Clinical Safety & Effectiveness

Increasing Palliative Care Consultations in the Medical Intensive Care Unit

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Educating for Quality Improvement & Patient Safety
Why Is Palliative Care Essential in the ICU?

After receiving ICU treatment many patients:

- Die in ICU or soon after ICU care
  - 1/5 dies following treatment in an ICU, 20%, 500,000 US/year

- Remain “chronically critically ill”
  - 100,000 ICU “survivors” in the US at any point in time who continue with critical illness on a chronic basis

Conceptual Model:

Palliative Care in the MICU

Disease Modifying Therapy
Curative, or Restorative intent
Critical Care

Life Closure

Diagnosis  Palliative Care  Hospice

Death Bereavement
Shouldn’t all clinicians be good at Palliative Care?

Of Course!
Primary Palliative Care
Secondary Palliative Care
Tertiary Palliative Care

Von Gunten, MD, PhD
JAMA 2002

Care plan matches patient’s goals

Focus
Dedicated Team
Follow Through
Decision Making Clarity
Time

Care plan matches patient’s goals
What Defines Quality?

RWJ Critical Care Peer Workgroup:
Domains of ICU Palliative Care Quality

- Symptom management and comfort care
- Communication within team and with patients/families
- Patient- and family-centered decision making
- Emotional and practical support for patients and families
- Spiritual support for patients and families
- Continuity of care
- Emotional and organizational support for ICU clinicians

Palliative Care in the ICU has been prioritized

(American College of Chest Physicians)

(American Thoracic Society)

(American College of Critical Care Medicine)

Institute of Medicine (IOM)
Veterans Administration Healthcare System

Institute for Healthcare Improvement

Commercial insurers
Clinical Practice is lagging...

- Much is now known about effective strategies for ICU Palliative Care quality improvement.
- These methods can be applied to improve ICU Palliative Care.
- Palliative Care is linked to "Giving Up": a major barrier to providing quality care for our patients/families.
Palliative Care Media Highlights 2010

The New York Times

Newsweek

USA Today

Los Angeles Times

The Philadelphia Inquirer
What do our patients/families want?
Define High-Quality ICU Palliative Care

- Communication by Clinicians:
  - timely, ongoing, clear, complete, sensitive
  - addressing condition, prognosis, treatment

- Patient-Focused Decision-Making:
  - aligned with values, goals, preferences

- Clinical Care of the Patient:
  - comfort, dignity, personhood, privacy

- Care of the Family:
  - proximity/access, support including bereavement care

N=48 subjects (15 pts, Fam); Focused group
And What They Get …

Not enough contact with MD: 78%
Not enough emotional support (pt): 51%
Not enough emotional support (family): 38%

Not enough information about what to expect with the dying process: 50%
Not enough help with pain/SOB: 19%

N=1578 descendents (NH, hospital)
More Medical Care Leads to Lower Emotional Satisfaction With Care

Family members of decedents in high-intensity hospital service areas report lower quality of:

- Inadequate Emotional support decedent (RR=1.2, 95%, CI=1.0–1.4)
- Concerns Shared decision-making (RR=1.8, 95% CI=1.0–2.9),
- Information about what to expect (RR=1.5, 95% CI=1.3–1.8)

High (n=365) vs low (n=413)*
Serious adverse outcomes for bereaved caregivers

Wright et al. JCO 2010: Sept 13  Place of death: Correlation with QOL of pats with cancer and predictors of bereaved CG mental health.
-Death in ICU and Hospital vs. Death at home/Hospice N=342, enrollment, 2 wks, 6 mo, QOL, psychiatric
-Death in ICU associated with 5X family risk of PTSD
-Death in hospital associated with 8.8 X family risk of prolonged grief disorder

-Anxiety/depression in ICU and 1 mo and 6 months later. (42% - 15%; 16%-6%)
-PTSD and complicated grief at 6 months. (35%)

-High rates of anxiety, depressive (87%), and posttraumatic stress symptoms (81%) within a week of ICU admission.
-At 3-2 days prior ICU discharge PTSD persisted in families (59%).
**Beneficial for hospice**

