Integrating Palliative & Critical Care: What is the best approach?

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• Disclosures
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NATIONAL INSTITUTE OF NURSING RESEARCH

CAMBIA Palliative Care Center of Excellence

UNIVERSITY OF WASHINGTON

PCORI Patient-Centered Outcomes Research Institute
Outline

• Role of palliative care in the ICU
• Shared decision-making
• Tools for communicating with families
• Interdisciplinary communication
One in Five Deaths in the U.S. Occur in the ICU

Angus, Crit Care Med 2004; 32:638
Changes in End-of-life Care for Medicare Beneficiaries

Teno, JAMA, 2013, 309:470
Variability in Withholding and Withdrawing Life Support in the US

27,030 patients ventilated more than 4 days
152 ICU’s from 2001-2009
Adjusted for severity of illness and patient and ICU characteristics

Range from 12% to 62%

Quill, CHEST, 2014; 146: 573
Receipt of cardiopulmonary resuscitation

Adjusted Likelihood, %

Correct Number

n=13,405
<table>
<thead>
<tr>
<th>Omitted Variables</th>
<th>AIC&lt;sub&gt;model&lt;/sub&gt; – AIC&lt;sub&gt;full model&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full model</td>
<td>---</td>
</tr>
<tr>
<td>Admitted from acute care</td>
<td>4.0</td>
</tr>
<tr>
<td>Acute diagnosis group</td>
<td>5.0</td>
</tr>
<tr>
<td>Number co-morbidities</td>
<td>9.6</td>
</tr>
<tr>
<td>Intensivists (all 9)</td>
<td>28.5</td>
</tr>
<tr>
<td>Daily census and # admits</td>
<td>65.9</td>
</tr>
<tr>
<td>Age, gender, race</td>
<td>72.6</td>
</tr>
<tr>
<td>APS and GCS</td>
<td>101.1</td>
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</table>

Palliative and End-of-life Care in the ICU

- **Palliative care**: care focused on improving communication about goals of care and maximizing comfort and quality of life.
- **End-of-life care**: care for those who are actively dying.
Models for Integrating Palliative and Critical Care

- Increase palliative care skills of ICU clinicians (integrative)
- Incorporate palliative care specialists in the ICU (consultative)
- Mixed model incorporating both
  - Training in palliative care for ICU clinicians
  - Palliative care consultation

Nelson, Crit Care Med 2010; 38:1765
Routine Palliative Care Consults Reduce ICU Length of Stay Before Death

• Anoxic encephalopathy and MODS with >3 organs in failure >3 days
  – Campbell, Chest, 2003; 123:266
• Advanced dementia
  – Campbell, Crit Care Med, 2004; 32:1839
• Chronic illness, age >80, hosp >10d, ICH
  – Norton, Crit Care Med, 2007; 35:1530
Cluster Randomized Trial to Improve ICU Clinician Palliative Care

- Intervention: multifaceted QI program
- Before-after pilot: Improved family- & nurse-rated quality of dying & LOS
- Design: Cluster randomize 12 hospitals
- Results:
  - Intervention implementation successful
  - 3000 eligible patients included
  - No effect on process or outcome

Curtis, Am J Resp Crit Care Med 2011; 183:348
No Effect on Family- or Nurse-Assessed Quality of Dying

Family-rated QODD

ICU Length of Stay

Curtis, AJRCCM, 2011; 183:348
IPACC Intervention: Cluster Randomized Trial in 12 Hospitals

<table>
<thead>
<tr>
<th>Event</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of social work (n=2236)</td>
<td>1.73</td>
<td>(1.16-2.58)</td>
</tr>
<tr>
<td>Provision of spiritual care (n=2236)</td>
<td>1.33</td>
<td>(0.91-1.94)</td>
</tr>
<tr>
<td>No CPR in final hour of life (n=2236)</td>
<td>1.11</td>
<td>(0.96-2.80)</td>
</tr>
<tr>
<td>DNR in place at time of death (n=2195)</td>
<td>1.09</td>
<td>(0.71-1.68)</td>
</tr>
<tr>
<td>Pain assessment, last 24 hours (n=2238)</td>
<td>1.06</td>
<td>(0.67-1.68)</td>
</tr>
<tr>
<td>Life support withdrawn/withheld (n=2224)</td>
<td>0.73</td>
<td>(0.50-1.06)</td>
</tr>
<tr>
<td>Prognostic discussion, 1st 72 hours (n=2238)</td>
<td>0.69</td>
<td>(0.48-0.99)</td>
</tr>
<tr>
<td>Palliative care consults (n=2193)</td>
<td>0.52</td>
<td>(0.18-1.51)</td>
</tr>
<tr>
<td>Family conference in 1st 72 hours (n=2238)</td>
<td>0.50</td>
<td>(0.34-0.73)</td>
</tr>
</tbody>
</table>

