Palliative Care Library

TUFTS Health Plan
No one does more to keep you healthy.
# Tufts Health Plan Medicare Preferred Medical Director Presentations on Palliative Care

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<td>Summary of 2011 Tufts Health Plan Medicare Preferred Palliative Care/Hospice Initiatives focusing on:&lt;br&gt;1. Identification/Prognostication&lt;br&gt;2. Patient-Centered Decision Support&lt;br&gt;3. High Quality Palliative Care/Hospice Network&lt;br&gt;A study on palliative care in NSCLC patients showed that early palliative care does not shorten survival and improves QOL</td>
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Using Hospice Programs

Denise Kress MS, RNC, CRRN
Jonathan Harding, MD
End of Life Program

- Hospice
- Palliative Care
- Advanced Directives
- Member education
- Provider Education
- Policies and Procedures
Benefits of Hospice

Benefit to Members and Families

- Multidisciplinary team:
  - nutrition
  - home nursing
  - Financial planning
  - social work
  - spiritual care

- Bereavement counseling for families

- Home Health Aides

- Respite care for families

- Reduced member cost share for hospice-related drugs
Benefits of Hospice

Benefit to Members & Families

- Community resources
- Companionship volunteers
- Nurses/physicians trained in palliative care
- Dying in a loving environment (often home with possessions, pets, and family)

... making the most of the life remaining
Benefits of Hospice

SoDiUM Study showed…

- Significantly improved experiences of dying for patients who die in hospice or at home v. Hospital or SNF
  - Feeling life had meaning
  - Able to express wishes about end of life care
  - Had someone to listen to them
  - Knowing what to expect
  - Resolved unfinished business

- Significantly improved experiences of dying for those with DNR orders

- Significantly improved experiences of dying for those with Health care proxies
Benefits of Hospice

Benefits To Medical Group

- Group no longer responsible for hospice-related medical costs while on hospice, including drugs
- Hospice pays for all hospice-diagnosis-related costs
- CMS pays for all out-of-network medical costs, and most in-network non-hospice-related medical costs.
- Group pays supplemental benefits for non-hospice related costs in-network: the difference between CMS and our benefits – co-pay differentials, supplemental benefits
- Tufts Health Plan pays for non-hospice related Part D drugs and OOA emergency treatment
- Bill PCP services to Hospice or to CMS, depending on relation to hospice diagnosis
Benefits to Medical Group

- If costs for members in the last 6 mos. of life not in hospice exceeds your premium, (MLR > 1.0) you are losing money on this population.

- CMS provides more generous payment to hospice agency than to us

- Enrolling a member in Hospice shifts financial risk from group to CMS and hospice agency, while adding benefits to members

- Hospice agency lowers costs by reducing futile treatments, focusing on palliation

- PCP can still manage non-hospice related care and bill FFS
Working with Hospice Agencies

- Many with overlapping territories
  - you often have a choice of agencies
- Variable Acceptance Criteria
- Variable services offered
- Vary in willingness to help “make the sale” to potential hospice candidates
- Selecting Preferred Agencies
Getting Patients & Family to Agree to Hospice

• Caregivers must explain the benefits to members
  • Role of CM, SW
  • Role of PCP
  • Role of Specialist
  • Role of Palliative Care Consultant
  • Role of Hospice Agency

• What is the Message?
  • Giving up hope - OR
  • Providing hope that the last months will have value
What characterizes potential Hospice members?

- Prognosis estimated < 6 mos. (longer survival is allowed!) - The Buchwald factor

- CHF, untreatable angina, COPD, ESRD, Alzheimer’s, CVA, Cirrhosis – not just cancer

- Many custodial and LTC members may qualify for and benefit from hospice and palliative care svcs

- Members’ treatment plan is, or should be, focused on caring & symptom relief, not on long-term cure
How Do We Identify Potential Hospice Members?

- Identified through case management, care management programs, Medical Director review of cases, PCP, or specialist

- Claims-based triggers (ICD-9, Rx) have high false (+) & false (–) rates but can supplement CMs
Hospice Program Goals

- Increase % of population on hospice
  - Benchmark: 2% of Medicare population
  - Managed care average: 38% of members who die

- Increase mean/median days on hospice
  - Benchmark mean: 70 + days
  - National median 21 d

- Increase conversion rate from potential hospice to hospice (goal: ? %)
  - We don’t know current conversion rate

- Increase member/caregiver satisfaction
Obstacles You Face

- Family acceptance of death
- Lack of family to provide care in the home
- Hospice agencies “dump” patients when they need inpatient care
- Oncologists
- Fragmentation of care; no one who knows the patient over years talking to the patient
What Works for You?

- PCP conversations
- Challenging oncologist
- Do not abdicate care to the oncologist
What Can Tufts Health Plan Do to Help?

- Provide best practices and benchmarks
- Analyze costs and MLR
- On-line Geriatric education content for PCPs and case managers on Hospice benefits, palliative care, etc.
- “Gold card” hospice agencies for
  - Entry criteria
  - Responsiveness
  - Conversion rate (potential hospice to hospice)
- Case Manager training on “having the difficult conversation” (non-delegated, delegated)
- Train the Trainer program for group medical directors
2
Palliative Care
Gail Gazelle, MD, FACP, FAAHPM
MD Can Help, P.C. (formerly Palliative Care Associates)
Assistant Clinical Professor of Medicine, Harvard Medical School

Deborah Amato, RN, CHPN
Tufts Health Plan Medicare Preferred Palliative Care Case Manager

TUFTS Health Plan
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Tufts Health Plan Medicare Preferred Palliative Care Initiative

- **Goal:** increase hospice member-months by 660 in 2008
  - This goal is double 2006 member months
  - Plan to achieve this goal by a combination of earlier referrals and more referrals

- **Rationale**
  - Small % of population on hospice (0.5%)
    - Benchmark 1-2%
  - Mean (40) and Median (21) days on hospice also low
    - Benchmark 70 mean, 35 median days
  - Hospice members experience
    - increased family satisfaction
    - increased survival time
    - decreased costs to family
    - lower costs and higher MLR for Tufts Health Plan providers:
      - WIN-WIN
Components of the Initiative

- Physician/case manager education
  - Benefits of hospice
  - Having Difficult Conversations with patients
- Claims processing changes to ensure Tufts Health Plan and hospice liabilities are accurately distributed
- Assess Hospice agency capabilities, “preferred network” of hospices based on criteria
- Identify potential hospice members to stimulate discussions between members and providers, case managers, or others
- Bridge to Hospice = a conversation, not a benefit
  - Case manager
  - External vendor
  - Palliative care consultation
Goals of this session

- Review the definition and concept of palliative care
- Compare/contrast palliative care w/ hospice care
- Identify patients/families appropriate for palliative care consults
- Describe outcomes of several palliative care consultations
- Identify palliative care resources in Tufts Health Plan Medicare Preferred Network
Figure 1: Historic view of hospice care....

Curative / life-prolonging therapy

Presentation

Relieve suffering

Death
Figure 2: the palliative care approach....

Curative / life-prolonging therapy

Presentation

Death

Relieve suffering
Palliative Care...

- A fully accredited medical subspecialty
- Works collaboratively with the PCP
- Focuses on:
  - Quality rather than quantity of life
  - Aggressive management of pain, dyspnea, nausea, insomnia, delirium, depression, and any other physical symptoms
  - Wishes regarding resuscitation status, artificial nutrition/hydration
  - Patient goals rather than purely medical goals
  - Support for family members
  - Enrollment in hospice when appropriate
Hospice

- A set of services
- Typically provided in patient’s home or other place of residence
- NOT 24/7
- Home nursing visits, home social worker, home health aides, pastoral counselor, volunteers
- Hospice Agency Paid by Medicare on Per Diem basis
  - Covers meds, DME, staffing, O2
  - IF RELATED TO TERMINAL DX
    - All other costs continue to be paid by Medicare Fee for Service
- For someone who has disease trajectory such that “more likely than not” to have terminal event w/in next 6 months
Hospice Enrollment by Diagnosis

2005 data:

- Cancer: 46%
- End Stage cardiac: 12%
- Dementia: 9.8%
- End Stage pulmonary: 7.5%
- Debility: 9.2%
- Others….. 15%

Source: National Hospice and Palliative Care Organization
How can I tell if likely to be in last 6 months???

- CHF: NYHA Class IV + on maximally tolerated diuretics, ACEI, etc.
  - EF does not have to be <20%... Many pts w/ ES diastolic dysfunction

- Dementia: FAST 7A (req assist for 3 ADLS, episodes of bowel and bladder incontinence, less than 6 meaningful words/average day)
  - + either pneumonia, upper urinary tract infection, or other significant infection w/in past 12 months

  OR

-- progressive Stage 3 or 4 decubiti

- OR evidence of nutritional decline in last 6 months
  - wt loss of 10% body wt
  - Choking, gagging on food c/w aspiration
How can I tell if likely to be in last 6 months???

- **End Stage pulmonary disease**
  - Disabling dyspnea at rest, poorly responsive to bronchodilators, resulting in decreased functional capacity
  - Progression of disease as evidenced by increased ED or MD visits or admissions
  - Recently documents RA O2 sat <88% or pCO2 >50

- **Debility**
  - Constellation of comorbidities w/ downward trajectory
  - Old age....
  - Failure to thrive
Mr. S
88 yr old M w/ CHF, CAD, DM, CRI, HTN
- Uses O2 prn
- s/p admission x 2 in last 9 months for CHF exacerbation
- Dyspnea w/ any exertion
- Becomes hypotensive w/ any increases in diuretics
- Sees you for f/u hospital visit…..
Mrs. A

- 77 yo F w/ adv Alzheimer’s disease
- Losing functional capacity
- Losing weight
- Husband reports increased nocturnal agitation...
  - He is also in your practice and you are concerned about depression
  - Daughter attends visit… expresses her concerns
- You know husband needs more help but are unsure if pt is eligible for hospice…..
Mr. M

- 68 yo M w/ prostate CA metastatic to bone
- Followed by Urology w/ q3mo Casodex
- Losing weight
- S/p ED visits x 2 for pain
- Wife calls on a Friday afternoon: what should she do about his pain?
Palliative Care Consultation can involve...