**The Impact of “the talk”**

**Table 3. Medical Care Received in the Last Week of Life by End-of-Life Discussion**

<table>
<thead>
<tr>
<th>Medical care received in the last week</th>
<th>Total (N=332)</th>
<th>End-of-Life Discussion</th>
<th>Adjusted OR (95% Confidence Interval)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes (No.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical care received in the last week</td>
<td>332</td>
<td>123 (37.0)</td>
<td>209 (63.0)</td>
<td></td>
</tr>
<tr>
<td>ICU admission</td>
<td>31 (9.3)</td>
<td>5 (4.1)</td>
<td>26 (12.4)</td>
<td>0.35 (0.14-0.90)</td>
</tr>
<tr>
<td>Ventilator use</td>
<td>25 (7.5)</td>
<td>2 (1.6)</td>
<td>23 (11.0)</td>
<td>0.26 (0.08-0.83)</td>
</tr>
<tr>
<td>Resuscitation</td>
<td>15 (4.5)</td>
<td>1 (0.8)</td>
<td>14 (6.7)</td>
<td>0.16 (0.03-0.80)</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>19 (5.7)</td>
<td>5 (4.1)</td>
<td>14 (6.7)</td>
<td>0.36 (0.13-1.03)</td>
</tr>
<tr>
<td>Feeding tube</td>
<td>26 (7.9)</td>
<td>11 (8.9)</td>
<td>15 (7.3)</td>
<td>1.30 (0.55-3.10)</td>
</tr>
<tr>
<td>Outpatient hospice used</td>
<td>213 (64.4)</td>
<td>93 (76.2)</td>
<td>120 (57.4)</td>
<td>1.50 (0.91-2.48)</td>
</tr>
<tr>
<td>Outpatient hospice ≥1 wk</td>
<td>173 (52.3)</td>
<td>80 (65.6)</td>
<td>93 (44.5)</td>
<td>1.65 (1.04-2.63)</td>
</tr>
</tbody>
</table>

Abbreviation: ICU, intensive care unit; OR, odds ratio.

<sup>a</sup>The propensity-score weighted sample was used for these analyses. Logistic regression models were also adjusted for patients’ treatment preferences, desire for prognostic information, and acceptance of terminal illness.
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Study</th>
</tr>
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<tbody>
<tr>
<td>↓ ICU/Hospital Length of Stay</td>
<td>Norton, Quill et al. 2007 n=191, Criteria, 8 to 16 d p=.0001</td>
</tr>
<tr>
<td>↓ Time from Poor Prognosis to Comfort- Focused Goals (Proactive Palli C/S)</td>
<td>Campbell 2003 n=332, 7.3 to 2.2 d 6.3 to 3.5 d for MOF, CV p=&lt;.05; No MDD in families</td>
</tr>
<tr>
<td>↑ Family Satisfaction/Comprehension</td>
<td>Curtis 2004 n=214 FM; MD 71%, FM 29%</td>
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<tr>
<td>↓ Conflict over Goals of Care</td>
<td>Curtis 2004</td>
</tr>
<tr>
<td>↑ Symptom Assessment</td>
<td>Erdek 2003; SICU QI, 10 pt/wk for 5 wks, Q4h, 42% to 71% pain assessment, 59%- 97% pain management, VAS</td>
</tr>
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Why focus on MICU?

<table>
<thead>
<tr>
<th>UNIT</th>
<th># DEATHS</th>
</tr>
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<tbody>
<tr>
<td>5 MICU</td>
<td>68</td>
</tr>
<tr>
<td>ECTC-1</td>
<td>68</td>
</tr>
<tr>
<td>KTC2B</td>
<td>25</td>
</tr>
<tr>
<td>5A MED</td>
<td>24</td>
</tr>
<tr>
<td>6 CCU</td>
<td>21</td>
</tr>
<tr>
<td>6B MED</td>
<td>15</td>
</tr>
<tr>
<td>KTC3</td>
<td>14</td>
</tr>
<tr>
<td>2 SICU</td>
<td>13</td>
</tr>
<tr>
<td>K5B MED</td>
<td>11</td>
</tr>
<tr>
<td>5 PCU</td>
<td>10</td>
</tr>
<tr>
<td>ECTC-2</td>
<td>9</td>
</tr>
<tr>
<td>4 SOUTH</td>
<td>7</td>
</tr>
<tr>
<td>KTCC1</td>
<td>6</td>
</tr>
<tr>
<td>KTC2A</td>
<td>5</td>
</tr>
<tr>
<td>7 BMT</td>
<td>3</td>
</tr>
<tr>
<td>GLD SCI</td>
<td>1</td>
</tr>
</tbody>
</table>

That's where the money is ....

