De-Coding Code Status Discussions

Disclosures

- None

Objectives

- Review the likely outcomes of in-hospital CPR
- Identify patients who require a code status discussion
- Describe key elements of a high quality code status discussion
Your “Code Status” Experience

- Think about a recent case involving code status
  - Discussion about code status
  - Lack of discussion when indicated
  - Actual code where CPR performed

- Turn to a neighbor and discuss
  - What was challenging?
  - What went well?
  - What emotions did you experience?

Code Status: Inpatient Provider Experience

- Anger at outpatient providers for not addressing
- Anxiety that discussion will trigger strong emotions
- Awkward discussing end of life goals on first visit
- Worry that discussion will be time consuming
- Frustration if terminally ill patient elects full code
- Wonder about utility of cursory code discussions
- Guilt for not addressing on admission
- Question why CPR offered to dying patients

Definition of “Code Status”

- Current medical order for the use, or avoidance, of CPR in cardiopulmonary arrest (death)
- Intended for end-of-life care
- Advance directives vs. Code status

<table>
<thead>
<tr>
<th>Advance Directives</th>
<th>Code Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Care</td>
<td>Current Medical Order</td>
</tr>
<tr>
<td>Health Care Proxy</td>
<td>Full Code vs. DNR</td>
</tr>
<tr>
<td>Living Will</td>
<td>If DNR: Intubate vs. DNI for respiratory distress</td>
</tr>
</tbody>
</table>
Definition of CPR

Cardio-pulmonary resuscitation (CPR) is a set of medical procedures that attempt to restart the heartbeat and breathing of a person who has no heartbeat and has stopped breathing.

- Procedures may include:
  - Chest compressions
  - Insertion of an airway and artificial ventilation
  - Electric shock
  - Medications

- No evidence to support “partial code” (i.e., partial CPR)


History

- 1960- CPR introduced
- 1974- AMA recommends code status documentation for “at risk” patients.
- 1980s- Professional guidelines for CPR discussions
  - Discuss prognosis
  - Elicit values and goals
  - Explain CPR with risks, benefits, expected outcomes
  - Make recommendation
- 1990- Patient Self Determination Act- Hospitals must ask all patients about advance directives
  - Advance directive = health care proxy, living will
  - Does not include a requirement to discuss code status/CPR

Language Matters: Options for Cardiac Arrest

<table>
<thead>
<tr>
<th>Full Code</th>
<th>DNR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempt Resuscitation</td>
<td>Do not attempt resuscitation (DNAR)</td>
</tr>
<tr>
<td>Perform CPR</td>
<td>Do not perform CPR</td>
</tr>
<tr>
<td></td>
<td>Allow Natural Death (AND)</td>
</tr>
</tbody>
</table>

Breault Ochsner 2011
“At this point in your life are you ready to allow ‘natural’ death?”

Objective #1

Review the likely outcomes of in-hospital CPR

70 yo Woman With Pneumonia

<table>
<thead>
<tr>
<th>Case 1- Near End-of-Life</th>
<th>Case 2- Healthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 4 Lung CA on 2nd line chemo</td>
<td>HTN, hypothyroidism</td>
</tr>
<tr>
<td>Mostly homebound</td>
<td>Active, plays tennis 3 days per week</td>
</tr>
</tbody>
</table>
CPR Outcomes

- Immediate survival: 41-44%
- Survival to discharge: 15 -18% (1 in 6)
- Recent data shows improving survival
  - Immediate survival 54% (1 in 2)
  - Survival to discharge 22% (1 in 5)
- Worse outcomes
  - Older age
  - Multiple coexisting illnesses
  - Nursing home resident

References:

Survival

<table>
<thead>
<tr>
<th>Decreased</th>
<th>Improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metastatic Cancer</td>
<td>Acute coronary syndrome or CHF</td>
</tr>
<tr>
<td>Sepsis</td>
<td>Drug reaction</td>
</tr>
<tr>
<td>Multi-organ system failure</td>
<td>Drug overdose</td>
</tr>
<tr>
<td>Dementia</td>
<td>Perioperative</td>
</tr>
<tr>
<td>Mechanical ventilation</td>
<td></td>
</tr>
</tbody>
</table>