- Speak w/ PCP re: reason for consultation
- Meet with key family members to assess their current understanding of illness and likely course
- Provide education about likely disease trajectory
- Explore and make recommendations about pain and symptom management
- Discuss treatment options
  - aggressive interventions vs. time-limited trials vs. comfort-oriented care
  - Return to hospital vs home-based care
Palliative Care Consultation can involve…

- Having “difficult” conversations
- Focus on patient’s individual goals for this critical period of their life
- Support for family members
- Follow-up with PCP
Palliative Care Consultation possibilities…

- one-time consult
- second meeting after family has time to consider options vs.
- follow-up with PCP to re-address issues
- ongoing visits for pain and/or symptom management vs.
- providing recommendations for PCP to follow
Tufts Health Plan Palliative Care Manager Role

- Review palliative care and Hospice options with case managers and medical groups.

- Maintain registry to help CM and groups identify potential hospice candidates

- Be resource to all CMs, include talking with member/families re: decision–making

- Provide formal and informal education with CM and medical groups
Palliative Care Resources

Inpatient Programs

- Dana Farber Pain and Palliative Care Program: Inpatient Only
- Massachusetts General Hospital Palliative Care Service: Inpatient; also has Palliative Care consults at Yawkey Center for Outpatient Care
- Lahey Palliative Care Consult Service: Inpatient but will follow member to home.
Palliative Care Resources

Outpatient Programs:

- Harvard Vanguard Palliative Care: currently for HVMA members only;
- Palliative Care Associates, Brookline: Dr. Gazelle
- Medical Directors of Hospice Agencies: THP has identified 16 physician directors of hospice agencies that would be interested in providing palliative care consults . . .

Telephonic Program:

- Vital Decisions: Support and advisory service for seriously ill members facing life care planning issues; performed by MD’s and/or interdisciplinary team.
How is Palliative Care reimbursed?

- Medicare fee for service reimbursement for Palliative Care consultation varies by complexity and location.

- Ranges from $54 (home based pre-hospice consultation) to $220 for inpatient, high complexity consultation.
Summary

 Have Medical Groups used Palliative Care consultations?

 Should Tufts Health Plan contract with a few Palliative Care physicians, and set up a special fee schedule for them?

 Would any groups be interested in a telephonic vendor for the bridge to hospice/life care planning discussions?
Tufts Health Plan Medicare Preferred
Palliative Care Program
Project Update
TMP Medical Directors Meeting
3/5/09

No one does more to keep you healthy.
Presentation Outline

- Program description
- Metrics
- External Benchmarking
- Best Practices
- Registry
- Palliative Care Consultation Services
- Next Steps
- Discussion
Palliative Care Program Description

- Program launched November, 2007

- Original goals:
  - Increase network hospice utilization rate to 2%, similar to general Medicare population
  - Increase hospice LOS by referring earlier
  - Increase hospice member months from 1300 to 2000 by 2008
  - Create network of Palliative Consultants
  - Create Registry of members who may be approaching end of life, to start care planning discussions
  - Assist groups in identifying “Preferred Hospice Providers”
Palliative Care Program Update

- Member Months, Hospice rate, and Hospice LOS have increased.

- Assumption of decreased end-of-life high cost utilization.

- 3 Palliative Consultants in process of being contracted.
## Palliative Care Program Update

- **Network impact thus far:**

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<th>Rate</th>
<th>Member Months</th>
<th>ALOS</th>
<th>MLOS</th>
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<tr>
<td>2005</td>
<td>1.29%</td>
<td>1364</td>
<td>50</td>
<td>11</td>
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<tr>
<td>2006</td>
<td>1.33%</td>
<td>1296</td>
<td>52</td>
<td>12</td>
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<td>2007</td>
<td>1.42%</td>
<td>2354</td>
<td>63 est.</td>
<td>18 est.</td>
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<td>2008* incomplete</td>
<td>1.46%*</td>
<td>2394*</td>
<td>71 est.</td>
<td>20 est.</td>
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Aetna Compassionate Care℠
3 components

- Case Management core competencies in EOL training
  - Identify resources to maximize QOL
  - Coordinate care, benefits, and community services
  - Inform members of treatment options, advance care planning, and continuity of care
- Enhanced Benefits for Commercial Members
  - Qualify for hospice with 12 month prognosis
  - Allows curative treatment with hospice services
- Robust Website Information for members/ families
  - How to discuss wishes with family and health providers
  - Checklists for legal, practical, medical matters
Aetna Pilot Program

3 year pilot results:

- Hospice use increased among members “enrolled” in the program
  - 71% increase in Commercial
  - 77% increase in Medicare members

- Acute inpatient days and ED visits decreased by 30-80%

- Palliative medication use increased 21-77%
Best Practices: What are our successful groups doing?

- End-of-Life is on their “radar screen”

- Discuss needs of end-stage members at Medical Management Meetings

- Invite Palliative Specialists to meet with PCP’s:
  - Get acquainted with their skills for complex patient management
  - How they would collaborate with the care team
Best Practices
Successful groups

- Identify “Preferred Hospice Providers” and cultivate close working relationships with them.

- Invite hospice representatives, including Medical Directors, to Medical Management or Staff meetings.
  - Offer education to PCP’s
  - Review case studies
  - Discuss communication strategies for PCP/patient, PCP/specialists, and PCP’s/hospice providers.
Best Practices
Coordination Strategies

- Establish routine PCP communication with group hospitalists and SNF rounders.

- PCP knows history of member’s illness, member’s values and goals...can assist with planning for appropriate discharge.
Best Practices

Involve Specialists

- Create processes for PCP’s to communicate with specialists… cardiologists, pulmonologists, nephrologists, oncologists… to collaborate on Registry members’ understanding of expected disease trajectory, prognosis, care options, and advance directives

- Identify which specialists best communicate with members and collaborate with PCP’s. Direct referrals to those specialists
‘Potential Hospice’ Registry

- Utilize Palliative Care Registry as trigger to consider having discussions with identified members.
  - Purpose of Registry is to stimulate earlier discussions, not to suggest that members are ready for hospice “now”
  - Members should be re-evaluated in the future, if PCP thinks “now” is too early for discussion about hospice
  - Even if not ready for hospice, advanced directives should be discussed
  - Only members with falsely identified life-limiting illness should be considered “inappropriate” and removed from the list
  - Future possibility of adding “ad hoc” members to Registry, at PCP request.
Potential Hospice Registry
HVMA Strategy

- Adapted Palliative Care Registry lists for oncologists
  - Identified attending oncologist of each Registry member with Oncology diagnosis
  - Created a list for each oncologist to review
  - Educated oncologists re: purpose of lists
  - Oncologists agree quarterly review is useful
Palliative Care Consultation Services

- Utilize Palliative Care Services in hospitals that have them.

- Utilize contracted Palliative Consultants.

- Keep a supply of informational brochures on Advance Directives and Hospice in office waiting room.
Next Steps

- Evaluate custodial population for end of life needs. Registry will soon identify custodial, Registry-appropriate members

  - SNF rounders will identify members with:
    - life-limiting illnesses
    - frequent hospitalizations
    - declining performance status, weight, body mass

  - Ensure this population has truly informed advance directives in chart…. G-tubes, antibiotics, hospitalization, CPR

  - Establish communication processes between SNF rounders and PCP’s
Next Steps

- THP MP member website tool enhancement with info on Advance Directives

- Case Management Hospice log revision to merge information from Case Managers and CMS

- Educate Case Managers and SNF network how to maximize hospice referrals in the SNF setting
Next Steps

- April 16… National Healthcare Decisions Day

- Lead by example…. Do you have an Advance Directive?

- Discuss Advance Directives with all members with life-limiting illnesses

- Encourage everyone to complete Health Care Proxy, and to discuss wishes with their proxy agents
4
The Relationship of an Accurate Prognosis to the Quality of Care

Norman Weinberg, MD FACP
Introduction

- Benefits of treatment should be viewed in the context of life expectancy.
- The acute illness requires the physician to determine if a reversible disease is present.
- The focus on the acute problem may exclude consideration of the natural history of co-morbid conditions.
Clinicians have been reluctant to tell patients they are approaching the end of life.

Clinicians tend to overestimate life expectancy.

This may lead to decisions that do not reflect the values of the patient.
Appropriate Care as a Criterion of Quality

- Informed participation of patients
- Efficient use of resources
- Values and opinions of patients
Appropriate Care as a Criterion of Quality

- Treatment of DVT
  - Streptokinase and heparin vs. heparin alone
  - Patients are unwilling to accept the small risk of intracranial hemorrhage to avoid post phlebitic syndrome.

O’Meara, NEJM, 1994
The Relationship Between Prognosis and the Patient’s Medical Decisions

- An improved understanding of the likelihood of survival affects the therapeutic decisions of patients.

- Informed decisions are more likely to reflect the patient’s values.
  - This improves the quality of care delivered.
Educating an older populations of the realistic chances of survival from CPR resulted in fewer patients willing to undergo this procedure.

Murphy, et al. NEJM, 1994
The Relationship Between Prognosis and Patient’s Medical Decisions

- Patient treatment preferences between life extending therapy and comfort care was highly influenced by their understanding of prognoses.

