Palliative Care and Its Impact on Patient Outcomes

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Presentation Objectives

At the end of this educational activity, participants should be able to

1) Identify the specific hospitalization rates related to palliative care for learner’s geographic area;

2) Assess impact of palliative care on clinical outcomes and medical costs;

3) Describe the effects of palliative care on patient and care giver outcomes; and

4) Interpret new and old paradigms for palliative care.
Definitions of Palliative and Hospice Care

“Palliative Care means patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social and spiritual needs and to facilitate patient autonomy, access to information, and choice.”

Hospice care is a focus of comfort and quality of life in the final phase of a terminal illness where expectation of death is within 6 months.
Palliative Care Gaps that Need to be Overcome

- Current lack of formal palliative care training for all types of healthcare professionals

- Current misperceptions of the differences between palliative and hospice care both by healthcare providers and lay people

- Current limited knowledge about the impact of palliative care on clinical outcomes

- Current lack of competence in key skills such as communication and prognostication which can affect the optimal use and timing of palliative care

- Current variable availability and success of inpatient and outpatient palliative care programs

- Current geographic variation in the availability of palliative care
Demographic Data

- 2.45 million deaths in US in 2010
- 1.03 million in hospice (41.9 %)
- Median LOS in hospice 19.9 days (21.1 d in 2009)
- 35.3% died within a week of enrollment
- 49.4% died within 2 weeks of enrollment
- While the percentage of patients dying in hospice is increasing, the patients are getting admitted closer to death and have a shorter LOS overall
- There are 2887 board certified palliative care physicians in the US (est)

NHPCO.org accessed 7/15/12
What is Palliative Care?

- Comfort focused, patient centered care

- Maximizes quality of life

- Applicable to patients at any time during a chronic or life threatening illness

- Focuses on relief of suffering

- Affirms life but sees dying as a natural process
Palliative Care Practice

• Is a team effort with RN/MD/SW/Chaplain addressing all aspects of suffering; physical, emotional, social and spiritual

• Stresses the importance of appropriate treatment

• Does not hasten or postpone death
Palliative Care Practitioners

• Try to anticipate and plan for all eventualities, including death

• Care for patients over the whole course of life threatening/chronic illness

• Facilitate communication and help patients maintain autonomy, dignity and a voice
Palliative Care Basics

- Communication
- Goals of Care
- Advance Care Planning
- Scrupulous Symptom Management
- Preparing for the Worst/Inevitable
How Does Palliative Care Differ from Hospice?

- **Non – Hospice Palliative Care**
  - Appropriate at any point of an illness
  - Keep insurance coverage
  - Provided at the same time as life-prolonging treatment

- **Hospice – A Form of Palliative Care**
  - Provided in the last 6 months of life
  - Give up insurance coverage for curative/life prolonging treatment
  - Life-prolonging treatments are limited

Diane Meier, *Making the Case* 2010
Palliative Care Gives Perspective
Consumers Awareness About Palliative Care

Vast Majority of the public, including people with serious illnesses, have never heard of palliative care

2011 Public Opinion Research on Palliative Care
Research Commissioned by the Center to Advance Palliative Care, Support Provided by the American Cancer Society and the American Cancer Society Cancer Action Network
Key Strategies to Improve Palliative Care Conversations

- Learn communication techniques
- Be honest about prognosis
- Be aggressive about advance care planning
- Involve all disciplines
- Make decision making patient centered
- Discuss the burdens vs. the benefits of all interventions, no matter how trivial
- Be empathetic
- Listen, listen, listen
- Recognize the dying process
- Educate yourself and colleagues
- Accept your limitations
- Accept death as a normal part of the human experience and project that acceptance to patients and families with caring and empathy
GEOGRAPHY IS DESTINY?
Medicare Costs Vary 100% by State

More than Twofold Variation

Total Medicare Reimbursement per Decident, by Interval Before Death
# Patients with Cancer: Medicare Recipients 2003-07

