Two Cases of Advanced Heart Failure: To VAD or not to VAD...?

Case 1

75 y/o m admitted for the third time in three months with CHF
- Receiving state of the science heart failure treatment
- Treatment included intravenous milranone
- Ejection fraction 15%
- Not a transplant candidate

Heart failure team recommended a Ventricular Assist Device (VAD)
- Evidence of improved quality and length of life
- Patient was reluctant
- Wife and family ardently wanted him to proceed
Case 1 Continued
Palliative care consult requested
• Tricky terrain for palliative care – avoiding the self-fulfilling prophesy
• Open mind to what VAD’s can and cannot do

Patient really did not want the VAD
• Take his chances on medical management
• Hoped to live but not afraid to die
• Recommending doctors and family had a hard time accepting

Home with hospice
• Continued medical management of his CHF (palliating dyspnea)
• Died at home several months later

Case 2
65 year old with a successful VAD for 2 years
• Excellent quality of life
• Found to have widely metastatic melanoma
• Oncologic treatment for his melanoma was not recommended

Palliative care consultation
• Symptoms were well managed
• Goal was to continue living but no major medical adventure
• DNI/DNR but still hospitalize for relatively easily reversible conditions

Considered hospice referral
• Could palliate melanoma but treat heart failure
• But still potentially wanted hospitalization short of intubation
• Home palliative care

Case 2 continued
Continued to live relatively well for 9 months
• No hospitalizations, no significant pain, good family times
• Gradually progressive weakness
• Wife gradually began to wear down with the added burdens of care

Ended up in the hospital with extreme fluid overload
• Neither oncology floor or heart failure floor was comfortable with him
• He still wanted non-invasive measures to try to reverse problems
• Began to go into renal failure; lost capacity

Eventually reached a point where there was agreement to stop
• Patient was oriented to fight, but lost capacity
• VAD team had little experience with shutting off VAD and palliating
• Lived for about 6 hours after VAD shut off
Background Data

- 70–80% of deaths in hospital or nursing home
- Families frequently impoverished
- 30% completion of advance directives
- Inadequate pain management at all levels
- Physicians overly optimistically prognosticate
- Infrequent, very late referrals to hospice
- Medical rituals replacing religious rituals
- Economic incentives promote over-treatment

Brave New World

- Many medical choices as patients get sicker
  - Expensive treatments of more and more marginal gain
  - No clear endpoint
  - Deep burden of choice
- Many perverse incentives
  - Invasive procedures and devices well compensated
  - Little reinforcement of conversations about what is really happening
  - Any death as an adverse quality outcome according to HCAPS
- No one is really in charge; few deep relationships with patients
  - Primary care physicians absent in most hospitals
  - Specialization and segmentation cloud the "big picture"
  - Palliative care in a very tricky position

Healing Approaches to Serious Illness

- Limits of usual conceptualization
  - Curative or restorative disease-based model
  - Unclear how adaptation to chronic illness fits
  - Death as a medical failure
- Broader model of healing
  - Maintaining integration and wholeness
  - Finding meaning and maintaining connection
  - Opportunity for growth and closure
  - Commitment to face the unknown together
Elements of Medicare Hospice Benefit

“Cadillac” of home care programs
Payment for all medications and medical services
Expert team of experienced caregivers
Supplementation of care at home or nursing home
Possibility of respite care and emergency inpatient care

Limitations of Medicare Hospice Benefit

Inherent prognostic uncertainty
Late referrals (wait until I really need it)
Unavailable to those who want to continue some active Rx
Primary care giver requirement
Cultural, ethnic, socioeconomic barriers

Elements of Medicare Hospice Benefit

Capitated, per-diem reimbursement
Prognosis of 6 months or less
Waive rights to curative treatment
Primary care giver – not 24 hour care
Some Challenges of the Hospice Discussion

Hospice requires a “bad news” discussion
- Acceptance that medical treatment isn’t working
- Acceptance of likelihood of death in 6 months
- Giving up on hospitalization and disease-driven treatment

Many patients don’t want to stop all treatment
- May be willing to stop burdensome treatment
- May want to continue to maintain more options

Small chances of cure or longer life maintain hope

END-OF-LIFE CARE
TRANSITION TO HOSPICE

Curative
Prolongation
of
Life
Palliative
Relief
of
Suffering

Potential Benefits of Palliative Care

- Improved pain and symptom management
- Careful attention to quality of life
- Fresh look at medical goals and priorities
- Assistance with difficult decision-making
- Multidisciplinary approach
- Focus on patient and family

Unlike hospice, palliative care allows for:

- Simultaneous treatment of underlying disease
- Acute hospitalization if needed
- Palliation alongside the most aggressive disease treatment
- Much more prognostic uncertainty

Palliative Care: When should it be discussed?

