Best Practices: *Sending team*

- Complete and accurate information transfer – mental status and functional status
- Advanced care planning
- Community engagement – many post-acute care needs are *non-medical*, e.g. transportation
Improving ED Transitions

Best Practices: *Receiving team*

- Medication reconciliation
- If patient has an adverse health event, suspect medications
- Be prepared to be in the role of sending team because care transitions are so common
- Encourage patients and caregivers to advocate for themselves
Improve ED Transitions

- **System-level**
  - Programs to improve transitions between facilities
  - ED to home transition programs
    - Multi-strategy interventions (discharge planning, case management, med management) and more intensive (> 1 contact)
  - Streamline health IT and remote data access
  - Training and awareness of geriatrics principles of care
  - Enhanced roles SW, Pharm, Community Health Workers/Peer Support
  - Connections with community resources

1. INTERACT/INTERACT II (Interventions to Reduce Acute Care Transfers)
2. Coleman Model (Eric Coleman)
3. Blue Transfer Envelope Process (Wisconsin)

Hughes et al. ED Strategies for Older Adults. VA ESP 09-009. 2018)
Enhancing Quality of Prescribing Practices for Older Adults Discharged from the ED: EQUiPPED

• Multi component Quality Improvement initiative

• Goals
  – Reduce potentially inappropriate medication use in older adults (65+) discharged from the ED
  – Influence ED prescribing practices
  – Target of 5% of less

• PIMs defined by Beers criteria
EQUiPPED

- Collaborative between Geriatric Research, Education and Clinical Sites (GRECCs) at 3 VAMCs, now expanded to 11 VA sites and 3 civilian hospitals

- Focus - Medication Safety

- Target - ED Providers

- Funded by:
  - VHA Office of Geriatrics & Extended Care
  - VHA Office of Rural Health
  - John A. Harford Foundation
  - AHRQ
Change – Three Components

1) Education
   Didactic
   Academic Detailing

2) Individual Provider Feedback
   Audit and Feedback
   Peer Benchmarking

3) Clinical Decision Support
   Discharge medication order sets
   Drug alert messages

*Stevens et al, J Am Geriatr Soc, 2015*
Clinical Decision Support

Epic Order set

Separate tab in the discharge menu under ORDERS tab in ED Discharge activity

Assists with alternative medication choices

Ease of work flow—pre-populated tapers, age-appropriate doses, etc

Organized by categories
Example order set

ED Geriatric Discharge order set

Infections

"Empiric Choices if No Culture Data Available"

- COPD/Bronchitis
- Infectious Diarrhea
- Pneumonia
- Sinusitis
- STD
- Skin/Soft Tissue
- UTI

Cardiology

- Antiarrythmics
- Anticoagulation
- Antihypertension
- CHF
- Hyperlipidemia

Dermatology

- Contact Dermatitis
- Eczema
- Poison Ivy
- Shingles
- Urticaria

Diabetes Mellitus
Individual Provider Feedback

• Audit and Feedback Reports
  • Overall ED and provider PIMs, over time and compared to 5% target
  • Peer benchmarking
  • Provider feedback sessions/academic detailing
# PIMs pre and post EQUiPPED

**Average Monthly Proportion of PIMs**

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<tr>
<th>Site</th>
<th>Pre-EQUiPPED</th>
<th>Post-EQUiPPED</th>
<th>p value*</th>
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<td>5.3 (SD 1.5)</td>
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<td>Durham</td>
<td>8.3 (SD 0.8)</td>
<td>4.5 (SD 1.0)</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

*p-value: Poisson regression including offset term for site’s total number of prescriptions

*Stevens, J Am Geriatr Soc, 2017*
US Emergency Departments and Older Adults

• Enhanced awareness of specific needs of older adults and processes of care to address them
• Interdisciplinary collaboration
• Coordinated care – ED as part of the care continuum
• Person- and family-centered care
• Systems-perspective
Thank you!

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