Family Conferences Decreasing Over Time

Panel B. Expected percentage with family conferences over time

DeCato, Crit Care Med, 2013; 41:1405-11
Randomized Trial of an ICU Communication Facilitator

- Critically ill patients with acute respiratory failure randomized to intervention or usual care
- **Intervention:** Communication facilitator
  - Nurse or social worker
  - Facilitate communication with ICU team
  - Address individual communication needs
  - Identify and address conflict
- 116 family with 6 month surveys

Curtis, AJRCCM, 2016; 193:154
Facilitator Training

- Two day training session with role play
- Based on three principles
  - ICU clinician-family communication studies
  - Attachment theory
  - Mediation in healthcare settings
- Quarterly meetings to review cases and assess fidelity

Curtis, AJRCCM, 2016; 193:154
Attachment Styles

- **Secure**: trusts self and others
  - Quiet, independent, “strong”
  - Encourage questions/concerns

- **Self-reliant**: trust self, not others
  - Asks same questions over and over
  - Set up consistent communication plan

- **Support-seeking**: trust others, not self
  - Asks same questions over and over
  - Set up consistent communication plan

- **Cautious**: doesn’t trust self or others
  - Disappears; hard to reach
  - Reach out to provide consistent support

Curtis, AJRCCM, 2016; 193:154
# Family Psychological Symptoms

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Control mean</th>
<th>Intervention mean</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression (PHQ-9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 months</td>
<td>4.9</td>
<td>3.1</td>
<td>0.096</td>
</tr>
<tr>
<td>6 months</td>
<td>4.7</td>
<td>2.4</td>
<td>0.017</td>
</tr>
<tr>
<td>Anxiety (GAD-7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 months</td>
<td>3.0</td>
<td>2.3</td>
<td>0.502</td>
</tr>
<tr>
<td>6 months</td>
<td>2.7</td>
<td>1.8</td>
<td>0.430</td>
</tr>
<tr>
<td>PTSD (PCL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 months</td>
<td>31.6</td>
<td>29.8</td>
<td>0.478</td>
</tr>
<tr>
<td>6 months</td>
<td>30.6</td>
<td>27.1</td>
<td>0.056</td>
</tr>
</tbody>
</table>

Curtis, AJRCCM, 2016; 193:154
Clinically Significant Changes in Depression

\[ p = 0.096 \]

\[ p = 0.017 \]

- Control: 15% 73% 13%
  - 5+ point increase
  - <5 point change
  - 5+ point decrease

- Intervention: 11% 64% 25%
  - 5+ point increase
  - <5 point change
  - 5+ point decrease

- Control: 16% 64% 20%
  - 5+ point increase
  - <5 point change
  - 5+ point decrease

- Intervention: 4% 70% 26%
  - 5+ point increase
  - <5 point change
  - 5+ point decrease

Curtis, AJRCCM, 2016; 193:154
ICU Communication Facilitator
Reduced Length of Stay and Costs

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Patient Means</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Intervention</td>
</tr>
<tr>
<td>ICU length of stay, days</td>
<td>21.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Survivors</td>
<td>19.1</td>
<td>20.0</td>
</tr>
<tr>
<td>Decedents</td>
<td>28.5</td>
<td>7.7</td>
</tr>
<tr>
<td>ICU Costs</td>
<td>$75.9 K</td>
<td>$51.1 K</td>
</tr>
<tr>
<td>Survivors</td>
<td>$66.4 K</td>
<td>$61.3 K</td>
</tr>
<tr>
<td>Decedents</td>
<td>$98.2 K</td>
<td>$22.7 K</td>
</tr>
<tr>
<td>Average daily ICU Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All patients</td>
<td>$3.4 K</td>
<td>$3.1 K</td>
</tr>
</tbody>
</table>

Curtis, AJRCCM, 2016; 193:154
Outline

• Role of palliative care in the ICU
• Shared decision-making
• Tools for communicating with families
• Interdisciplinary communication
What Do We Know About Shared Decision-making in the ICU?