- Patients with difficult to treat symptoms
- Patients who fear future suffering
- Patients who face uncertain medical choices
- Patients and families who need added support
- All patients with a serious, potentially life-threatening illness??
Palliative Care: Hoping and Preparing

“Let’s hope for the best…”
• Join in the search for medical options
• Open exploration of improbable/ experimental Rx
• Ensure fully informed consent

“…attend to the present…”
• Make sure pain and physical symptoms are fully managed
• Attend to depression and any current psychosocial issues
• Maximize current quality of life

“…and prepare for the worst.”
• Make sure affairs (financial/personal) are settled
• Think about unfinished business
• Open spiritual and existential issues

Why is this discussion so important now?

Age Distribution of US population

PREVALENCE OF ALZHEIMER’S DISEASE
(BY DECADES IN U.S.A. FROM 1600-2005)

Figure 1
SOCIAL SECURITY, MEDICARE, AND MEDICAID
AS A PERCENTAGE OF GDP

Figure 2. Growth in Medicare Expenditures, 1970-2015

Source: Congressional Budget Office.

Source: CMS Medicare Trustees Report.
Feeding tube insertions and health care transitions

Regional Variation in Health Care Costs

Where more can be less

Regional Variation in Health Care Costs

No evidence spending differences explain differences in health
Access to technology similar
Unlikely that physicians in low-cost areas consciously denying their patients needed care (quality outcomes are actually better)
All fee for service
How physicians respond to the availability of resources, treatments important.
**Spending at the EOL**

$2.1 Trillion 2006 HC

$735 billion Medicare

- $220 billion attributable to 5% of beneficiaries who die each year

$66 billion in last month of life

- Most costs in acute care

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**Health Care Costs in the Last Week of Life: Associations with EOL Conversations**

627 patients with terminal cancer interviewed at baseline (~6 mo) and followed up through death

Controlled for age, sex, religion, marital status, race, health insurance status

"Have you and your doctor discussed any particular wishes you have about the care you would want to receive if you were dying?"

Zhang. Arch Intern Med, March 9, 2009

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**Temel et al. Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer. NEJM. 2010 363:733-42**

- Early palliative care provided at the same time as life-sustaining treatments for patients with metastatic NSCLC has multiple benefits
  - Improved mood
  - Improved quality of life
  - Less use of aggressive therapies at the end of life
  - Improved survival (close to 3 months)

- Effect size would be comparable to a “blockbuster” new drug

- Results don’t explain why

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**Morrison et al. Palliative Care Consultation Teams Cut Hospital Costs For Medicaid Beneficiaries. Health Affairs 2011;30:454-453**

- Palliative Care Consultation Teams Cut Hospital Costs For Medicaid Beneficiaries.
Cost/Day For Patients Discharged Alive

More Medical Care Sometimes Leads to Lower Satisfaction with Care

Family members of decedents in high-intensity hospital service areas report lower quality of:
- Emotional support
- Shared decision-making
- Information about what to expect
- Respectful treatment


Physicians practicing in high health care-intensity regions report more difficulty:
- Arranging elective admissions
- Obtaining specialty referrals
- Maintaining good doctor-patient relations
- Delivering high quality care


What Do Family Caregivers Want?

Patient-centered treatment

Study of 475 family members 1-2 years after bereavement:
- Loved one’s wishes honored
- Inclusion in decision processes
- Support/assistance at home
- Practical help (transportation, medicines, equipment)
- Personal care needs (bathing, feeding, toileting)
- Honest information
- 24/7 access
- To be listened to
- Privacy
- To be remembered and contacted after the death

Tolle et al. Oregon report card. 1999 www.ohsu.edu/ethics

Family Satisfaction with Hospitals as the Last Place of Care

Not enough:
- Contact with MD: 78%
- Emotional support (pt): 51%
- Information about what to expect with the dying process: 50%
- Emotional support (family): 38%
- Help with pain/SOB: 19%


Perspectives on What Palliative Care is for...