References:

Survival: Effect of Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Survival to Discharge</th>
<th>Survival With Minimal Neuro Defects</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;70</td>
<td>22%</td>
<td>12.6%</td>
</tr>
<tr>
<td>70-74</td>
<td>21%</td>
<td>10.2%</td>
</tr>
<tr>
<td>75-79</td>
<td>19%</td>
<td>8.6%</td>
</tr>
<tr>
<td>80-84</td>
<td>17%</td>
<td>7.6%</td>
</tr>
<tr>
<td>&gt;85</td>
<td>15%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

References:
- Ehlenbach NEJM 2009; Ebell JAMA Int Med 2013
Risks/Outcomes of CPR

- **Majority** of patients die - 78%
  - Immediate death in 46%
  - Prolonged death (survive CPR but die in hospital) in 32%
- **Death is not peaceful and is not what most hope for**
- **Morbidity for patients**
  - Pain
  - Poor neurologic outcomes - 28% significant disability
  - Poor functional outcomes - 25% decline, only 51% discharge to home
- **Morbidity for family and clinicians**
  - Complicated grief/bereavement
  - PTSD

Ehlenbach NEJM 2009; Girotra NEJM 2012

Death/Survival Following CPR

- Die During CPR: 46%
- Die Before Discharge: 32%
- Survive but Die < 1 Year: 9%
- Alive > 1 Year: 13%

Girotra NEJM 2012; Chao NEJM 2013; Widera Geripal 2013

Prognostication of CPR Outcome

- GO-FAR= Good Outcome Following Attempted Resuscitation
- www.gofarcalc.com
- **Variables**
  - Age
  - Moderate or severe cognitive/neurologic disability
  - Admission from a skilled nursing facility
  - Metastatic or hematologic cancer
  - Major trauma
  - Pneumonia
  - Septicemia
  - Hypoxemia or hypoperfusion
  - Acute stroke
  - Respiratory insufficiency
  - Hepatic insufficiency
  - Renal insufficiency or dialysis
  - Medical noncardiac diagnosis
### Case 1 - Near End-of-Life

- Stage 4 Lung CA on 2nd line chemo
- Mostly homebound
- GO-FAR estimate = 9.4%

### Case 2 - Healthy

- HTN, hypothyroidism
- Active, plays tennis 3 days per week
- GO-FAR estimate = 27%

### Poor Understanding of Outcomes

- Unrealistic portrayal on TV
- Patients/families **overestimate** success of CPR
  - 67% older patients believe >50% chance of surviving CPR
  - 23% older patients believe >90% chance of surviving CPR
  - 96% of surveyed adults with unrealistic assessment
- MDs often inaccurate in predicting success of CPR
  - Residents no better than chance at predicting survival after CPR
  - < 10% Residents correctly assessed CPR outcomes in recent study, more tend to **underestimate** survival

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Objective #2

Identify patients who require a code status conversation

Question

Do we need to discuss code status with every patient admitted to the hospital?

70 yo Woman With Pneumonia

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<thead>
<tr>
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<th>Case 2: Healthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Stage 4 Lung CA on 2nd line chemo</td>
<td></td>
</tr>
<tr>
<td>● Mostly homebound</td>
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</tr>
<tr>
<td>● GO-FAR estimate 9.4%</td>
<td></td>
</tr>
<tr>
<td>● HTN, hypothyroidism</td>
<td></td>
</tr>
<tr>
<td>● Active, plays tennis 3 days per week</td>
<td></td>
</tr>
<tr>
<td>● GO-FAR estimate 27%</td>
<td></td>
</tr>
</tbody>
</table>
Conflicting Guidelines on CPR Discussions