Risks of Treatment

- **Hospitalization**
  - Muscle mass decreases by 5% per day
  - Supine position reduces PO2 by > 8mm Hg.
  - Demineralization of bones begins within days
  - Bed rails and intravenous, oxygen and monitor lines create risks for falls
Risks of Treatment

- Thinning of epidermis and subcutaneous fat can lead to skin necrosis within 2 hours (especially if the skin is most from incontinence).
Risks of Treatment

- 35% of patients had a loss of ADL function at discharge
- In patients over 85, the rates of functional decline exceeded 50%
- These changes affect mortality, nursing home placement and caregiver strain

Covinsky, et al. JAGS, 2003
Risks of Treatment

- The effects of competing risks
  - The new diagnosis in someone with several chronic conditions has a smaller impact on already reduced life expectancy.
  - Gain from successful therapy of the new condition is reduced.

Welch, Ann Intern Med., 1996
Risks of Treatment

- **Costs**
  - 10% of the population accounts for 70% of the health care costs.
  - Inappropriate care is an element of this finding.
    - Inappropriate because of limited life expectancy
    - Inappropriate if it does not reflect patient values
Methods to Predict Life Expectancy

- **Types of measures**
  - Functional Status
  - Co-morbid Conditions
  - Dementia
Methods to Predict Life Expectancy

- **Functional Status**
  - Loss of independence of activities of daily living – frail patients who are ADL dependent are 8 times more likely to die from sudden death.

Lunny, et al. JAMA, 2003
Methods to Predict Life Expectancy

- **Functional status**
  - Frail nursing home patients had loss of functional status at 1 year before death.
  - The greater the number of dependent ADL’s at hospital discharge, the greater the mortality risk.
  - Mortality after discharge includes functional status as well as disease burden.
Methods to Predict Life Expectancy

- **Co-morbid conditions**
  - Predictors of 5 year mortality
    - High brachial (>169) and low tibial (< or = to 127 mm Hg.) systolic blood pressure
    - FBS > 130 mg/dl
    - Creatinine > 1.2 mg./dl.
    - Low FVC
    - Severe aortic stenosis
Methods to Predict Life Expectancy

- Co-morbid conditions (cont’d)
  - Abnormal LV ejection fraction
  - Internal carotid artery stenosis
  - Major EKG abnormalities

Survival in Patients with Dementia

- Independent risk factors for death
  - Increased severity of cognitive impairment (a baseline score on MMSE of 17 or less)
  - History of falls
  - Frontal release signs (grasp and glabellar
  - Abnormal gait

Wolfson, et al. NEJM, 2011
Survival in Patients with Dementia

- Treatment with antibiotics did not alter the outcome in patients with advanced Alzheimer’s disease (institutionalized).
  
  (JAMA, 1990)

- Six month mortality for patients admitted with pneumonia

  with end stage dementia: 53%
  cognitively intact: 13%

  (Morrison, et al. JAMA, 2000)
Survival in Patients with Dementia

- Mortality for patients with
  - Hip fracture & end stage dementia: 55%
  - Hip fracture and cognitively intact: 12%

- Patients in stage 7c of dementia had a mean survival time of 3.2 months (non-verbal, cannot walk or sit without assistance, unable to smile or hold head up independently).
Criteria for hospice enrollment

- Incontinent; need assistance with walking, eating and grooming; limited speech, and
- Aspiration, dehydration, malnutrition, UTIs, decubitus ulcers and sepsis.
Conclusions

- Estimates of life expectancy should be central factor in determining risks and benefits of treatments.
- End of life discussions result in less aggressive therapist and earlier hospice referrals.
- Physicians tend to refer to hospice too late.
Pay for performance may create a conflict of interest by placing income above what is medically appropriate.

Quality of care has two dimensions:
- The skill with which the care is delivered
- Appropriateness of the services
Conclusions Cont’d

- Appropriateness of services must include the patient preferences.
- Patient preferences are influenced by their understanding of the probability of their survival.
How can group medical directors incorporate this knowledge into actions by physicians?

- Medical Director education program for physicians with Tufts Medicare Preferred HMO members
- Direct physician education (speaker’s bureau)
- Use prognostic algorithm and EMR reports to calculate prognosis on subset of Tufts Medicare Preferred HMO population, to identify those who would not benefit from treatment before deciding on treatment
- Expand Potential Palliative Care Registry using claims data to identify larger candidate population (esp. dementia plus UTI, sepsis, malnutrition, or dehydration codes)
- Other ideas?
Advance Directives
Part of Tufts Health Plan Medicare Preferred’s Palliative Care Initiative
Denise Kress, MS, GNP, BC Director Care Management Senior Products
Palliative Care Initiative: Program Components

- Physician and Case Manager education on end-of-life discussions
- Palliative Care consultant network
- Improved service from Hospice agencies
- Improved Claims processes for members on Hospice
- “Poor Prognosis” registry to stimulate end-of-life planning discussions and preparations, including hospice when appropriate
- Monitoring and feedback on hospice referral rates, length of stay, and % of population in hospice, by group
- Advance Directives discussions facilitate later life planning decisions including Hospice election
Advance Directives

- Advance Directives include Living Wills, DPAHC, and other tools to communicate life goals, priorities, and decision-making in advance of incapacity for decision making.

- Patient Self-Determination Act (1991) set requirements for Health Plans and Hospitals to have policies on honoring advance directives and to disseminate those policies to members.

- Discussions about Advanced Directives should be part of care of every Medicare member, before poor prognosis.

- As members approach end of life, physicians should update those discussions with a clearer picture of likely dying scenarios.
  - This will allow members to more specifically instruct their proxies on likely decisions that may need to be made.
Advocate Directives

- Discussions about life planning provide a natural transition for discussions about prognosis.

- When further treatments are of questionable benefit, prior life planning discussions set the stage for discussions about the option of Hospice vs. continued, futile attempts at disease eradication.

- Advance directive rates are low, when studied, usually in the range of 20 - 30% in Medicare populations.
Advance Directives

- Status One HRCM program now is able to produce a report of members with or without an Advance Directive [as reported by member or caregiver] who are enrolled in the Status One program [5% of population with high risk of hospitalization]

- We now have these data by Tufts Medicare Preferred HMO group, as of one point in time [8/09]

- When this report is provided to you:
  - Members without an advance directive should be prompted to have this discussion annually, unless they have requested not to have that discussion
  - Members with an Advance Directive that is not accessible to the PCP and home hospital should be asked [by PCP or office staff] to provide the document for their medical record
    - Advance Directives in a safe deposit box or attorney’s office are not helpful in medical decision-making
  - If a member has provided the PCP with an advance directive, but the member told Status One HRCM they do not have one, the member or caregiver should be reminded that the document exists, and asked if she would like to update it
Advance Directives: What Should Your PCPs Do?

- EMR field to identify available Advance Directives (which are scanned into EMR)

- Review lists for your pod
  - If no Advance Directive flagged, but you have one ask patients if they want to make changes to the document.
  - If no Advance Directive flagged, and you don’t have one set up an appt. to discuss with the patient
  - If Advance Directive flagged, ensure you have a copy or request one from the patient
  - If you have EMR, ensure that the EMR’s Advance Directive flag is checked
Advance Directives: Patient Conversations

- If physicians are reluctant to have these discussions
  - Pull in additional resources (social workers, Palliative Care consultants)
  - Train your physicians on having these conversations.

  - Tufts Medicare Preferred HMO Palliative Care Program Manager can provide tools and support, in some cases including live training.

  - Provide incentives for PCPs to have these conversations
Prognosis

- Why is it Important
- Prior Presentation Summary
- Prognosis on Oncology
Summary of Presentation 5/09

- Norman Weinberg, MD
Predicting Survival

Graph removed due to copyrights.
Life expectancy graph removed due to copyrights

Reference: Walter LC, Covinsky KE. Cancer screening in elderly patients: a framework for individualized decision making. JAMA. 2001;285:2750-2756, Figure 1.
Last accessed on June 4, 2012
Prognosis: Next Steps

- How can group medical directors incorporate this knowledge into actions by physicians?

- Group Medical Directors
  - Medical Directors to deliver or arrange education program for physicians with Tufts Medicare Preferred HMO members
  - Use prognostic algorithms and EMR reports to calculate prognosis on subset of the Tufts Medicare Preferred HMO population. Identify those who would not benefit from treatment before deciding on treatment

- Tufts Health Plan Medicare Preferred
  - Expand Potential Palliative Care Registry using claims data to identify larger candidate population (esp. dementia plus UTI, sepsis, malnutrition, or dehydration codes)
  - Tufts Health Plan Medicare Preferred provide additional education to Medical Directors on Prognosis
  - Other ideas?
Prognosis in Terminal Illness: Physicians’ Accuracy & Preferences for Disclosure

Elizabeth B. Lamont, MD, MS
Hematology-Oncology Unit
Massachusetts General Hospital
Department of Health Care Policy
Harvard Medical School
Guest Speaker

- **Dr. Lamont** is a medical oncologist whose main academic focus is epidemiology and outcomes research. She studies how non-malignant factors affect the development, diagnosis, and treatment of cancer. Within this focus, she has particular interest in the use of large administrative data sets to examine the role of patient demographic factors (including age, race and poverty), patient clinical factors (including medical comorbidity), and geographic factors including area-level social attributes and health care availability) in affecting patient care and clinical outcomes. Particular areas of inquiry include cancer care of the elderly and cancer care at the end of life.

