Primary Palliative Care for Emergency Medicine (PRIM-ER)
Research in emergency care

Window to population health

Research agenda to end disparities, & address the needs of society’s most vulnerable
Background

Increasing ED visits by older adults with serious illness

Most prefer to receive care at home and to minimize life-sustaining procedures

Palliative care improves quality of life and decrease health care use
Default Approach
PRIM-ER

1. Evidence-based, multidisciplinary primary palliative care education (EPEC-EM, ELNEC);
2. Simulation-based workshops on communication in serious illness (EM Talk);
3. Clinical decision support; and
4. Provider audit and feedback.
Cluster Randomized, Stepped Wedge Trial Across 35 EDs
18 Health Systems
Intervention Milestones

Develop and finalize all intervention components to be implemented
<table>
<thead>
<tr>
<th>Clinical Decision Support (CDS) system</th>
<th>A.1.a.i. Develop CDS system at NYU Perelman.</th>
<th>6/15/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A.1.a.ii. Test usability with emergency physicians from two pilot sites.</td>
<td>8/15/2018</td>
</tr>
<tr>
<td></td>
<td>A.1.a.iii. Finalize CDS system once average system usability scale is at least 68 and then deploy across two pilot sites.</td>
<td>9/15/2018</td>
</tr>
<tr>
<td>Clinical workflow and resource packets</td>
<td>A.1.b.i. Develop and test clinical workflow and resource packets at pilot sites through qualitative interviews with key informants.</td>
<td>8/15/2018</td>
</tr>
<tr>
<td></td>
<td>A.1.b.ii. Develop and test clinical workflow and resources packets at all 18 health systems through qualitative interviews with key informants.</td>
<td>11/15/2018</td>
</tr>
<tr>
<td></td>
<td>A.1.b.iii. Tailor CDS system to all 18 health systems based on results of workgroups with key informants.</td>
<td>12/15/2018</td>
</tr>
<tr>
<td>Emergency provider education and training</td>
<td>A.1.c.i. Tailor existing online learning management system for providers to access and track educational activities.</td>
<td>6/15/2018</td>
</tr>
<tr>
<td></td>
<td>A.1.c.ii. Deploy EM Talk, EPEC-EM, ELNEC and online palliative care basics at one pilot site for all emergency providers.</td>
<td>8/15/2018</td>
</tr>
<tr>
<td></td>
<td>A.1.c.iii. Adjust volume and length of curriculum at second pilot site so that eligible providers complete an average of at least 75% of mandatory education and training activities.</td>
<td>9/15/2018</td>
</tr>
</tbody>
</table>
Clinical Decision Support:
Example Graphical User Interface

Since you would not be surprised if the patient expired in the next 6 months, the following actions are recommended: 1) Complete health care proxy form / establish surrogate decision maker 2) Obtain living will or other formal indication of patient’s goals of care. 3) Complete the consent to withhold/withdraw form, as appropriate. 4) Evaluate skin. Additionally, place the following orders, as appropriate. If none of these orders are placed, indicate the reason in the “acknowledge reason” section.

- Add to unsigned orders: IP CONSULT TO PALLIATIVE CARE
- Add to unsigned orders: IP CONSULT TO SOCIAL WORK
- Add to unsigned orders: IP CONSULT TO CHAPLAINCY SERVICES
- Add to unsigned orders: IP CONSULT TO GERIATRICS

The following actions were applied automatically:

- Message sent: This advisory has been sent via In Basket

Since you would not be surprised if the patient expired in the next 6 months, a Social Work Consult has been placed, and follow-up actions have been added to your Admission Checklist.

Please place any or all of the orders below, as appropriate. If none of these orders are placed, indicate the reason in the “Acknowledge reason” section.

- Add to unsigned orders: IP CONSULT TO PALLIATIVE CARE
- Add to unsigned orders: IP CONSULT TO CHAPLAINCY SERVICES
- Add to unsigned orders: IP CONSULT TO GERIATRICS

The following actions were applied automatically:

- Message sent: This advisory has been sent via In Basket
Usability Testing: ED Process Map

Arrival

Pre-triage area

Pre-triage Nurse

25.2% 2.0%

ESI 1,2 Ambulance ESI 3,4,5

Triage area

Registration

18.7% 81.3%

ESI 3, some ESI 4 Some ESI 4, ESI 5

Treatment areas

ED treatment bed (see figure 3)

3.1% 59.9%

37.0%

Transfer Admission Discharge

To Clinic, Pharmacy, etc
Data Collection Milestones

Develop, test, and finalize data collection procedures
| Tracking education and training activities | B.1.b.i. Develop tracking and reminder system in learning management system for educational and training activities.  
B.1.b.ii. Test tracking and reminder system in learning management system to ensure threshold reached.  
B.1.b.iii. Finalize tracking and reminder system to achieve an average of at least 75% completion of assigned activities across all eligible providers at pilot sites. | 8/1/2018  
9/15/2018  
11/15/2018 |
| Fidelity of EM Talk | B.1.c.i. Develop and test procedures for monitoring fidelity of EM Talk curriculum.  
B.1.c.ii. Refine training until \( \geq 80\% \) fidelity of EM Talk curriculum at the trainer (adherence to training curriculum, including cases presented and remediation plan) and participant level (demonstrate acquisition of skills, including empathic statements and attending to emotion). | 8/15/2018  
10/15/2018 |
| Primary and secondary endpoints | Finalize primary and pre-specified secondary endpoints with guidance from NIH Collaboratory Design and Biostatistics workgroup. | 7/15/2018 |
| Medicare claims | B.3.a. Approval for use of Medicare claims data provided by the Centers for Medicare and Medicaid Services.  
B.3.b. Develop code for cleaning and analysis of Medicare claims data based on final version of primary and secondary endpoints. | 11/1/2018  
12/15/2018 |
## Barriers Scorecard

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Level of Difficulty*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment and engagement of patients/subjects</td>
<td>X</td>
</tr>
<tr>
<td>Engagement of clinicians and health systems</td>
<td></td>
</tr>
<tr>
<td>Data collection and merging datasets</td>
<td>X</td>
</tr>
<tr>
<td>Regulatory issues (IRBs and consent)</td>
<td>X</td>
</tr>
<tr>
<td>Stability of control intervention</td>
<td>X</td>
</tr>
<tr>
<td>Implementing/delivering intervention across healthcare organizations</td>
<td></td>
</tr>
</tbody>
</table>
Data Sharing Plan

Make readily available to qualified researchers, health care delivery organizations, research institutions, and government health care systems:

- New clinical workflows
- Data analysis codes
- Study Protocols
- De-identified study dataset
Data Sharing Obstacles

Use of Virtual Research Data Center (VRDC) to analyze Medicare Claims data

Conflicting federal, state and city policies

Proprietary information (Vital Talk)
Protection of Human Subjects

SINGLE IRB
Institutional capacity and cost

PATIENTS
Waiver of informed consent HIPAA authorization as minimal risk and >300,000 patient participants

PROVIDERS
Potentially sensitive provider-level performance data
If you want to go fast, go alone.
If you want to go far, go together.