<table>
<thead>
<tr>
<th>Organization</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Medical Association</td>
<td>All patients “encouraged” to discuss especially if “substantial risk”</td>
</tr>
<tr>
<td></td>
<td>No mention of hospitalization</td>
</tr>
<tr>
<td>American College of Physicians</td>
<td>“Especially encouraged” to discuss if “serious illness or advanced age”</td>
</tr>
<tr>
<td></td>
<td>No mention of hospitalization</td>
</tr>
<tr>
<td>Society of Hospital Medicine</td>
<td>“Provide counseling on code status including the outcomes of CPR... in</td>
</tr>
<tr>
<td></td>
<td>seriously ill patients”</td>
</tr>
<tr>
<td>American Heart Association</td>
<td>“…initiate discussion about the use of CPR with all patients admitted...”</td>
</tr>
<tr>
<td>Joint Commission</td>
<td>No guideline</td>
</tr>
</tbody>
</table>

Guidelines and Practice Differ

- CPR not discussed with many seriously ill patients
- Patients/families lack key info for “informed consent”
  - Prognosis
  - Risks/benefits of CPR
  - Expected outcomes of CPR
- MDs often unaware of patient/family goals
- Significant variation in institutional goals and practice
- Inconsistent documentation common


Ideal

Prognostic Awareness + Goals of Care + MD/NP/PA Recommendation → Code Status
Problems Discussing CPR on Admission

- Addressed ineffectively
  - Only 18% residents feel patients understand
  - Most elements of informed consent absent
- Inadequate time spent for meaningful discussions
  - Median time for hospitalist discussion = 1 min
- No prior relationship, context or trust
- Asking terminally ill patients about code status implies CPR may be beneficial
- Risk of under treatment if patient/MD confuse future wishes with current medical orders

Smith AK Arch Int Med 2006; Binder J Hosp Med 2016; Anderson J Gen Int Med 2010

ALL PATIENTS

• Health Care Proxy
• Care preferences if becomes critically ill
• Assess prognosis ("surprise question") and age

Prognosis < 1 year or Age ≥ 80

Screening Discussion
Is patient informed? Have decisions been made?

No

Detailed Discussion Needed, Timing Based on Risk Assessment

Yes

Enter Code Status Order

*Surprise Question: "Would you be surprised if this patient died in the next year?"
**Age cutoff is arbitrary, providers could opt for a different age cutoff

Code Status Discussions

<table>
<thead>
<tr>
<th>Screening Discussion</th>
<th>Detailed Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;What is your understanding of your illness and what to expect in the future?&quot;</td>
<td>Prognostic information</td>
</tr>
<tr>
<td>&quot;Have you discussed with your doctor/family your care preferences if you were to become critically ill?&quot;</td>
<td>Goals/Values</td>
</tr>
<tr>
<td>&quot;Have you made decisions about the use of life sustaining treatments such as CPR?&quot;</td>
<td>Risks/Benefits of CPR</td>
</tr>
<tr>
<td>If limitations, confirm if current</td>
<td>Alternative to full code</td>
</tr>
<tr>
<td>Provide education</td>
<td>Make recommendation</td>
</tr>
<tr>
<td></td>
<td>Ask for decision</td>
</tr>
</tbody>
</table>
Objective #3
Describe the key elements of a high quality code status discussion

Fact or Fiction
Patients who are informed about their serious illness and poor prognosis are less likely to choose full code
a) Fact
b) Fiction
Importance of Prognostic Awareness

- Knowing prognosis significantly impacts code status decisions
  - 45% wanted CPR before learning survival odds
  - Only 5% wanted CPR when informed of life expectancy < 1 year
- Terminally ill cancer patients who think prognosis > 6 months are 2.5-8.5 times more likely to want aggressive care

Murphy NEJM 1994; Weeks JAMA 1998

Ownership of Hard Conversations

- Developing prognostic awareness is a process
- Goals of care change
- Shared ownership, all providers play a role
  - Primary Care
  - Specialists
  - Hospitalists/Intensivists
- Generalist vs. Specialist palliative care
  - Primary Care/Specialists/Hospitalists- Basic discussions about prognosis, goals of care, suffering and code status
  - Palliative Care- Assistance with conflict resolution regarding goals or methods of treatment
- Communication amongst providers critical

Quill and Abernathy, NEJM 2013

Approach to Code Status Discussion

- Discussion of illness and prognosis
  - Guided by patient/family information preferences
- Clarify patient/family goals and values
  - Including end-of-life preferences
- Include elements of informed consent
  - Risks/benefits
  - Outcomes
  - Alternatives
- Provide a recommendation based on:
  - Prognosis
  - Goals of Care