Patients and their families
- relieve symptoms
- navigate a complex / confusing medical system
- understand the plan of care
- coordinate and control care options
- palliation of suffering along with continued treatment
- practical and emotional support for exhausted caregivers
Palliative Care
Clinician Perspective

Save time by helping with intensive patient-family meetings, coordination of care, discharge planning

Bedside management of pain and distress of highly symptomatic and complex cases, 24/7

Promote patient and family satisfaction with the clinician’s quality of care

Palliative Care
Hospital Perspective

• Effectively treat people with complex advanced illness
• Provide service excellence, patient-centered care
• Increase patient and family satisfaction
• Improve staff satisfaction and retention
• Meet JC quality standards
• Rational use of hospital resources, avoid costs
• Increase bed/ICU capacity, reduce costs

Palliative Care
Payer Perspective

• Improving quality and controlling cost
• Time based billing
• Quality improvement is an unequivocally good objective for them
• Cost control in this domain is a tricky issue
• Many large payers are now embracing and investing
• Specters of rationing and death panels

A Cautionary Tale...
Proactive Palliative Care in ICU

Baseline length of stay data on high risk ICU population
• Metastatic cancer
• Multi-organ failure
• Advanced dementia

3 month data collection with no intervention
Proactive palliative care consultation
• Screening consultation on all patients who met criteria
• Full consultation if desired by ICU team
Main results
• Decreased ICU time by one week on average per patient
• Same number of deaths; same time to death

So, why not...
Proactive Palliative Care in Neuro/Trauma ICU

Similar process...identify patients at high risk of death
• Serous co-morbid diseases before CNS bleed
• Pre-existing dementia
• Over 80 years old with multiple co-existing injuries
• Severe head trauma in those over 80

Proactive palliative care consultation
• Participation in family meetings
• Provide an informational link between ICU team, neurology, neurosurgery and family
• Ongoing conversation about patient wishes where prognosis is poor

Proactive Palliative Care in ICU, continued...

Everybody was happy with the intervention
• Patients and families went to a more family friendly environment
• ICU doctors and nurses got help with decision making when needed
• ICU beds were “back filled” with more “appropriate” patients
• Quality of care for those who died was improved by all markers

Systems issues at play
• Backfill of ICU patients good for hospital’s bottom line
• Palliative care team got financial support for an additional NP FTE
• Palliative care and ICU team collaborated on a paper
• Norton et al. Critical Care Medicine. 2007;35:1-6

Proactive Palliative Care Program
Medicine of the Highest Order

Palliative Care Program
Medicine of the Highest Order
So what happened…

Sometime treatment was withdrawn earlier
• Consensus about poor prognosis
• Consensus that patient would not want such treatments
• Patients avoided getting trach and PEG
• Families were very satisfied with the care
• Medical and nursing staffs also satisfied and appreciated the help

But… DRGs go up five fold with tracheostomy and PEG
• Hospital did about 15-20 fewer such interventions in the ICU per year
• Reimbursement to the hospital went down 1.5 million dollars
• Revenue lost dwarfed the revenue gained in our MICU intervention
• Also undermined the cost avoidance argument we had been making

Fortunately

Hospital and payers got together and negotiated
• Some more equitable sharing of the savings
• Continued monitoring of the cost implications of such interventions
• Payer would cover the cost of an additional palliative care fellow

In an integrated health system, such savings which result from genuine improvements in quality of care would be equitably shared – but so far we are not there.

Clearly illustrated a perverse economic incentive of the current system

Bottom Line Summary

Palliative care improves quality of care
• Pain and symptom management
• More informed decision making
• Added patient and family support

Palliative care probably improves cost of care
• Better informed consent; more realistic expectations
• Less expensive, near futile treatment
• More timely and appropriate transition to hospice care

Palliative care may improve actual mortality and/or mortality rates
• If introduced early alongside disease-directed therapy
• By preventing near futile aggressive treatment that might shorten life
• By facilitating earlier and more appropriate referral to hospice care

Some References


Norton S et al. Proactive Palliative Care in the Medical ICU. *Critical Care Medicine.* 2007;35:1-6


Morrison RS et al. Palliative Care Consultation Teams Cut Medical Costs for Medicaid Beneficiaries. *Health Affairs* 2011;30:454-453

Thank you