"Slick Willie"  
Famous Bank Robber
FY 10: % of MICU Patients who Died with a Geriatric Palliative Care Consultation

% MICU Deaths with PC Consult

- October: 0.00%
- December: 5.00%
- February: 10.00%
- April: 15.00%
- June: 20.00%
FY 10: % of Geriatric Palliative Care Consultations requested from the MICU

% of Consults Requested from MICU

- October: 15.00%
- December: 10.00%
- February: 5.00%
- April: 15.00%
- June: 10.00%
Problem Statement

- Patients/Families die without palliative care services (SW, Chaplain, psychologist, Pharm D, MD) and Bereavement Services
- PC is entered later in the hospitalization

Education/Process

MD/RN

- Lack of understanding of what palliative care can add
- Nurses/Social work are not empowered to recommend palliative care to MDs

Family/Patient

- Lack of Advance Directives and discussions about the future
- Lack of education in palliative care
- Unrealistic Goals

Policy

- No Policy or service agreement in place for patients who meet criteria
- No mandatory training for MD or nurses in palliative care/issues
- No incentives for increasing palliative care utilization

- Lack of understanding of impact of the palliative care in the Intensive care
- Lack of knowledge concerning appropriate criteria for trigger for consultation

- Lack of understanding that palliative care does not mean giving up
- Too many priority focus areas for the learners, so palliative care can be low priority
The Paradigm

Integrate Geriatric Palliative Care in the ICU

- beginning at ICU admission
- regardless of prognosis
- part of the comprehensive critical care plan

- Overall Goal: Increase the frequency/timeliness of Geriatric Palliative Care Medicine consultations
Aim Statement

- To increase the percent of patients who are referred for a Geriatric Palliative Care Medicine consultation at the STVHCS MICU from 10% to 40% during October 2010 to Dec 2010.
Primary Measures

# MICU Patients with a GPC consult

# total MICU patients

# MICU Patients who Died with a GPC consult

# total MICU patients who Died

GPC: Geriatric Palliative Consultation
Measures

- Demographics
- Diagnosis
- Discharge Location (Home, SNF, Hospice (home/inpatient, Died, still in MICU/hospital)
- % Documented Social Work support and Spiritual support
Patient Enters the MICU → MICU staff assesses and manages the patient → Is patient stable for transfer?

- Yes → Patient leaves MICU
- No → Patient is not stabilized despite aggressive life-sustaining therapies → MICU staff recommends comfort care

- Family Yes → Patient Dies or leaves MICU without Geriatric Palliative Consult
- Family No → Palliative/Hospice care Consult

- Mixed Model: "Clinical Triggers" Engage MICU to discuss Case-by-CASE
- MICU staff places GP C/S

- Patient Dies or leaves MICU with Palliative care Consult
“Clinical Triggers”

**Baseline patient characteristics**
- Preexisting functional dependency with \( \geq 1 \) chronic life-limiting conditions (e.g. dementia)
- Advanced-stage malignancy
- Admission from a community hospice, or on “comfort measures only”
- ALS / neuromuscular disease considering mechanical ventilation/BIPAP, feeding tube
- Recurrent admissions (>2/year)
- End Stage of COPD

**Selected Acute diagnosis**
- Global Cerebral ischemia
- Intra-cerebral hemorrhage requiring mechanical ventilation
- Status post cardiac or respiratory arrest
- Prolonged dysfunction of multiple organs (multi-system organ failure)
- Status Epilepticus > 24 hrs

*Adapted from Mt Carmel, MSM, Nelson et al. 2010; Crit Care Med; 38: 1765-72*
“Clinical Triggers”

**Healthcare Use**
- Prolonged or failed wean from the ventilator
- DNR and DNI status established or requested
- Decision to forego life-sustaining therapies with expected death

**Family Characteristics**
- Psychological or spiritual distress
- Family distress impairing surrogate decision-making, complex decision making
- Family request for information regarding palliative care or hospice appropriateness

*Adapted from Mt Carmel, MSM, Nelson et al. 2010; Crit Care Med; 38: 1765-72*
Interventions: Education/Collaboration

- Interdisciplinary (IDT) Workgroup:
  - MICU Leaders: medical director Dr. Restrepo, nurse director Janet Tidwell
  - MICU IDT staff/champions: Chaplain Robert Bellin, RN Robbie/Alodia, Clerk Tom Cardinal
  - GPC staff: Bonnie Howard, RN/CNS
  - GPC Fellow: Dr. Jennifer Healy
  - Incoming Resident: Dr. Linda May
  - Information systems (Karla Strawn), Statistician (Shuko Lee), Dr. Linda May
Interventions: Education/Collaboration

