Why do patients agree to a “DNR” or “Full Code” order? Perspectives of Medical Inpatients

James Downar, MDCM, MHSc, FRCPC
Divisions of Critical Care and Palliative Care, UHN

Objectives

• Understand some of the reasons why patients request “full code” or “DNR” orders

• Anticipate the fears and concerns of patients who make *apparently* illogical requests for “full code” orders
Background

- Majority of pts have DNR order pre-death
  - CPR in ~5% of all hospital deaths- increasing
  - 0.3% of admissions
- Usually follows discussion with pt/family
  - Variable timing, content, style
- Poor understanding of resuscitation orders by both pts and MDs

Well as I say, just the sort of things they put in those, if the heart went . . . to put those clamp things on, and if they didn’t work, then just let me go.

What you mean by clamp things?

The shock, they give you=

(Son) =to start you up again. . . .

=But I definitely don’t want to be a vegetable. . . . Yeah, I don’t wanna be put on one of those life-support or anything.
Samples from 2am...

- “If I live another 22 days then I will inherit $5 million…”
- “I want you to intubate me, then call my wife to come in to pull the plug because she knows what to do…”
- “DNR? No...I’m not one of those religious guys...I don’t want that natural s#!t…”
Purpose

• Why do patients ultimately choose DNR or FC status?
  – Logic
  – Process
  – Fears
  – Understanding of FC/DNR orders
Methods

• Qualitative study
  • Modified grounded theory, constant comparison, selective coding

• Inpatients on GIM ward
  • 24-48h post-admission

• Inclusion criteria
  • English-speaking, Competent
  • Clear code status order after discussion with team

• Exclusion criteria
  • Delirium, MD refusal
## Results – Demographics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Full code (15)</th>
<th>DNR (14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean (SD))</td>
<td>57.2 (12.9)</td>
<td>76.2 (12.9)</td>
</tr>
<tr>
<td>Gender (% male)</td>
<td>66.0</td>
<td>91.3</td>
</tr>
<tr>
<td>Admitting diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer-related</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Nonmalignant disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart disease</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Lung disease</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Liver disease</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Stroke/neurologic disease</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Gastrointestinal hemorrhage</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infection</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Venous thrombus/thromboembolism</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Abdominal pain NYD</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Myeloproliferative disorder</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Comorbidities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Nonmalignant disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart disease</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Lung disease</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Liver disease</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Stroke/neurologic disease</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Renal disease requiring hemodialysis</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
Results – Familiarity with Code Status

- **DNR Pts**
  - Very familiar with subject
    - Personal experience or relatives
  - Necessary and appropriate discussion
  - “I feel good I because I know that they are looking after me...They are really telling me the bottom line, that there is nothing left here...That’s good because you know what to look forward to.”
Results – Familiarity with Code Status

- Full Code pts
  - Little experience with conversation
  - Surprised
  - Inappropriate / Rude
  - “I find it even rude actually; I don’t think I’m dying.”
Results – Reasons for choosing FC/DNR

- Personal Factors
- Relational Factors
- Philosophical Factors
Results – Reasons for choosing DNR

• Personal Factors
  • Unsatisfied with present QOL/health
    – “I can't stand up by myself out of bed, I need help with everything so what's the sense to try to keep on living?”
  • Poor anticipated QOL/health
    – “If my life was going to be spent in this room forever...no thanks”
  • Concern about pain/suffering
    – “If I only have 3 more months, I don’t really want to have any more pain”
Results – Reasons for choosing DNR

• Relational Factors
  • Family
    – “It causes hardship for my family”
  • Society/Healthcare Workers
    – “If I'm going to live on a machine, somebody will have to look after the machine, and I don't think that's fair”

• Philosophical Factors
  • Discomfort with the idea of Life Support
    – “I don't want to be kept artificially alive...when the body cannot sustain you, you are dead”
  • Inevitability of death
    – “If I'm dying, let me die. You can't change something that is irrevocable”
Results – Reasons for choosing FC

• Personal factors
  • Good current QOL/health
    – “I like life...life has been very good to me.”