- **Dr. Lamont** received her MD degree from Dartmouth Medical School. She completed her Internal Medicine residency at B&W, and Oncology and Ethics fellowships at U. of Chicago. She is an Assistant Professor of Medicine and Health Care Policy at Harvard Medical School, practices oncology at MGH and has numerous publications and research projects to her credit.
Motivation

- Prognosis is an estimate of survival
- Prognosis is central to medicine
- Is prognosis at the end of life important?
Components of Prognosis

- **MDs formulate prognoses**
  - Prognostic accuracy

- **MDs communicate prognoses**
  - Prognostic disclosure
Part I: MDs’ Prognostic Accuracy
Design

- Prospective cohort study

- All patients admitted to 5 Chicago hospices during 130 consecutive days in 1996, followed until June 1999

- Referring physicians contacted

- 4 minute telephone survey regarding prognosis and other information

- Administrative data and mortality follow-up
Background

- MDs frequently prognosticate near the end-of-life

- Prior research on prognostic accuracy is limited
  - Small numbers of patients (<100)
  - Small numbers of MD prognosticators (<4)
  - No evaluation of patient or MD determinants of accuracy
  - Conflation of pessimistic and optimistic error
Study Goals

- To characterize MDs’ prognostic accuracy in terminally ill patients
- To evaluate determinants of MDs’ accuracy
Prognosis Variables

- **Formulated Prognosis:**
  - “What is your best guess or estimate of how long you think this patient has to live?”

- **Observed Survival:**
  - Date of date of death minus date of survey
Outcome Variable

- Prognostic Accuracy Variable
  - Accurate Prognosis
    - (observed/formulated = 0.67-1.33)
  - Optimistic Prognosis
    - (observed/formulated < 0.67)
  - Pessimistic Prognosis
    - (observed/formulated > 1.33)
Covariates

- Patient characteristics
  - Demographic
  - Disease

- Physician characteristics
  - Demographic
  - Practice
  - Other

- Patient-Physician relationship characteristics
  - Strength
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>68.6 years (± 17.4)</td>
</tr>
<tr>
<td>Sex</td>
<td>Female 55%</td>
</tr>
<tr>
<td>Diagnosis (Dx)</td>
<td>Cancer (64.7%), AIDS (12.3%), Other (23.0%)</td>
</tr>
<tr>
<td>Duration</td>
<td>32 weeks</td>
</tr>
<tr>
<td>ECOG</td>
<td>3 (greater than &gt;50% day in bed)</td>
</tr>
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</table>
**MD Characteristics (N=365)**

<table>
<thead>
<tr>
<th>Practice</th>
<th>18 years (± 10.2)</th>
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<tbody>
<tr>
<td>Sex</td>
<td>Male 80%</td>
</tr>
<tr>
<td>Specialty</td>
<td>Internal medicine (31.8%), oncology (17.0%), non-onc subspecialties (19.8%)</td>
</tr>
<tr>
<td>Similar Patients</td>
<td>5 in previous 12 mos</td>
</tr>
<tr>
<td>Hospice Referrals</td>
<td>8 in previous 12 mos</td>
</tr>
</tbody>
</table>
Characteristics Pt/MD Pairs (N=504)

<table>
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<tr>
<th>Duration</th>
<th>52 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>7 contacts in past 3 mos</td>
</tr>
</tbody>
</table>
| Recency   | 7 days since last examination  
                         7 days since last contact |
Results

- For almost all patients (96.4%), MDs were able to formulate a prognosis.

- For these 486 patients:
  - Median Formulated Survival: 75 days
  - Median Observed Survival: 24 days
Formulated Px vs. Observed Survival in Terminally Ill Hospice Patients (N=486)

- Accurate Px 20% (92/486)
- Optimistic Px 63% (295/486)
- Pessimistic Px 17% (81/486)

Christakis NA, Lamont EB, *BMJ* 2000
Multivariate Results

- Most experienced MDs most accurate
- Stronger patient-MD relationships associated with less accuracy
- Error homogeneously distributed and no predictors of optimistic error
Limitations

- Nature of sample
- Manner in which prognoses elicited
- Possible non-response bias
Conclusions

- Physicians inaccurate and optimistic in prognoses for terminally ill patients

- Error uniformly distributed among both physicians and patients

- These phenomena may interfere with optimal care at the end of life
Part II: MDs’ Preferences for Prognostic Disclosure
Background

- What do MDs tell patients about prognosis?
- Studies comparing MD and patient prognostic estimates reveal a disparity.

Do patients misinterpret or deny poor prognoses?

or

Do MDs think one thing about prognosis, but tell their patients something better?
Study Goals

- To determine MDs’ preferences for prognostic disclosure to terminally ill cancer patients

- To evaluate determinants of MDs’ preferences for prognostic disclosure
Design

- Prospective cohort study

- 326 of 412 eligible cancer patients (79%)

- Telephone survey of referring physicians regarding prognosis and other information

- Administrative data and mortality follow-up
Prognosis Variables

- **Formulated Prognosis:**
  - “What is your best estimate of how long you think this patient has to live?”

- **Communicated Prognosis:**
  - “If the patient or his/her family were to push you very hard to predict a specific range of time that the patient most likely had to live, what would you say to the patient?”
Outcome Variable

- Prognostic disclosure variable:
  - Frank disclosure
    - (communicated=formulated)
  - Non-disclosure
    - (formulated, but would refuse to communicate)
  - Discrepant optimistic disclosure
    - (communicated>formulated)
  - Discrepant pessimistic disclosure
    - (communicated< formulated)
## Patient Characteristics (N=326)

<table>
<thead>
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<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>69.2 years</td>
</tr>
<tr>
<td>Sex</td>
<td>60% female</td>
</tr>
<tr>
<td>Primary Tumor</td>
<td>lung (28%), colorectal</td>
</tr>
<tr>
<td></td>
<td>breast (10%), pancreas (8%)</td>
</tr>
<tr>
<td>Duration</td>
<td>32 weeks</td>
</tr>
<tr>
<td>ECOG PS</td>
<td>3 (＞50% of day in bed)</td>
</tr>
<tr>
<td>Characteristic</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Practice experience</td>
<td>17 years</td>
</tr>
<tr>
<td>Sex</td>
<td>80% male</td>
</tr>
<tr>
<td>Specialty</td>
<td>IM/Geriatrics (37%), Oncology</td>
</tr>
<tr>
<td>(23%), other (40%)</td>
<td></td>
</tr>
<tr>
<td>Confidence in Px</td>
<td>70%</td>
</tr>
<tr>
<td>Similar patients</td>
<td>3 pts in prior 12 mos</td>
</tr>
<tr>
<td>Hospice referrals</td>
<td>8 pts in prior 12 mos</td>
</tr>
<tr>
<td>Characteristics Pt/MD Pairs (N=326)</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td></td>
</tr>
<tr>
<td>Duration</td>
<td>42 weeks</td>
</tr>
<tr>
<td>Contacts</td>
<td>8 contacts in prior 3 mos</td>
</tr>
<tr>
<td>Last physical exam</td>
<td>7 days</td>
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</table>
Communicated Prognosis

- Disclosure preferences:
  - Frank disclosure 37%
  - Non-disclosure 23%
  - Discrepant disclosure 40%
Discrepant Prognostic Communication

- For the patients (N=232) in whom disclosure was favored by physicians:
  - Median formulated px: 75 days
  - Median communicated px: 90 days
Communicated vs. Formulated Prognosis in Terminally Ill Cancer Patients (N=232)

- Frank Pk: 37% (111/300)
- No Pk: 23% (68/300)
- Discrepant Pk: 40% (121/300)

Lamont EB, Christakis NA Annals 2001
Multivariate Results

- As patient age increased, frank disclosure increased

- As physician experience increased, frank disclosure decreased

- With stronger patient-MD relationships, frank disclosure decreased

- As MD confidence in the formulated prognosis decreased, non-disclosure increased
Limitations

- Communicated prognosis is hypothetical
- Possible age-period-cohort effects
- Generalizability
Conclusions

- Most MDs (63%) do not favor frank disclosure of prognoses to their inquiring terminally ill cancer patients

- This behavior may account for part of the disparity in prognostic understanding between patients and MDs
Synthesis of Parts I and II
Summary of Part I and II

- Physicians are generally inaccurate and optimistic in their estimates of patient survival.

- Physicians favor discrepant and usually optimistic disclosure of survival estimates to patients over frank disclosure.

- Patients may then become twice removed from their true survival, both times towards a falsely optimistic prognosis.
Communicated, Formulated and Observed Survival in Terminally Ill Cancer Patients (N=300)

% Surviving

Time (days)

Communicated Prognosis
Formulated Prognosis
Observed Survival

Lamont EB, Christakis NA Annals 2001
Implications

- Phenomena may compromise patient care at the end of life

- Better training for physicians in science of prognosis and art of disclosure
What Can MDs to Improve Px Accuracy?

