Access to Home and Community Health Services for Older Adults with Serious Life-Limiting Illness

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Presentation Outline

• **Background**
  • Emergency medicine for older adults with serious life-limiting illness

• **Introduction to Parent Grant- PRIM-ER**
  • Primary Palliative Care for Emergency Medicine

• **Introduction to Sub-Project- Contextual Analysis of Access Factors to Home and Community Services for Older Adult End-of-Life Care**
  • Qualitative Interviews, environmental scan, grey literature review

• **Results**
  • Provider perspectives on access to home and community services for end-of-life care, including integrative medicine
I have no conflict of interest to disclose

Funding

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Background

- Emergency medicine in the US is considered high intensity, with a predilection for invasive life-sustaining procedures.

- However, emergency departments (EDs) increasingly care for older adults with multiple comorbid conditions who present with acute exacerbations of chronic disease. Emergency care has not yet adapted to the needs of this aging population.

- Older adult patients who undergo invasive procedures at the end-of-life often do not obtain any clinical benefit or prolonged life.\(^1\)

- There is a need for greater goal-concordant, patient-centered care, at the end of life to provide older adults the care they desire.
Background

- The emergency department (ED) is a critical juncture in the care of older adults and sits at the crossroads of ambulatory and inpatient care.

- Half of Americans >65 years old are seen in the ED in the last month of life, and 75% are seen in the ED in the last 6 months of life.\(^2\)

- The decisions made within the ED can alter the care trajectory of older adult patients and must consider the risks/benefits of inpatient care such as iatrogenic complications, functional and cognitive decline, and loss of independence associated with hospitalization.\(^3-8\)

- ED providers may not be aware of, or have access to, alternatives to inpatient care that may provide greater support, comfort, and goal-concordant care of older adults with serious life-limiting illness.
Background

What is goal-concordant end-of-life care?

• Older adult patients prefer to, “age-in-place.”9,10

• Most patients prefer to die at home, and there has been an increase in the proportion of patients who die at home over the past several decades.11,12

• Providing home-based end-of-life services increases the likelihood of dying at home, and there is an overall reduction in end-of-life care costs when care is delivered at home.13

• Getting older adults out of the hospital and into home and community health services to support end-of-life needs may improve care satisfaction and reduce overall healthcare costs for older adult end-of-life care.
The PRIM-ER Study

PRIM-ER
Primary Palliative Care for Emergency Medicine

PRIM-ER is a pragmatic, cluster-randomized stepped wedge trial to test the effectiveness of the PRIM-ER intervention in 35 emergency departments

PRIM-ER includes: 1) evidence-based, multidisciplinary primary palliative care education, 2) simulation-based workshops on communication in serious illness, 3) clinical decision support (CDS), and 4) provider audit and feedback.

Medicare claims data will be used to assess the following outcomes:

**Primary Outcome:** ED disposition to an acute care setting

**Secondary Outcome:** Healthcare utilization in the 6 months following the ED visit; and survival following the index ED visit.
PRIM-ER focuses on palliative care education in the ED, but what about access to home and community services from the ED?

Contextual Analysis

1. Provider Interviews
   Qualitative interviews with ED providers on access to home and community services

2. Environmental Scan
   To identify and compare home and community services within a hospital service area across different health systems and geographic regions

3. Grey Literature Review
   To identify and compare federal and state regulations impacting access to home and community services
Contextual Analysis

End-of-Life Home and Community Services of Interest

- Assisted Living
- Skilled Nursing Care
- Adult Day Care
- Home Health
- Home Care
- Intermediate Care
- Hospice
- Palliative Care Services
- Rehabilitation
- Physical and Occupational Therapy

- Integrative Medicine Services
  - Naturopathic Medicine
  - Chiropractic Medicine
  - Acupuncture
  - Massage Therapy
Contextual Analysis

Integrative Medicine for End-of-Life Support

- High symptom burden at the end of life
- Growing interest in integrative medicine among older adults\textsuperscript{14}
- Integrative medicine can play an important role in palliative care\textsuperscript{15,16}
- Prevalence of integrative medicine use is high among populations at risk for impaired health-care access.\textsuperscript{17,18}
- There is wide variation in licensure and scope of practice for integrative practitioners.
## Preliminary PRIM-ER Data