• <5% of patients can participate in ICU decisions about withholding treatments
  – Communication is primarily with family
• Families rate communication as of equal or more importance than clinical skill
• Families under immense burdens
  – High level of anxiety and depression

Prendergast, AJRCCM, 1997
Prochard, Crit Care Med, 2001
Shared Decision-making About End-of-life Care

- **Key factors**
  - Prognosis
  - Level of certainty
  - Family preferences

- **Roles**
  - Patient/family: patient values & preferences
  - Clinician: treatments that are indicated

Carlet, Intensive Care Med 2004; 30:770
Family Preferences for Role in Decision-making

Heyland, Intens Care Med, 2003; 29:75

n=1123 families of patients in 6 ICUS
Symptoms of PTSD Higher with Discordance in Decision-making Role

Preferred Role | Actual Role | Decision making role

- Primarily doctor's decision
- Family member involved in decision making
- Discordance
- Agreement

Gries, Chest 2010; 137:280
New Paradigm for “Right Approach” to Parentalism vs. Autonomy

Default Starting Place

Family preference
Prognosis and Certainty

Parentalism or Doctor Decides

Shared Decision Making

Autonomy or “Informed Choice”

Curtis/White, Chest, 2008; 134:835
Curtis/Vincent, Lancet, 2010; 375:1347
Study of ICU Family Conferences

- Daily screen of all ICUs in 4 hospitals
- If conference planned, contact attending:
  - Is discussion of withholding or withdrawing life support likely?
  - Willing to have conference recorded?
- Consent/survey all participants
- 51 families enrolled (46% of eligible)
  - 214 family members and 221 clinicians

Curtis, J Crit Care, 2002; 17:147
New Paradigm for “Right Approach” to Parentalism vs. Autonomy

Collaborative
- Elicit patient values
- Offer recommendation

Facilitative
- Elicit patient values
- Place in context

Directive
- Provide some info
- Make decision

Informative
- Provide info
- Make no recommendation

Shared Decision Making

White, Crit Care Med, 2010; 38:743
How Do You Figure Out What Role Family Members’ Want to Play?

- Often not helpful to just ask them
- Listen for family decision-making style
  - While discussing patient/family values
  - While explaining surrogate decision-making
- Explore statements about decision making in previous situations
- Generate hypothesis for family-preferred role and explore that hypothesis
- May change during critical illness
A Role for “Informed Assent” in Discussing CPR?

• Physicians need not offer therapies that are not indicated
• CPR is often viewed as an exception because of patient/family expectations
• Informed assent may be an ethical option
  – Explain the reasons CPR is not offered
  – Ensure patient/family understanding
  – If patient/family object, CPR not withheld until consensus achieved

Curtis & Burt, Chest, 2007; 132:748
Outline

• Role of palliative care in the ICU
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• Tools for communicating with families
• Interdisciplinary communication
### Duration of Family Conferences and Proportion of Family Speech

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of conference</td>
<td>32 min</td>
<td>17-45 min</td>
</tr>
<tr>
<td>Proportion family speech</td>
<td>29%</td>
<td>14-44%</td>
</tr>
</tbody>
</table>

McDonagh, Crit Care Med, 2004, 32:1484
### Proportion Family Speech Correlates with Family Satisfaction

<table>
<thead>
<tr>
<th>% Fam Speech</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well did...</td>
<td>r (p value)</td>
</tr>
<tr>
<td>MD communicate</td>
<td>0.37 (0.01)</td>
</tr>
<tr>
<td>Conf. meet needs</td>
<td>0.31 (0.04)</td>
</tr>
</tbody>
</table>

McDonagh, Crit Care Med, 2004, 32:1484
Clinician Statements Associated with Increased Family Satisfaction

- Assure family that patient will not be abandoned prior to death
- Assure family that patient will be kept comfortable and not suffer prior to death
- Provide support for family around decisions to withdraw or continue life support

Stapleton, Crit Care Med, 2006; 43:1679
Missed Opportunities During ICU Family Conferences