- Prognostic opinions from colleagues
- Existing prognostic information from literature
  - Best supportive care arms of clinical trials
  - Natural history series of untreated patients
- Scales developed by supportive care researchers
  - Morita, Palliative Prognostic Index (PPI)
  - Glare, Palliative Prognostic Score (PaP)
Prognostication Tools: PPI

- Table removed due to copyrights

<table>
<thead>
<tr>
<th>PPI Score</th>
<th>Median Survival (days)</th>
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<tbody>
<tr>
<td>0.0-2.0</td>
<td>90</td>
</tr>
<tr>
<td>2.1-4.0</td>
<td>61</td>
</tr>
<tr>
<td>&gt;4.0</td>
<td>12</td>
</tr>
</tbody>
</table>

Morita T, et al. Support Care Cancer. 1999
## Prognostication Tools: PaP

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Assessment</th>
<th>Partial Score</th>
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<tr>
<td>Dyspnea</td>
<td>No</td>
<td>0</td>
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<tr>
<td></td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Anorexia</td>
<td>No</td>
<td>0</td>
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<tr>
<td></td>
<td>Yes</td>
<td>1.5</td>
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<tr>
<td>Karnofsky Performance Status</td>
<td>&gt; 30</td>
<td>0</td>
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<tr>
<td></td>
<td>10 – 20</td>
<td>2.5</td>
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<tr>
<td>Clinical Prediction of Survival (weeks)</td>
<td>&gt; 12</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>11 – 12</td>
<td>2</td>
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<tr>
<td></td>
<td>7 – 10</td>
<td>2.5</td>
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<td></td>
<td>5 – 6</td>
<td>4.5</td>
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<td></td>
<td>3 – 4</td>
<td>6</td>
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<td></td>
<td>1 – 2</td>
<td>8.5</td>
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<tr>
<td>Total WBC (x10^9/L)</td>
<td>&lt; 8.5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>8.6 – 11</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>&gt; 11</td>
<td>1.5</td>
</tr>
<tr>
<td>Lymphocyte Percentage</td>
<td>20 – 40 %</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>12 – 19.9 %</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>&lt; 12 %</td>
<td>2.5</td>
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<table>
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<tr>
<th>RISK GROUP</th>
<th>30 DAY SURVIVAL</th>
<th>TOTAL SCORE</th>
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<tbody>
<tr>
<td>A</td>
<td>&gt; 70 %</td>
<td>0 – 5.5</td>
</tr>
<tr>
<td>B</td>
<td>30 – 70 %</td>
<td>5.6 – 11</td>
</tr>
<tr>
<td>C</td>
<td>&lt; 30 %</td>
<td>11.1 – 17.5</td>
</tr>
</tbody>
</table>


Glare, PA, et al. JCO 2004
What Can MDs to Improve Prognostic Disclosure?

- Follow published literature re: steps for delivering “bad news”
  - Preparation
    - MD research on Prognosis
  - Content
    - Bad news early in encounter
  - Patient Response
    - Acknowledge it and engage it
  - Close
    - Plan for what to do next
      - Reassurance re: your continued care
      - Schedule return appt even if patient going to hospice

Lamont and Christakis, *JAMA* 2003
2009 HOSPICE UTILIZATION RATE

- **Goal** 2.00%
- **National Norm** 1.80%
- **Southboro** 2.06%
- **Tufts Health Plan Medicare Preferred Network** 1.41%
2009 Groups with hospice rate >2%

- Group A 3.57%
- Group B 3.50%
- Group C 2.92%
- Group D 2.68%
- Group E 2.27%
- Group F 2.20%
- Group G 2.19%
- Group H 2.14%
- Group I 2.10%
- Group J 2.06%

Group names removed, please contact Tufts Health Plan Medicare Preferred if you require the data on best practices.
What Best Practices improve Hospice Utilization in Top 10 Groups?

IDENTIFY

- Palliative care champion for group
- Active case finding using Tufts Health Plan Medicare Preferred palliative care registry
- Weekly group discussion of palliative care patients with case manager and medical director or PCP

PREPARE

- Advance directive initiative
- Active palliative care consult program

REFER

- Partnership with select hospice(s)
Palliative Care Champion for Group

- Group Medical Director

- Tufts Health Plan Medicare Preferred Medical Director

- Physician Advocate for Palliative Care

- Inpatient Palliative Care Physician
Palliative Care Registry

- Tufts Health Plan Medicare Preferred provides report quarterly (Feb., May., Aug., Nov.)

- It is to be used for case finding patients with a poor prognosis or good candidates for advance directives, health care proxy or plan for hospice referral.

- Cases are added to Medical Management meetings with Case Manager and Medical Director or PCP for discussion.
Tufts Health Plan Medicare Preferred Registry

<table>
<thead>
<tr>
<th>PCP</th>
<th>New</th>
<th>First Name</th>
<th>DOB</th>
<th>ESRD</th>
<th>COPD</th>
<th>CHF</th>
<th>LDL</th>
<th>Dementia</th>
<th>Alere</th>
<th>Status One</th>
<th>Last Assessed</th>
<th>Comments</th>
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<tbody>
<tr>
<td>BOB</td>
<td>Y</td>
<td>MIKE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Y</td>
<td>06-Nov-08</td>
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<tr>
<td>Y</td>
<td>RICK</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<td></td>
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<td></td>
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<td>Y</td>
<td>SAM</td>
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<td>Y</td>
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<td></td>
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<td>06-Jan-10</td>
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</table>
Discussion: Southboro & Group Practices

- Palliative care champion for group
- Active case finding using Tufts Health Plan Medicare Preferred Palliative Care Registry
- Weekly group discussion of palliative care patients with case manager and medical director or PCP
Palliative Care Consult

- Advance Care Planning
- Pain and Symptom Management
- Physicians Board Certified in Palliative Medicine
- Consults in the Home
- No need for Homebound Status
- Not a Hospice Referral

Palliative Care Consult Typical Cost

- **Initial Visit** $95-$118
  - 90 Minutes

- **Follow Up Visit** $65 X 2
  - 45 Minutes

- **Home Palliative Care Consult Total** $250
  - Total 3 ½ Hours
Advance Directive Initiatives

- Letter to members with health care proxy (HCP) attached returned by mail or next appointment

- Status one advance directive / HCP, list from December, 2009

- Tufts Health Plan Medicare Preferred registry provides list of patients needing advance directives / HCP

- Every new admission or every patient turning 65 becomes eligible for advance directives / HCP

- Use of the waiting room for materials like “5 Wishes” for patient education
## Status One Advance Directives

<table>
<thead>
<tr>
<th>Patient First Name</th>
<th>DOB</th>
<th>Advance Directive*</th>
<th>HCP*</th>
<th>PCP First Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>5/13/1900</td>
<td>Yes-D</td>
<td>Yes-D</td>
<td>TOM</td>
</tr>
<tr>
<td>B</td>
<td>9/25/1900</td>
<td>Yes</td>
<td>No</td>
<td>JOHN</td>
</tr>
<tr>
<td>A</td>
<td>2/27/1900</td>
<td>No</td>
<td>Yes-D</td>
<td>MIKE</td>
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<tr>
<td>L</td>
<td>11/28/1900</td>
<td>Yes-D</td>
<td>Yes-D</td>
<td>MICKEY</td>
</tr>
<tr>
<td>R</td>
<td>1/18/1900</td>
<td>Yes-D</td>
<td>Yes</td>
<td>DONALD</td>
</tr>
<tr>
<td>J</td>
<td>5/1/1900</td>
<td>Yes-D</td>
<td>Yes</td>
<td>POOH</td>
</tr>
<tr>
<td>M</td>
<td>11/11/1900</td>
<td>No</td>
<td>No</td>
<td>TIGGER</td>
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<tr>
<td>M</td>
<td>7/4/1900</td>
<td>No</td>
<td>Yes-D</td>
<td>EYORE</td>
</tr>
<tr>
<td>N</td>
<td>9/12/1900</td>
<td>Yes</td>
<td>Yes</td>
<td>CHRIS</td>
</tr>
</tbody>
</table>
Discussion: Southboro & Group Practices

- Advance Directive Initiative

- Active Palliative Care Consult Program
Partnership with Select Hospices

- Accepts admissions outside of normal business hours
- Accepts patients with no primary caregiver
- Accepts patients receiving palliative care such as chemotherapy, radiation, IV hydration and occasional transfusions.
- Prevents revocation of the hospice benefit
- Builds referral program with local Home Health Agencies and Extended Care Facilities to ease referral of patients predicted to need hospice care.
- Provides bereavement support groups and advance directive, health care proxy education to local medical groups and their patients on a regular basis.
- Provides onsite case finding of palliative care patients at local medical groups and assist with appropriate end of life care planning and consultation.
Discussion: Southboro & Group Practices

- Partnership With Select Hospice(s)
Other Best Practices?

- Individual Group Initiatives
What Can a Palliative Care Program Manager Do for My Group?

- Level of Care Consult on Palliative Care Cases
- Educate Physicians / Case Managers about Hospice Level of Care
- Work with Case Manager to evaluate Hospices for a Partnership Relationship
- Partner with Case Manager / Group to Resolve Issues with Partnership Hospices
- Work with Group and Partnering Hospice so that:
  - Physician Relationship with Certain Hospice Clinicians can be established
  - On-site Case Finding Palliative Care Rounds
  - On-site Advance Care Planning Education for your Patients
  - On-site Bereavement Group for your Patient’s Families
8

Palliative Care Update:
Strategies to Put Patients at the Heart of Care

Jatin Dave, MD, MPH
Susan Garrels, LICSW, MSW

TUFTS Health Plan
No one does more to keep you healthy.
Outline

- Review past Tufts Health Plan Medicare Preferred Medical Directors presentations on Palliative Care/Hospice

- Provide an update on 2011 Tufts Health Plan Medicare Preferred Palliative Care/Hospice Initiatives
  1. Identification/Prognostication
  2. Patient-Centered Decision Support
  3. High Quality Palliative Care/Hospice Network

- Review a recent study on palliative care in NSCLC patients

- Ask for your feedback on 2012 initiatives for Palliative/Hospice Care
## Selected Previous Tufts Health Plan Medicare Preferred Presentations

<table>
<thead>
<tr>
<th>Title &amp; Presenter</th>
<th>Month, Yr</th>
<th>Key Messages</th>
</tr>
</thead>
</table>
| Using Hospice Program Denise Kress | April, 2007 | Benefits of Hospice  
Obstacles to Utilizing Hospice  
Strategies to Overcome the Obstacles |
| Palliative Care Gail Gazelle    | September, 2007 | Palliative Care (PC) vs. Hospice  
Need for PC network  
PC as a growing specialty |
| Palliative Care – Next Step Status Deborah Amato | March, 2009 | Data on Hospice Utilization by Groups  
Strategies used by Tufts Health Plan Medicare Preferred Best Practices e.g. Reviewing hospice registry by PCP or sharing with oncology specialists |
| Prognosis & its Impact on Care Goals Norman Weinberg | May, 2009 | Importance of Prognosis for Decision Making Basic Prognostication Skills |