  • Qualifiers
    • Decision dependent on QOL/health
      – “I lost my wife to cancer 5–6 years ago and we put a do not resuscitation order for her because it was inevitable anyway”

    • Do not want prolonged life support
      – “I wouldn’t take the machine that would keep me going for a period of time”
Results – Reasons for choosing FC

- **Relational Factors**
  - Desire to remain with family members
    - “The first thing I thought of was my daughter, then I said, yes... yes, resuscitate me”

- **Philosophical Factors**
  - Unfulfilled life goals
    - “I said you just do what you have to do to keep me alive. Because there is a lot that I want to do”
  - Resuscitation as a standard of care
    - “I would want to be resuscitated. If I didn't, then why would I come to the hospital?”
Results – Understanding of Resuscitation

- DNR pts
  - Violent/traumatic CPR
  - Tubes/machines
  - Pain
    - “What I heard was pain, pain then, and pain when and if I survive”
  - Futility
    - “I think resuscitation means ‘make the person suffer for a few days more’”
Results – Understanding of Resuscitation

- FC pts
  - “Restoration of life”
    - “It means bringing them back to the point when they will at some point be conscious”
  - Shock to restore life
  - “No idea”
Results – Understanding of DNR

• DNR pts
  • Comfort care
  • Allow natural process

• FC pts
  • Passive/suboptimal care
    – “I had brother in-law...he took ill at the home and they took him into emergency, and they left him there...he passed away...They didn’t give him the proper attention...and that’s what I feel it would happen if you say no resuscitation”

• Euthanasia/assisted suicide
  – “Well, I almost feel like we are getting into euthanasia here”
Interpretation

- DNR pts have more experience with issue
  - Older but not necessarily sicker
  - Familiarity often from personal experience
  - Code status discussions rare, even among chronically ill

- Similar to other qualitative work in cancer patients
  - Personal
  - Relational
  - Philosophical

Heyland et al. Chest 2006;130:419-28
Interpretation – Logical Framework

- Both DNR/FC pts making decisions based on health status/QOL
  - Few want ICU/LS in face of poor prognosis, prolonged LS

- Decision for FC/DNR associated with fear of other option
  - Resuscitation- pain, futility, poor QOL
  - DNR- neglect, euthanasia

Murphy et al. NEJM 1994;330:545-9
Fried et al. NEJM 2002;346:1061-66
Weeks et al. JAMA 1998;279:1709-14
Interpretation – Logical Framework

• Choice between life and death
• Implicit judgments about
  • Value of life
  • Personal relationships
  • “I have four children, and of course I want you to do everything for me to stay alive”
• DNR may be appropriate, but not for them
  • Self-exclusion

Interpretation – FC and Optimism

• Survey of 371 pts aged >60
  • Before knowing outcomes of CPR
    – 41% wanted CPR
    – 11% if life expectancy <1yr
  • After learning outcomes (10-17% survival)
    – 22% wanted CPR (6% over age 85)
    – 5% if life expectancy <1yr

• SUPPORT
  • Broad overestimation of survival by patients
  • Pts who estimated >6m survival more likely to request FC

Murphy et al. NEJM 1994;330:545-9
Fried et al. NEJM 2002;346:1061-66
Weeks et al. JAMA 1998;279:1709-14
Interpretation – DNR is a 4-letter word...

- Do WHLS orders affect survival/care?
  - Inconsistent findings
  - Misinterpretation or orders by staff?
  - Do differences in care predate DNR order?
  - Marker of care vs. determinant of care

Interpretation – Physician Recommendation

• Nobody mentioned the physician’s recommendation (!!)
  • No recommendation? Subtle recommendation?

• Shared Decision Making
  – Largely supported by patients, but...
    • Implies a decision, and an agreement
    • May be helpful, may be burdensome
    • Dependent on trust
    • Situation-dependent (urgency, self-withdrawal)

Interpretation – Limitations

- SDMs not interviewed
  - Different perspectives, different conversation
- MD could refuse participation
  - Excluding cases of conflict, disagreement
- English-speaking
  - Culture/linguistic issues
- CPR vs Life Support
  - We did not distinguish
  - Few patients understand distinction
Interpretation – Lessons learned

• When faced with discordance
  • Where does pt see him/herself in life?
    – Goals, accomplishments, family
  • What is the outlook for the pt in ICU?
    – Long stay? Functional outcome?
  • What is the alternative to ICU/FC?
    – Concerns about neglect, euthanasia
  • What is involved in CPR/DNR?
    – What do you recommend and why?
    – Does the patient/family trust you?

• Suggested reading
Acknowledgments

- Dr. Tracy Luk
- Rob Sibbald
- Tatiana Santini
- Dr. Joe Mikhael
- Dr. Hershl Berman
- Dr. Laura Hawrylucky
- Associated Medical Services
Thanks for your attention!