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Cincinnati</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>% hospitalized in last mo</td>
<td>61.3</td>
<td>61.3</td>
</tr>
<tr>
<td>% in ICU last mo</td>
<td>24.6</td>
<td>23.7</td>
</tr>
<tr>
<td>Hospital days last mo</td>
<td>4.7</td>
<td>5.1</td>
</tr>
<tr>
<td>ICU days last mo</td>
<td>1.13</td>
<td>1.32</td>
</tr>
<tr>
<td>Chemo last 2 weeks</td>
<td>6.3</td>
<td>6.0</td>
</tr>
<tr>
<td>% deaths in hospital</td>
<td>17.8</td>
<td>28.8</td>
</tr>
<tr>
<td>Hospice last 6 mo</td>
<td>52.3</td>
<td>36.7</td>
</tr>
<tr>
<td>Hospice days last mo</td>
<td>10.8</td>
<td>8.7</td>
</tr>
<tr>
<td>% w/ Life sustaining therapies last mo</td>
<td>10.3</td>
<td>9.2</td>
</tr>
<tr>
<td>% seeing ≥ 10 MDs</td>
<td>48.5</td>
<td>46.2</td>
</tr>
</tbody>
</table>
## Terminal Care: Medicare Recipients 2003-07

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Cincinnati</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>% decedents with ICU admit in terminal hospitalization</td>
<td>12.9</td>
<td>17.1</td>
</tr>
<tr>
<td>% deaths with ICU admit</td>
<td>13.4</td>
<td>18.1</td>
</tr>
<tr>
<td>% spending ≥ 7 d in ICU in last 6 mo of life</td>
<td>14.9</td>
<td>15.2</td>
</tr>
<tr>
<td>% deaths in hospital</td>
<td>21.5</td>
<td>30.1</td>
</tr>
<tr>
<td>Medicare spending in last 2 years of life</td>
<td>$23,292</td>
<td>$26,511</td>
</tr>
</tbody>
</table>

[www.dartmoutatlas.org](http://www.dartmoutatlas.org) accessed 7/15/12
Inpatient Days Last Six Months of Life

By hospital referral area

2001-2005  www.dartmouthatlas.org
Percent of Patients Seeing > 10 Specialists in Last 6 mo of Life

• Cincinnati: 37.7% Nat average 36.1%
Palliative Care Programs Growing

• In past decade, number of hospital based palliative care programs have doubled

• Ohio 80% of hospitals have palliative care programs (grade B)

• Kentucky 55% have palliative care programs (grade C)

• Larger hospitals (> 300 beds) more likely to have programs

• Public hospitals, less likely to have programs
Geographic Issues: Patients’ Backgrounds in Cincinnati, Ohio

- Religions where beliefs have implications for palliative medicine
  - Judaism
  - Islam
  - Sikh
- Palliative Care is new for Asian cultures and countries
- Black and Hispanic patients are more likely to have misunderstandings about hospice care and advance directives, have fatalistic views and have more aggressive treatments at End of Life

- Implications for:
  - Who makes decisions (patients vs. family)
  - Who makes up the family (immediate, extended, non-kin)
  - Direct vs. indirect communication
  - Communicating bad news directly to patients
  - Attitudes about death, suffering, physicians
  - Advance care planning
  - Utilization of hospice care

Which Hospital Patients Should get Palliative Care Consultation?