Copies of any prior program available upon request
<table>
<thead>
<tr>
<th>Title and Presenter</th>
<th>Month, Yr</th>
<th>Key Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance Directives</td>
<td>November, 2009</td>
<td>Importance of Advance Directives for Every Member</td>
</tr>
<tr>
<td>Denise Kress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prognosis in Terminal Illness: Physicians’ Accuracy &amp; Preferences for Disclosure</td>
<td>November, 2009</td>
<td>Physician Overestimation (X2 compared to real prognosis) &amp; Overly-optimistic Communication (X2 compared to estimated prognosis)</td>
</tr>
<tr>
<td>Elizabeth B. Lamont, Jonathan Harding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palliative Care Best Practices</td>
<td>February, 2010</td>
<td>Palliative Care Champion for Each Group</td>
</tr>
<tr>
<td>Nancy Chane and Daniel J. Crowe,</td>
<td></td>
<td>Active Case Finding Using Palliative Care Registry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weekly Medical Group Discussion of Palliative Care Patients During Rounds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Active Palliative Care Consult Program</td>
</tr>
</tbody>
</table>

Copies of any prior program available upon request
Summary of Interventions

- ↑ Members with Advanced Directives
- Follow documented Advanced Directives
  - Get them to the site of care when needed
  - Socialize clinical staff to follow them
- ↑ Palliative Care consultations
- ↑ Use of Hospice benefits
Hospice Utilization Over the Last Five Years has been around 1.5%

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
<th>Est. Mean LOS</th>
<th>Est. Median LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1.45%</td>
<td>61</td>
<td>16</td>
</tr>
<tr>
<td>2008</td>
<td>1.56%</td>
<td>68</td>
<td>16</td>
</tr>
<tr>
<td>2009</td>
<td>1.59%</td>
<td>78</td>
<td>22</td>
</tr>
<tr>
<td>2010</td>
<td>1.68%</td>
<td>90</td>
<td>28</td>
</tr>
<tr>
<td>2011</td>
<td>0.94% to end of Q2</td>
<td>60</td>
<td>22</td>
</tr>
</tbody>
</table>
If we think High-quality Palliative Care/Hospice add value to our members, what are the potential reasons for under-use of Hospice?

Palliative Care?
## 2011 Palliative Care/Hospice Needs Assessment

<table>
<thead>
<tr>
<th>Groups</th>
<th>Current Tufts Health Plan Medicare Preferred Processes</th>
<th>Palliative Care Network</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Methods</strong></td>
<td>Focus groups and interviews with physician leaders and CMs</td>
<td>Reviewed cases referred by CMs, quality managers, MDs – anyone who reviews care</td>
</tr>
<tr>
<td><strong>Barriers</strong></td>
<td><strong>Member Level:</strong> Unrealistic goals, Lack of planning</td>
<td>Lag in adjustment for claims paid by hospice/FFS Medicare</td>
</tr>
<tr>
<td></td>
<td><strong>Clinician Level:</strong> Prognostication, Communication, Lack of goals of care discussion, PCP-specialist communication gap</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Systems Level:</strong> SNF and Hospice</td>
<td></td>
</tr>
</tbody>
</table>

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163
Our Current Approach

- **Step 1**
  Identifying potential members needing Palliative Care/Hospice

- **Step 2** Patient-Centered Decision Support
  - a. Assessment
  - b. Prognostication
  - c. Goals of Care Discussion
  - d. Education/Counseling

- **Step 3**
  Referral to High-quality Palliative Care/Hospice Provider if needed
Step 1: Identifying Potential Members Needing Palliative Care/Hospice

Refer to Palliative Care if:

- **Potential bedside clinical Triggers**
  - Diagnosis: Ca, CHF, COPD, ESRD, ESLD, Adv. Dementia
  - Functional Status
  - High Symptom Burden
  - Discordance between family members, reality/current goals
  - Patient Preferences
  - Provider Preferences: Prognostication, Goals of Care discussion.

Refer to Hospice if:

- < 6 months of estimated prognosis
- Comfort Care during last hours/weeks
  (although not ideal considering it takes about 6-8 weeks to establish trusted relationship)

- **From Tufts Health Plan Medicare Preferred reports**
  - Palliative Care Flag on High-risk member list
  - Readmissions Report
  - High Cost Members Report
Step 2: Patient-Centered Decision Support

A. Additional Patient Assessment with Emphasis on Triggers Leading to Need for PC/Hospice
   - Severity of Disease and/or Symptoms
   - Rate of Disease Progression
   - Co-morbidities
   - Functional Status (e.g., ADL/IADL, Palliative Care Performance Scale, Karnofsky Performance Scale)
   - Pt/Family Expectations

B. Prognostication
   - Expected disease trajectory with different treatment options
C. Patient Goals of Care

- What is important to you?
- Five Wishes, Hard Choices or Other tools
- Longevity vs. Comfort Trade-off
Who Can Initiate Goals of Care Discussions

PCP (Ideally)

SPECIALIST

MEMBER

CM/SW (Can create a foundation)

PALLIATIVE CARE CONSULTANT (if needed)
How to Have Structured Goals-of-Care Discussion
A Time-Efficient Useful Model

- Focus: Goals of Care vs. Specific Treatment Options. May not anticipate all treatment options

- Over-arching goals of medical care
  - Life Prolongation
  - Functional maintenance
  - Comfort

- Goals of care + Realistic prognosis/choices can help in creating a good treatment plan

- There are times in medicine when we are asked to consider trade-offs especially between Longevity and Comfort

Member’s Condition Impacts Goals: This may not be obvious to our members, our guidance can help them set up realistic goals.

<table>
<thead>
<tr>
<th>Member Condition</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robust</td>
<td>Life Prolongation</td>
</tr>
<tr>
<td>Frail</td>
<td>Functional Maintenance</td>
</tr>
<tr>
<td>Dying</td>
<td>Comfort</td>
</tr>
</tbody>
</table>
Translating Goals of Care into Potential Clinical Pathways for Decision Making

Patient/Provider/Family Discussion of treatment goals

1 Longevity

2 Comprehensive maintain function, prolong life

3 Basic maintain function, maintain comfort

Function

4 Comfort maximize comfort, maintain function

Comfort

5 Hospice only goal is comfort

Another Goals of Care Discussion Example

Can You and Your Loved Ones Answer These Questions?

1. On a scale of 1 to 5, where do you fall on this continuum?

   1: Let me die without medical intervention
   2: 
   3: Don’t give up on me no matter what, try any proven and unproven intervention possible
   4: 
   5: 

2. If there were a choice, would you prefer to die at home, or in a hospital?

3. Could a loved one correctly describe how you’d like to be treated in the case of a terminal illness?

4. Is there someone you trust whom you’ve appointed to advocate on your behalf when the time is near?

5. Have you completed any of the following: written a living will, appointed a healthcare power of attorney, or completed an advance directive?
Based on Foundation (Longevity vs. Comfort) Clinician Can Help Patients/Family Make Specific Decisions

1. Do Not Resuscitate/Do Not Intubate
2. Do Not Hospitalize
3. No Artificial feeding
4. No IV Antibiotics
5. No IV Hydration
D. Patient Education/Counseling

- Alignment: Discuss with patient/family appropriate treatment options based on his/her goals

- Recommendation: Offer appropriate treatment choice based on your clinical judgment and experience but let patient know about other options as well

- Negotiation/Support: Offer Palliative Care/Hospice for Appropriate Patients/Families
Step 3: Palliative Care Consultation Network and Hospice Options

- Palliative Care consultants can help with
  1. Symptom Management
  2. Decision Support -- “bridge” to hospice (the bridge is a conversation, not a benefit. Who is going to help with these conversations?)
  3. Psychosocial Support

- We have identified a potential network of such consultants but we need groups to include them in their “referral circle” to include them in the Tufts Medicare Preferred HMO specialist network

- We need groups to identify whom, from the updated list we will send, to contract with

- PC specialists (NP or MD) can make house call or have joint visit in your office. Few specialists are also credentialed in SNFs as well as hospitals
Financial Impact of Hospice on MA Plans

- No need to contract directly with Hospice
- Reduction in Premium
- Responsibility for medical claims
  - MCO: for Ancillary Benefit (e.g., Vision)
  - Medicare (Non-hospice diagnosis related)
  - Hospice Agency (All related to Hospice Diagnosis)
- Costs to MA Plan in last 6 months of life, on and off hospice (2005 data)
  - No hospice… $5600 pmpm
  - Some hospice in last 6 months… $3150 pmpm
  - Hospice only… $136 pmpm
- MLR for MA Plan on and off hospice (2005 data)
  - No Hospice… 4.01
  - Some hospice in last 6 months… 3.53
  - Hospice months only… 1.03
Expenditures (in 1996 dollars) in the last year of life per month

Graph removed due to copyrights.

Total cost in the last year of life:
MA: $28588
CA: $27814
Association Between Cost and Quality of Death in the Final Week of Life

Graph removed due to copyrights

Higher health care cost in the last week of life lead to worse quality of life in the last week of life.