- Listen and respond
  - Answer questions
  - Clarify and follow up on family statements
- Acknowledge and address emotions
- Address tenets of palliative care
  - Explore patient preferences
  - Explain surrogate decision-making
  - Affirm non-abandonment

Curtis, AJRCCM, 2005; 171:844
VALUE: 5-step Approach to Improving Communication in ICU with Families

• V... Value family statements
• A... Acknowledge family emotions
• L... Listen to the family
• U... Understand patient as a person
• E... Elicit family questions

Curtis, J Crit Care, 2002; 17:147
A Communication Strategy and Brochure for Relatives of Patients Dying in the ICU

Alexandre Lautrette, M.D., Michael Darmon, M.D., Bruno Megarbane, M.D., Ph.D., Luc Marie Joly, M.D., Sylvie Chevret, M.D., Ph.D., Christophe Adrie, M.D., Ph.D., Didier Barnoud, M.D., Gérard Bleichner, M.D., Cédric Bruel, M.D., Gérald Choukroun, M.D., J. Randall Curtis, M.D., M.P.H., Fabienne Fieux, M.D., Richard Galliot, M.D., Maité Garrouste-Orgeas, M.D., Hugues Georges, M.D., Dany Goldgran-Toledano, M.D., Mercé Jourdain, M.D., Ph.D., Georges Loubert, M.D., Jean Reignier, M.D., Fayçal Saidi, M.D., Bertrand Souweine, M.D., Ph.D., François Vincent, M.D., Nancy Kentish Barnes, Ph.D., Frédéric Pochard, M.D., Ph.D., Benoit Schlemmer, M.D., and Elie Azoulay, M.D., Ph.D.

Randomized 126 patients if attending believed “patient would die in a few days”

Intervention

- Proactive family conference using VALUE strategy
- Bereavement pamphlet for family

Lautrette, NEJM, 2007; 356:469
Family Member Outcomes: Clinically Significant Morbidity at 3 Months

Lautrette, NEJM, 2007; 356:469

p<0.02 for all
• Negotiate ahead of the conference
  – Lead the family conference
  – Provide back-up and support
    • Identify missed opportunities
    • Ask family for patient’s story
    • Empathy statements
    • Best case / worst case / most likely case
• Follow up and continuity
Outline

• Role of palliative care in the ICU
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• Tools for communicating with families
• Interdisciplinary communication
Transcending the silos: toward an interdisciplinary approach to end-of-life care in the ICU

Interdisciplinary collaboration associated with decreased
- ICU mortality
- ICU length of stay
- ICU readmission rates
- Physician and nurse conflict
- Job stress for nurses
Doctor and Nurse Ratings of Interdisciplinary Communication

![Bar chart showing ratings of openness and accuracy for doctors and nurses.](chart)

- **Openness**: Doctors have a higher percentage of ratings 4 or 5 out of 5 compared to nurses.
- **Accuracy**: The difference between doctors and nurses is also significant.

Reader, Br J Anaesth, 2007; 98:347

p<0.001 for all
Percent of Deaths with Physician-Nurse Collaboration in Decision-making

Percent of Physicians Involving Nurses in Decisions about Withdrawal

Yaguchi, Arch Intern Med, 2005; 165:1970
Nurse-Family Communication Before ICU Family Conferences

Percent

Curtis, Crit Care Med; 2001; 29:N26
Tools for Increasing Interdisciplinary Communication

• Nurse/RT presentations on AM rounds
• Nurse participation in family conferences and clinician “pre-conference”
• Interdisciplinary educational sessions
  – Palliative care teaching rounds
  – “Death rounds”: review of deaths in ICU
    • Hough, J Crit Care 2005: 20;20
• Interdisciplinary QI projects
Opportunities for Palliative Care in the ICU

• Support primary palliative care
  – Teaching for fellows, nurses, others

• Maximize effectiveness of specialty palliative care

• Identify barriers to specialty consults
  – SICU: surgeons’ concern about relinquishing control of decisions
  – MICU: intensivists feel they are expert

• Match need for PC consults to capacity
Summary

- Decision-making about end-of-life care common in ICU and should start early
  - Supporting tools and providers can help
- Shared decision-making is the default
  - Adapt to individual patient & family
- Interdisciplinary communication key
- Need to improve advance care planning and incorporate into ICU care

http://www.uwpalliativecarecenter.com