Anderson et al J Gen Int Med 2010; Fettig Pallimed 2011
Goals of Care

- Cure
- Prolong life
- Maintaining function
- Maximize comfort
- Non-medical goals
  - Create legacy
  - Mend relationships
  - Be at peace with God
  - Arrange financial/legal affairs

Central Issue: Goals at End of Life

If goal is to allow natural death:
- Recommend DNR
- Explore goals and preferences for care for pre-arrest situations

If goal is to attempt to reverse potentially reversible causes of death:
- Recommend Full Code
- Explore goals and preferences for care if outcome of CPR is poor

Gillick J Am Med Dir Assoc 2001
Make a Recommendation

- Give a medical recommendation based on
  - Patient’s condition and prognosis
  - Patient’s values and goals
- Helps lift psychological burden
  - “Based on the extent of your illness and what you have told me about what is important to you I recommend…..”
- Summarize what you will do for patient

Helpful Communication Techniques

- Hope/Worry
  - “I’m hoping this won’t happen, but I’m worried…”
- Patient Centered
  - “I want to bring this up to make sure we respect your wishes…”
- Reassurance/Non-Abandonment
  - “This is a decision only about life sustaining treatments. You will still get all other medically appropriate interventions such as…”
  - “Instead of doing more medical interventions that are unlikely to help, I recommend that we do….. in order to reach your goal of…..”

Additional Pointers

<table>
<thead>
<tr>
<th>Do</th>
<th>Don’t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow adequate time</td>
<td>Present a menu of options</td>
</tr>
<tr>
<td>Include proxy if possible</td>
<td>Focus on medical info and procedures</td>
</tr>
<tr>
<td>Allow silence and listen</td>
<td></td>
</tr>
<tr>
<td>Emphasize what you will do</td>
<td></td>
</tr>
<tr>
<td>Reassure that DNR only pertains to cardiopulmonary arrest</td>
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Admitting a 70 yo With Pneumonia

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<tr>
<th>Case 1: Stage 4 Lung CA</th>
<th>Case 2: HTN, Hypothyroid</th>
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<tbody>
<tr>
<td>• Ask about health care proxy</td>
<td>• Ask about health care proxy</td>
</tr>
<tr>
<td>• Surprise question: “No”</td>
<td>• Surprise question: “Yes”</td>
</tr>
<tr>
<td>• Screening Discussion</td>
<td>• Ask patient about goals and care preferences if becomes critically ill</td>
</tr>
<tr>
<td>▪ Assess if prior informed GOC discussion/CPR decision</td>
<td>▪ Document info provided</td>
</tr>
<tr>
<td>• Detailed GOC/CPR discussion needed if not previously done</td>
<td>▪ Encourage communication with proxy</td>
</tr>
<tr>
<td>▪ Timing based on risk assessment</td>
<td>▪ Detailed GOC/CPR discussion not needed</td>
</tr>
<tr>
<td>• Document and communicate with outpatient providers</td>
<td>▪ Document and communicate with outpatient providers</td>
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</tbody>
</table>

Take Home Points

• **Most patients do not survive** CPR however a small percentage survive with acceptable outcomes
• Most patients overestimate success of CPR
• Available data and the GO-FAR tool can help prognosticate outcomes of CPR
• Code status addresses a patient’s **current readiness** to accept a natural death

Take Home Points

• **All hospitalized patients** should be asked about health care proxy and care preferences in the event of critical illness
• **All patients with serious illness or advanced age** should have a detailed discussion about prognosis, goals of care and code status, timing and location will vary based on prognosis and competing demands
• Prognostic awareness and patient’s goals are critical components of **informed** decision making about code status


FETTING, LH. Pallimed Blog 2011

GISBEE, MR. Choosing Appropriate Medical Care For the Elderly; JAMA Med Dir Assoc. 2010;15(6):393-9.


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<tr>
<td>Marks, E. et al. “Supportive Care Network of Wisconsin (PCNow) Board of Directors Position Statement: Partial or No Codes”, PCNow website 2016.</td>
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<td>Widera, E; Geripal 2013.</td>
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