A Cumulative Cost: Hospice Users vs. Non-Users: Hospice Referral 50-80 days Before Death Most Cost Effective

Graph removed due to copyrights
A recent study on palliative care in NSCLC patients

The New England Journal of Medicine

Original Article

Early Palliative Care for Patients with Metastatic Non–Small-Cell Lung Cancer

Helping cancer patients live better, longer

Cancer strategy: Easing the burden
Boston Globe (8/19/10)

Palliative care can help cancer patients live longer
NBC Nightly News (9/10/10)

USA Today (8/18/10)

Palliative Care Extends Life, Study Finds

The New York Times (8/18/10)

Study shows value of quality-of-life cancer care
The Washington Post (8/18/10)

New Studies in Palliative Care
National Public Radio, The Diane Rehm Show (8/24/20)

Study: Advanced Cancer Patients Receiving Early Palliative Care Lived Longer
The Wall Street Journal (8/18/10)
Study Design

Baseline Data Collection

150 patients with newly diagnosed metastatic NSCLC

Randomized

Early palliative care integrated with standard oncology care

Meet with palliative care within 3 weeks of consent and at least monthly thereafter

Standard oncology care

Meet with palliative care only when requested by patient, family or oncology clinician.
# Study Intervention

## Palliative Care Guidelines

### Illness understanding and education
- Inquire about illness and prognostic understanding
- Offer clarification regarding treatment goals

### Symptom management
- Pain
- Pulmonary symptoms (cough, dyspnea)
- Fatigue and sleep disturbance
- Mood (depression, anxiety)
- Gastrointestinal (anorexia, weight loss, nausea & vomiting, constipation)

### Decision-making
- Assess mode of decision-making
- Assist with treatment decision-making

### Coping with life-threatening illness
- Provide support and counseling for patients and families/caregivers

### Referral/Prescriptions
- Identify care plan for future appointments
- Indicate referrals to other care providers
- Note new medications prescribed
Study Objectives

Primary Objective:
- To measure the difference between study groups with respect to the change in QOL from baseline to 12 weeks

Secondary Objectives:
- Psychological distress at 12 weeks
- Resource utilization at the end-of-life
- Documentation of resuscitation preferences in the medical record
Study Flow

Assessed for eligibility (N=283) between June 2006 - July 2009

Excluded (n=9)
Not offered/refused (n=119)
Study closed during eligibility (n=4)

Randomly assigned (N=151)

Assigned to early palliative care (N=76)
Received early palliative care (N=77)

12 week follow up:
60 completed (89%)
10 died
7 did not complete:
1 transferred care
1 forms mailed/never returned
5 hospitalized or too ill

Assigned to standard care (N=75)
Received standard care (N=74)

12 week follow up:
47 completed (82%)
17 died
10 did not complete:
1 withdrawn
3 forms mailed/never returned
6 hospitalized or too ill
## Key Results

<table>
<thead>
<tr>
<th></th>
<th>Oncologic Care</th>
<th>Oncologic Care + Early Palliative Care</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median survival times</strong></td>
<td>8.9 months</td>
<td>11.6 months</td>
</tr>
<tr>
<td><strong>Depressed at 3 months</strong></td>
<td>38%</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Anxious at 3 months</strong></td>
<td>30%</td>
<td>25%</td>
</tr>
</tbody>
</table>

J. Temel, NEJM, August 19, 2010
Summary of Temel Study

- Compared with standard oncology care, early palliative care led to
  - ↑ QOL
  - ↓ Psychological distress
  - Longer Survival
  - More accurate illness understanding
  - Greater documentation of resuscitation preferences
  - Less aggressive care at the end of life
Conclusion

- We have presented on several topics related to Palliative Care/Hospice
- Our 2011 Tufts Health Plan Medicare Preferred Palliative Care/Hospice Initiatives focused on
  1. Identification/Prognostication
  2. Patient-Centered Decision Support
  3. High Quality Palliative Care/Hospice Network
- Temel et al study on palliative care in NSCLC patients showed that early palliative care does not shorten survival and improves QOL
- How we can further help with providing high-quality palliative/hospice care to our members with 2012 PC/Hospice initiatives?
- Future MD Meeting Topics on Palliative Care?
Additional Slides for Your Reference & PCP Education

- Importance of Palliative Care
- Common disease trajectories
- Myths and Physician Feelings
- Palliative Care vs. Hospice
- Prognostication Tools

TUFTS Health Plan
No one does more to keep you healthy.
## Demographics

<table>
<thead>
<tr>
<th></th>
<th>1900</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age at death</strong></td>
<td>46 years</td>
<td>78 years</td>
</tr>
<tr>
<td><strong>Top causes</strong></td>
<td>Infection, accident, childbirth</td>
<td>Cardiovascular disease, cancer, organ system failure</td>
</tr>
<tr>
<td><strong>Disability</strong></td>
<td>Not much</td>
<td>2-4 years before death</td>
</tr>
<tr>
<td><strong>Financing</strong></td>
<td>Private, modest</td>
<td>Public and substantial 83% Medicare</td>
</tr>
<tr>
<td><strong>Site of death</strong></td>
<td>Home</td>
<td>Hospital, nursing home</td>
</tr>
</tbody>
</table>

**Where do people die?**
- hospital: 50%
- nursing home: 30%
- home: 20%

**Where do people want to die?**
- home: 1<sup>st</sup>
- hospital: 2<sup>nd</sup>
- nursing home: NEVER

---

End-of-Life / Palliative Education Resource Center (EPERC), The Medical college of Wisconsin, 2008
http://www.mcw.edu/palliativecare/EPERC.htm
Different Disease Trajectories

1. Short Period of Decline

2. Chronic Illness with Exacerbations

3. Prolonged Dwindling

4. Sudden Neurological Impairment

Field M, Cassel C. Committee on Care at the End of Life, Division of Health Care Services, Institute of Medicine. Washington, D.C., 1997
Medical Myths

- If you tell a patient he is going to die, the patient will lose hope.
- Hospice care precludes treatment of treatable problems.
- Opiates given to treat pain depress respiration.
- Opiates given to treat pain are highly addictive.
- Opioid analgesics are too dangerous for the elderly.
- If a hospice patient lives longer than six months, the referring physician will be investigated by Medicare.

Labyak, M  Ten Myths and Facts about Hospice Care State Initiatives in End of Life Care Issue 11, August 2001:3
<table>
<thead>
<tr>
<th>Helplessness</th>
<th>Ethical/Legal realities</th>
</tr>
</thead>
<tbody>
<tr>
<td>“There is nothing more that I can do.”</td>
<td>Physicians are not obligated to provide care deemed medically futile</td>
</tr>
<tr>
<td>“I don’t want to be the one to tell him.”</td>
<td>Withdrawing care is legally and ethically identical to withholding care</td>
</tr>
<tr>
<td>“I can’t stop this treatment now, that would kill her. I wish we hadn’t started this.”</td>
<td>Quality of life of the pt and upholding an individual’s right to self-determination are hallmarks of good care.</td>
</tr>
<tr>
<td>“Continuing treatment in this case seems futile.”</td>
<td></td>
</tr>
</tbody>
</table>
Process of Goals of Care Discussion

1. Relationship Building
2. Negotiation
3. Documentation/implementation
4. Listen, Validate, Align
5. Educate on facts/choices while considering reality
6. Orders/treatment plan

TUFTS Health Plan Medicare Preferred
Commonly Misconstrued Phrases Used in End-of-Life Discussions with Patients

Table removed due to copyrights - available at http://www.aafp.org/afp/2008/0115/p167.html

Table 3.


Last accessed June 4, 2012
Talking Points

- "It isn’t time to discuss ACP."
  - “This is the best time to discuss, when member is fairly healthy and not in the midst of a crisis.”

- "I know the patient, they would want everything."
  - “I’ve had conversations with the member and he/she tells me their goals would be…”

- "That isn’t for me to discuss, let the specialist do it"
  - “The member really values your opinion and relationship.”

- "I don’t want them to lose hope or give up."
  - “Individuals feel less anxiety about the future when they have had these conversations with their PCPs.”

- “The daughter doesn’t want anyone to discuss this with mom.”
  - “I know it is hard navigating difficult family dynamics, is there any way I can help.

- Other suggestions on responses
Unlike Hospice, Palliative Care Does Not Require Patients To:

- Forgo curative treatment of underlying (terminal) disease
- Forgo acute hospitalization for the disease
- Accept palliation as primary goal of treatment
- Accept a 6-month or less prognosis
- Concurrent care for those <21
# Example of criteria for Palliative Care/Hospice (1)