### Table 3. Outcomes

<table>
<thead>
<tr>
<th>Index visits (N, %)</th>
<th>56,243 (100.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED Disposition (N, %)</td>
<td>36,920 (65.6)</td>
</tr>
<tr>
<td>Acute Care</td>
<td>5,289 (9.4)</td>
</tr>
<tr>
<td>ICU</td>
<td>494 (0.9)</td>
</tr>
<tr>
<td>Home Health</td>
<td>103 (0.2)</td>
</tr>
<tr>
<td>Hospice</td>
<td>16,954 (30.1)</td>
</tr>
<tr>
<td>Home</td>
<td>1,772 (3.2)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
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</tbody>
</table>

#### Healthcare Utilization

<table>
<thead>
<tr>
<th>Visits post index (Mean, SD)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Outpatient visits (Mean, SD)</td>
<td></td>
</tr>
<tr>
<td>Visits (Mean, SD)</td>
<td>1.1 (2.8)</td>
</tr>
<tr>
<td>1+ visit (N, %)</td>
<td>25,114 (44.7)</td>
</tr>
<tr>
<td>Inpatient stays post index</td>
<td></td>
</tr>
<tr>
<td>Visits (Mean, SD)</td>
<td>1.3 (1.7)</td>
</tr>
<tr>
<td>1+ visit (N, %)</td>
<td>32,395 (57.6)</td>
</tr>
<tr>
<td>Length of Stay (Mean, SD)</td>
<td>6.7 (8.0)</td>
</tr>
</tbody>
</table>

#### Hospice Admissions (N, %)

| 6,777 (12.1) |

#### Survival

<table>
<thead>
<tr>
<th>Number of Deaths (%)</th>
<th>23,939 (42.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time from index (median days)</td>
<td>114.3</td>
</tr>
</tbody>
</table>

ED visits post index, Inpatient stays post index, hospice admissions and deaths are calculated within a 12 month timeframe after the index visit.
Qualitative Interview Methods

• Conducted interviewer-administered virtual interviews with ED physicians and nurses using ZOOM teleconferencing

• Interviews were audio recorded and transcribed verbatim

• All transcripts were independently double-coded and underwent thematic coding using Dedoose qualitative analysis software

• Interview notes were collected in real-time and debriefing sessions occurred after every 3rd interview

• Interview guide subsections:
  • 1. Provider attitudes, beliefs, and knowledge regarding home and community health services for end-of-life care
  • 2. Barriers and facilitators to home and community health services within, and external to, their ED and health system.
Results

- Completed 18 interviews with **10** ED physicians and **8** ED nurses. Interviewees were identified as site leaders for the PRIM-ER intervention.

  - Mean Age (SD): 41 (8.9)

  - Years of Experience:
    - <2 (n = 1)
    - 2-5 (n = 0)
    - 5-10 (n = 7)
    - 10-15 (n = 4)
    - >15 (n = 2)

  - Race:
    - Black or African American (n = 2)
    - Asian (n = 2)
    - White (n = 10)

  - Gender Identity:
    - Female (n = 12)
    - Male (n = 2)
    - Other (n = 0)
Results

Location

- The 18 interviewees were from **11** different health systems and **9** different states.

  - Health Systems:
    - Allegheny Health Network
    - Baystate Health
    - Christiana Care Health System
    - Henry Ford Health System
    - Icahn School of Medicine at Mount Sinai
    - New York University School of Medicine
    - Ochsner Health System
    - The Ohio State University
    - University of Florida Health
    - University of Pennsylvania Health System
    - University of Texas

  - States Include:
    - Delaware
    - Florida
    - Louisiana
    - Massachusetts
    - Michigan
    - New York
    - Ohio
    - Pennsylvania
    - Texas

- Originally scheduled to complete 36 interviews within 17 health systems, but interviews had to be stopped due to the COVID-19 pandemic.
Results

Available Home and Community Services (Excluding Integrative Medicine)