- Palliative care is a scarce resource

- Most palliative care is tertiary

- Optimally, basic palliative care should be provided by the primary health providers (RN/SW/MD, et.al)

- Education is not sufficient

- System wide changes/routines need to be enacted when certain criteria are met

Who Needs Palliative Care and When?
Life Threatening Condition

- Metastatic Cancer
- COPD
- Cirrhosis
- Renal Failure
- Sepsis
- Multiorgan Failure
- Major Trauma
- Neurologic Catastrophe

Primary Triggers for Consultation:
Life Threatening Condition Plus

On admission

• Yes to “surprise” question
• Frequently hospitalized for same problem
• Admission for uncontrolled symptoms
• Baseline complex care (vent/FT/dialysis)
• Decline in function or “failure to thrive”

Daily during admission

• Yes to “surprise” question
• Uncontrollable symptoms
• ICU > 7 days
• Lack of clear goals of care
• Disagreements among staff and or pt/family

Secondary Triggers

On admission

- Admit from LTC
- Elderly, dementia
- Metastatic or advanced Ca
- Out of hospital arrest
- h/o hospice use
- No advance care planning

Daily during admission

- On TXP list or ineligible
- Pt/family emotional or other distress
- Pt/family asks for palliative care
- Pt/family team considering trach/RRT/FT/BMT/LVAD

Palliative Care and Current Medical Practice

Palliative care is under-used in current medical practice leading to significant increases:

1) In healthcare costs:
   a) One third of life-time medical spending is in the last year of a patient’s life, (Riley, 2010).

2) More hospitalizations

3) Dissatisfaction among patient/families and health care providers

Clinicians have many misconceptions about palliative care. In a 2011 public opinion survey, physicians equate palliative care with hospice or end of life care and are reluctant to believe otherwise. (CAPC, 2011)
What’s Holding Us Back?
1998 ASCO Survey

- 90% of MDs learned about palliative care from trial and error

- For 38% source was one traumatic patient experience

- 81% had inadequate teaching in discussing poor prognoses

- 65% had poor education in controlling symptoms

- 33% heard a palliative care lecture in fellowship

- 10% completed a palliative care rotation as fellows

MD Factors Associated with EOL Discussions

- Survey of MDs
  - 4074 responded

- Hypothetical pt with advanced cancer and 4-6 mo to live

- Would you discuss prognosis, DNR, hospice now, when symptomatic or when therapies exhausted

  - 65% would discuss px now
  - 44% would discuss DNR now
  - 26% would discuss hospice now
  - 21% would discuss place of death now

Delay of Palliative Care

A sizeable minority (20%) of healthcare professionals in pulmonology and oncology report delaying palliative care due to the misperception “It will take away the patient’s hope.” (Knauft, 2005; Zhou, 2010)

Other attitude barriers to palliative care identified across multiple studies:

1) Nurses stating “Physicians’ responsibility for advanced care planning”
2) Employing health-system did not require discussions
3) Staff/physician does not want to upset family or be misunderstood as giving up
4) Patient is not very sick yet
5) Patient/family is in denial
6) Patient/family doesn’t know what kind of care they want
7) Lack of time for discussions

Zhou, 2010; Boyd 2011; Knauft 2005
## What do Patients Want at the End vs. What Doctors Think They Want

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Patients</th>
<th>Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be mentally aware</td>
<td>92%</td>
<td>65%</td>
</tr>
<tr>
<td>Not be a burden to family</td>
<td>89%</td>
<td>58%</td>
</tr>
<tr>
<td>Have funeral arrangements planned</td>
<td>82%</td>
<td>58%</td>
</tr>
<tr>
<td>Not be a burden to society</td>
<td>81%</td>
<td>44%</td>
</tr>
<tr>
<td>Feel one’s life is complete</td>
<td>80%</td>
<td>68%</td>
</tr>
</tbody>
</table>
It’s Not All About Money…

But we need to use our limited resources wisely or at least get the most for our enormous healthcare investment.
We are Overwhelmed

Growing number of Medicare beneficiaries
Past and projected enrollment in Hospital Insurance (HI) and Supplementary Medical Insurance (SMI), in thousands, 1970–2050