<table>
<thead>
<tr>
<th></th>
<th><strong>Palliative Care</strong></th>
<th><strong>Hospice</strong></th>
</tr>
</thead>
</table>
| **Debility/Failure to Thrive** | - Greater than three chronic conditions in patient over 75 years old  
- Functional decline  
- Weight loss  
- Patient/family desire for low-yield therapy  
- Increasing frequency of outpatient visits, emergency department visits, hospitalizations | - Documentation of clinical progression of disease  
- ECOG three or more  
- No desire for aggressive treatment  
- Not a candidate for aggressive treatment  
- Frequent emergency room visits/frequent hospitalizations |
| **Cancer**           | - Uncontrolled signs and symptoms due to cancer or treatment  
- Introduced at time of diagnosis – if disease terminal  
- Introduced when disease progresses despite therapy | - Any patient with metastatic or inoperable cancer |
| **Heart Disease**    | - Stage III or IV heart failure despite optimal medical management  
- Angina refractory to medical or interventional management  
- Frequent emergency department visits or hospital admissions  
- Frequent discharges from implanted defibrillators despite optimal device and antiarrhythmic management | - Heart failure symptoms at rest  
- Ejection fraction less than 20%  
- New dysrhythmia  
- Cardiac arrest or syncope  
- Frequent emergency room visits for symptoms |
| **Pulmonary Disease**| - Oxygen-dependent, O₂ sats less than 88% on room air  
- Unintentional weight loss  
- Dyspnea with minimal to moderate exertion  
- Other pulmonary diagnoses, e.g., pulmonary fibrosis, pulmonary hypertension | - Dyspnea at rest  
- Signs or symptoms of right heart failure  
- O₂ sat or O₂ of less than 88%  
- PCO₂ greater than 50  
- Unintentional weight loss |
### Example of criteria for Palliative Care/Hospice (2)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Palliative Care</th>
<th>Hospice*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dementia</strong></td>
<td>• Behavioral problems</td>
<td>• Unable to walk, bathe or dress self without assistance</td>
</tr>
<tr>
<td></td>
<td>• Feeding problems – weight loss</td>
<td>• Incontinence</td>
</tr>
<tr>
<td></td>
<td>• Caregiver stress</td>
<td>• Less than six intelligible words</td>
</tr>
<tr>
<td></td>
<td>• Frequency of ED visits</td>
<td>• Frequent ER visits</td>
</tr>
<tr>
<td></td>
<td>• Increased safety concerns</td>
<td></td>
</tr>
<tr>
<td><strong>Liver Disease</strong></td>
<td>• Increased need for paracentesis for removal of ascitic fluid</td>
<td>• INR greater than 5</td>
</tr>
<tr>
<td></td>
<td>• Increased confusion (hepatic encephalopathy)</td>
<td>• Albumin less than 2.5</td>
</tr>
<tr>
<td></td>
<td>• Increased safety concerns</td>
<td>• Refractory ascites</td>
</tr>
<tr>
<td></td>
<td>• Symptomatic disease</td>
<td>• SBP</td>
</tr>
<tr>
<td><strong>Renal Disease</strong></td>
<td>• Dialysis</td>
<td>• Jaundice</td>
</tr>
<tr>
<td></td>
<td>• Stage IV or Stage V chronic kidney disease</td>
<td>• Malnutrition and muscle wasting</td>
</tr>
<tr>
<td><strong>Neurologic</strong></td>
<td>• Stroke</td>
<td>• Not a candidate for dialysis</td>
</tr>
<tr>
<td></td>
<td>• Parkinson’s</td>
<td>• Creatinine clearance of less than 15 mL/minute</td>
</tr>
<tr>
<td></td>
<td>• ALS – amyotrophic lateral sclerosis</td>
<td>• Serum creatinine greater than 6.0</td>
</tr>
<tr>
<td></td>
<td>• MS – multiple sclerosis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Frequent emergency room visits</td>
<td>• Albumin less than 2.5</td>
</tr>
<tr>
<td></td>
<td>• Unintentional weight loss</td>
<td>• Unintentional weight loss</td>
</tr>
<tr>
<td></td>
<td>• Decubitus ulcers</td>
<td>• Decubitus ulcers</td>
</tr>
<tr>
<td></td>
<td>• Homebound/bed confined</td>
<td>• Homebound/bed confined</td>
</tr>
</tbody>
</table>
## Palliative Performance Scale

<table>
<thead>
<tr>
<th>%</th>
<th>Ambulation</th>
<th>Activity Level Evidence of Disease</th>
<th>Self-Care</th>
<th>Intake</th>
<th>Level of Consciousness</th>
<th>Estimated Median Survival in Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Full</td>
<td>Normal No Disease</td>
<td>Full</td>
<td>Normal</td>
<td>Full</td>
<td>N/A</td>
</tr>
<tr>
<td>90</td>
<td>Full</td>
<td>Normal Some Disease</td>
<td>Full</td>
<td>Normal</td>
<td>Full</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>Full</td>
<td>Normal with Effort Some Disease</td>
<td>Full</td>
<td>Normal or Reduced</td>
<td>Full</td>
<td>N/A</td>
</tr>
<tr>
<td>70</td>
<td>Reduced</td>
<td>Can't do normal job or work Some Disease</td>
<td>Full</td>
<td>As above</td>
<td>Full</td>
<td>145</td>
</tr>
<tr>
<td>60</td>
<td>Reduced</td>
<td>Can't do hobbies or housework Significant Disease</td>
<td>Occasional Assistance Needed</td>
<td>As above</td>
<td>Full or Confusion</td>
<td>29   4  108</td>
</tr>
<tr>
<td>50</td>
<td>Mainly sit/lie</td>
<td>Can't do any work Extensive Disease</td>
<td>Considerable Assistance Needed</td>
<td>As above</td>
<td>Full or Confusion</td>
<td>30   11</td>
</tr>
<tr>
<td>40</td>
<td>Mainly in Bed</td>
<td>As above</td>
<td>Mainly Assistance</td>
<td>As above</td>
<td>Full or Drowsy or Confusion</td>
<td>18   8</td>
</tr>
<tr>
<td>30</td>
<td>Bed Bound</td>
<td>As above</td>
<td>Total Care</td>
<td>Reduced</td>
<td>As above</td>
<td>8    5  41</td>
</tr>
<tr>
<td>20</td>
<td>Bed Bound</td>
<td>As above</td>
<td>As above</td>
<td>Minimal</td>
<td>As above</td>
<td>4    2</td>
</tr>
<tr>
<td>10</td>
<td>Bed Bound</td>
<td>As above</td>
<td>As above</td>
<td>Mouth Care Only</td>
<td>Drowsy or Coma</td>
<td>1    1  8</td>
</tr>
<tr>
<td>0</td>
<td>Death</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

a. Survival post-admission to an inpatient palliative unit, all diagnoses (Virik 2002).
b. Days until inpatient death following admission to an acute hospice unit, diagnoses not specified (Anderson 1996).
c. Survival post admission to an inpatient palliative unit, cancer patients only (Morita 1999).
<table>
<thead>
<tr>
<th>CRITERION</th>
<th>ASSESSMENT</th>
<th>PARTIAL SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyspnea</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Anorexia</td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1.5</td>
</tr>
<tr>
<td>Karnofsky Performance Status</td>
<td>≥30: 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-20: 2.5</td>
<td></td>
</tr>
<tr>
<td>Clinical Prediction of Survival</td>
<td>&gt;12: 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12-11: 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-6: 2.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6-5: 4.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4-3: 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-1: 8.5</td>
<td></td>
</tr>
<tr>
<td>Total WBC (x10⁹/L)</td>
<td>≤8.5: 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.6 - 11: 0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;11: 1.5</td>
<td></td>
</tr>
<tr>
<td>Lymphocyte Percentage</td>
<td>20 - 40%: 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 - 19.9%: 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt; 12%: 2.5</td>
<td></td>
</tr>
<tr>
<td>RISK GROUP</td>
<td>30 DAY SURVIVAL</td>
<td>TOTAL SCORE</td>
</tr>
<tr>
<td>Risk Factor</td>
<td>Points</td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Recent NH admission</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-69</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>70-74</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>75-79</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>80-84</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>85-89</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>90-94</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>95-99</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>100+</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Shortness of breath</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Pressure ulcer stage 2+</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>ADL score 28</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Bedbound most of day</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Insufficient PO intake</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bowel incontinence</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>BMI &lt;18.5</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Weight loss</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ADL score: total dependence in bed mobility, dressing, toileting, transfer, eating, grooming, locomotion
- Insufficient Oral intake: Not consuming almost all liquids in prev 3 d, or >25% food uneaten at most meals
- Recent weight loss: >5% over prior 30d or >10% over prior 180d
- Scores of 16 and above correlated to observed 6m mortality >50% (Mitchell et al JPSM 11/5/10)
## Prognosis for Patients with Heart Failure

<table>
<thead>
<tr>
<th>Population</th>
<th>Survival Time</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EFFECT</strong> Hospitalized Patients with HF</td>
<td>30 day, 1 Year</td>
<td><a href="http://www.ccort.ca/Research/CHFRiskModel.aspx">http://www.ccort.ca/Research/CHFRiskModel.aspx</a></td>
</tr>
<tr>
<td><strong>Seattle Heart Failure Model</strong></td>
<td>1, 2 and 5 year</td>
<td><a href="http://www.SeattleHeartFailureModel.org">www.SeattleHeartFailureModel.org</a></td>
</tr>
</tbody>
</table>
Prognosis in Patients with COPD

<table>
<thead>
<tr>
<th>Variable</th>
<th>Points on BODE Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>FEV1 (% predicted)</td>
<td>≥65</td>
</tr>
<tr>
<td>Distance walked in 6 min (meters)</td>
<td>&gt;350</td>
</tr>
<tr>
<td>MMRC dyspnea scale*</td>
<td>0-1</td>
</tr>
<tr>
<td>Body-mass index (BMI)</td>
<td>&gt;21</td>
</tr>
</tbody>
</table>

*MMRC dyspnea scale range from 0 (none) to 4 (4 dyspnea when dressing or undressing).

<table>
<thead>
<tr>
<th>BODE Index Score</th>
<th>One year mortality</th>
<th>Two year mortality</th>
<th>52 month mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>2%</td>
<td>6%</td>
<td>19%</td>
</tr>
<tr>
<td>3-4</td>
<td>2%</td>
<td>8%</td>
<td>32%</td>
</tr>
<tr>
<td>4-6</td>
<td>2%</td>
<td>14%</td>
<td>40%</td>
</tr>
<tr>
<td>7-10</td>
<td>5%</td>
<td>31%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Note: these variables do not appear to help predict prognosis within six months of death.

From: http://www.eperc.mcw.edu/fastFact/ff_141.htm
Model for End-stage Liver Disease (MELD) Score

MELD Score =

3.8 X Serum Bilirubin (mg/dL) + 11.2 X INR + 9.6 X Serum Creatinine (mg/dL) + 6.4 X [etiology: 0 if cholestatic or alcoholic, 1 if other etiologies]

<table>
<thead>
<tr>
<th>MELD Score</th>
<th>Predicted 6 month survival</th>
<th>Predicted 12 month survival</th>
<th>Predicted 24 month survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>98%</td>
<td>93%</td>
<td>90%</td>
</tr>
<tr>
<td>10-19</td>
<td>92%</td>
<td>86%</td>
<td>80%</td>
</tr>
<tr>
<td>20-29</td>
<td>78%</td>
<td>71%</td>
<td>66%</td>
</tr>
<tr>
<td>30-39</td>
<td>40%</td>
<td>37%</td>
<td>33%</td>
</tr>
</tbody>
</table>