- **Key Persons:** Critical Care Fellows/Residents, Social worker Jennifer Kelley,

- **Collaborators:** Dr. Judith Nelson (VISN 3, VHA Inc., Comfort Bundle, IPAL-ICU NIA Grant)

- **UT Clinical Safety & Effectiveness Course**
  (UT HSC: Dr. Jan Patterson, Amruta Patel, Edna Cruz, MD Anderson: Wayne Fisher)
Palliative Care in the ICU: Bringing the Evidence to the Bedside

Results

“You Cannot Improve What You Cannot Measure.”
-Business Adage,
Used By Don Berwick (IHI)
## Table: Patient Characteristics/LOS

<table>
<thead>
<tr>
<th></th>
<th>June, Aug-Sept N=85</th>
<th>Oct-Dec N=78</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>65.4 ± 11.3</td>
<td>64.7 ± 11.0</td>
</tr>
<tr>
<td><strong>Gender (Male)</strong></td>
<td>84 (97.7)</td>
<td>112 (96.6)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>48</td>
<td>87</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>33</td>
<td>19</td>
</tr>
<tr>
<td>Black</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>Diagnosis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer 4</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Sepsis</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>RF</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Other (MOF, ESLD, CV, ESRD)</td>
<td>56</td>
<td>84</td>
</tr>
<tr>
<td><strong>Length of Stay in Hospital</strong></td>
<td>3.3 ± 4.0</td>
<td>5.4 ± 8.4</td>
</tr>
<tr>
<td><strong>Discharge Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>55</td>
<td>48</td>
</tr>
<tr>
<td>Skilled Nursing Home/ECTC</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>Death in Hospital</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>Hospice</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Still in Hospital</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>
# of Paliative Care Consults Completed from MICU at STVHCS

Pre Intervention data

Post intervention data

Time Period

Jun  Aug  Sep  Oct  Nov  Dec

# Consults Completed from MICU

0.000 0.044 0.148 0.265 0.477 0.053

UCL  CL  LCL
Conclusions

- More MICU patients and families received GPC services:
  - We provided support for more patients who were expected to benefit from ICU treatment and those who died.

- Aim: To increase the percent of patients who are referred for a Geriatric Palliative Care Medicine consultation at the STVHCS MICU from 10% to 40% during October 2010 to Dec 2010.
Lessons Learned

- Work force is #1 Major Barrier
- Work processes and systems (rounding, predictability, turnover)
- Sustainability
- Interval Management with stakeholders and workgroup key
- BUY-IN is crucial
- Culture change-Still not viewed as standard of care, goals of care conversations start early!
Lessons Learned

- Defining a “Clinical Triggers” criteria
- Understanding what we can offer: Acute and chronic have different needs, skills
- Fragmentation – Rounds
- Opportunities for Education: GPC is only for when someone is actively dying
- Need for IT resources for data collection, accessibility of data: lag time
Next Steps

- PC team is working on new projects/collaboration

- Education: *Knowledge and skills needed clinicians and patients and families* (Pocket Cards, RN/MD orientation, modules, videos, surveys, focus groups)

- Increase IDT family meetings (MD/RN/SW), Templates

- Bereavement/Anticipatory Grief Support Templates/Implementation/Interventions, “Bereavement Bags”
“Care and Communication Bundle” of ICU Palliative Care Quality Measures

Day 1
(1) Identify Decision-Maker
(2) Address AD status
(3) Address CPR status
(4) Distribute informational pamphlet to family
(5) Assess pain regularly
(6) Manage pain optimally

Day 3
(7) Offer Social Work support
(8) Offer Spiritual support

Day 5
(9) Family Meeting

www.qualitymeasures.ahrq.gov
“There’s no easy way I can tell you this, so I’m sending you to someone who can.”
Acknowledgements

- MICU MD, RN leaders (Marcos Restrepo MD, Janet Tidwell RN), Jay I. Peters MD, RNs
- GPC team: Jennifer Healy MD, Bonnie Howard, RN
- Sandra Sanchez-Reilly, MD Mentor
- Jeanette Ross MD, Dr. Linda Gray
- GRECC Sara Espinosa, MD MSc, Karla Strawn
- Scotte Hartronft MD, Michael Lichtenstein MD MSc
- Collaborator Judith Nelson MD (ICU-IPAL, NIH grant)
- UT-Clinical Safety and Effectiveness (Jan Patterson MD, Amruta Patel, Wayne Fisher)
- CAPC : Diane Meier MD, David Weismann MD,
Thank you!

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