- Hospice
- Home Aide
- Home Nursing
- Home Hospice
- Physical Therapy
- Caregiver Respite
- Skilled Nursing
- Hospital At Home
- Occupational Therapy
- Home-Based Palliative Care
- Sub-Acute Rehabilitation
Results

Helpful and Desired Services

Services Most Helpful to ED Physicians:
- Hospice
- PT/OT
- Visiting Nurses

Services Most Desired by ED Providers:
- Home-Based Palliative Care
- 24/7 Social Work/Case Management
- Greater Caregiver Support
- More Education on H&CS
- Greater Long-Term Follow-Up with Patients

All providers reported they feel it is important for ED providers to be aware of home and community resources for end of life support and have systems in place to expedite referrals to these services.
Results

What Home and Community Services can Offer the Patient

Avoiding the ED and Inpatient Admission
  Symptom Management
  Caregiver/Family Support
Support Activities of Daily Living/Home Support
Personalized Care- Considering Cultural, Religions Needs Etc.
  Improved Medication Management
More Holistic Approach- Spiritually, Functionally, Emotionally
  Improved Support and Education on the Process of Dying

“I feel like it’s important to note that specifically with the culture of the emergency department right now, with such a high volume of patients in the hospital, we are dealing with a critical boarding crisis on a daily basis. That emphasizes home community resources should happen, so that these patients aren’t having an even more trying experience in hospital when they very well may board in the emergency department for several days at a time.”
Results

Barriers to Home and Community Services

- Not Accessible 24/7
- Insurance/Payment
- Busy ED
- Staffing
- Patients Refusing Services
- Patient Location/Distance
- Provider Reluctance to H&CS
- Requires Other Dr. Permission
- Provider Preference to Admit
- Smaller ED
Results

Barriers to Home and Community Services

“When we have so many inpatients that we're holding—we're the biggest inpatient unit in the hospital, and then we have ER patients coming in on top of that, I feel like sometimes we don't always have the time to address those needs.”
Results

Available Integrative Medicine Services

<table>
<thead>
<tr>
<th>Integrative Services</th>
<th>Case Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acupuncture</td>
<td>8</td>
</tr>
<tr>
<td>Meditation or Mind/Body</td>
<td>7</td>
</tr>
<tr>
<td>Massage</td>
<td>6</td>
</tr>
<tr>
<td>Art Therapy</td>
<td>5</td>
</tr>
<tr>
<td>Chiropractic</td>
<td>4</td>
</tr>
<tr>
<td>Tai Chi</td>
<td>2</td>
</tr>
<tr>
<td>Aromatherapy</td>
<td>1</td>
</tr>
<tr>
<td>Pet Therapy</td>
<td>0</td>
</tr>
</tbody>
</table>
Results

Barriers to Integrative Medicine

- Lack of Provider Familiarity
- Insurance/Payment
- No IM Department
- Doubt Legitimacy/Don't Support
- No IM Providers on Staff
- Lack of Research Evidence

Case Count

0 2 4 6 8 10 12 14 16
Results

15/18 interviewees expressed their unprompted support for integrative medicine for older adults with serious life limiting illness

What Integrative Medicine can Offer Older Adult Patients with Serious Life-Limiting Illness

- Symptom Management, Especially Pain
- Help Improve Cognitive Deficits
- Movement/Muscle Strengthening
- Coping with End-of-Life
- Options/Goal Concordant Care
Integrative Medicine for Older Adults with Serious Life-Limiting Illness

“Oh, I think integrative medicine can absolutely help because they can help you stay more focused, more alert, you can move and be more active in your own life for as long as possible. Everybody at some point they lose their strength, or they lose their perceptions, or they struggle with the dementia or Alzheimer’s. I think that integrative health can really help them be in control and make their own decisions for a longer period of time. They’re looked at as a whole person, not a disease.”
References


References


Thank You Team!

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Nina Siman, MA, MSed, Senior Data Analyst
Claire de Forcrand, MPH, Medical Student
Thank you!

Please feel free to email questions to Jacob.Hill@nyulangone.org

Enjoy the rest of the conference!