Projected Federal Spending Over the Long Term
Percentage of GDP

Medicare and Medicaid
Social Security
Other Spending

Actual
Projected

Medicare Cost Increase Parallels Last Six Months of Life Costs

Last Six Months of Life: Medicare Cost 1996 – 2005
Inpatient Spending per Decedent During the Last Six Months of Life, by Gender and Level of Care Intensity (Level of Care Intensity: Overall, Gender: Overall – 1996 to 2005)

Total Medicare Reimbursement Per Patient 1996 – 2007
Medicare Reimbursement per Enrollee, by Race and Program Component (Program Component: Overall, Race: Overall – 1996 to 2007)

*Medicare FFS data; from www.dartmouthatlas.org
From the WSJ last week

of all Medicare beneficiaries that year. See a timeline of events in his medical history and the costs he incurred at Johns Hopkins, where he spent most of 2009. Source: Wall Street Journal analysis of Medicare inpatient and outpatient claims data; Photos: Melissa Golden for The Wall Street Journal, Crawford family

![Graph showing breakdown of 2009 charges](image)
As we spend more…”
Can Palliative Medicine Lower Medicare Costs?

Patients in high spending states were less likely to have advance directives. (Odds ratio=0.69, 95% CI 0.54-0.88)

Advance directive leads to:
   a) More hospice use (40% vs. 26%)
   b) Fewer in-hospital deaths (37% vs. 43%)
   c) Fewer life-sustaining treatments (34% vs. 39%)

Problem: Rates of advance directives vary by race, level of education and socioeconomic status
   a) 40% of America is non white
   b) 15% Hispanic
   c) 14% African American
   d) 5.1% Asian-American

Hispanic and Asian populations will double by 2050

Lower State Healthcare Costs Linked to Palliative Medicine

Nicholas LH et al., JAMA. 306(13):1447-1453
There are many real and measurable benefits to early palliative care involvement.

Despite significant advances in palliative medicine, growth of palliative medicine programs, and increasing referrals to hospice, we are still having the same conversations....
Cost “avoidance”

• In a study of Medicare patients, palliative care consultation saved $174 per day or $1700/admission for patients d/c’d alive

• Saved almost $5000 or $374/day for patients who died in hospital

• They estimated that a large hospital, seeing 300-500 pts/year could save $1.3 million/year

Palliative Care Consult can Decrease Hospital Costs for Medicaid Patients

- Data from 4 NY hospitals with mature palliative care teams 2004-07
- Patients with only Medicaid
- Met usual criteria for palliative care consult appropriateness
- Compared to matched control group

Results for Palliative Care Group

Died in hospital

• Hospital costs $7,563 lower

• Spent less time in ICU

• Less likely to die in ICU

• Lower ICU costs

• Spent 3.6 fewer days in ICU

Discharged alive

• Hospital costs $4,098 lower

• More likely to have hospice referral

Magnitude of Benefit

• Medicaid spending is rising quickly

• Estimated that costs could increase from $339 billion (2011) to $458 billion by 2020

• If palliative care were available to all Medicaid patients in NY state (2-6% likely qualify for PC)

• NY state alone could save $84 million to $252 million per year

What can Early Palliative Care do?

• Decrease distressing symptoms

• Decrease depression

• Improve overall QOL for patients and families

• Decrease use of non-beneficial treatments

• Decrease physician burnout
Early Palliative Care Can

- Improve acquisition of timely advance care plans and DNR status
- Improve communication
- Increase use of hospice and LOS in hospice
- Decrease costs of EOL care
- Prolong life
Early Palliative Care for Patients with Metastatic NSSLC

• Published in NEJM 2010

• Randomized study of 151 patients with newly diagnosed metastatic NSSLC

• Control group received standard care

• Study group received standard care + early palliative care

Early Palliative Care for Patients with Metastatic NSSLC

• Primary outcome, change in QOL at 12 weeks

• Other endpoints; rate of depression, less aggressive end-of-life care

• Study took place 2006-2009

Mean Change in Quality-of-Life Scores from Baseline to 12 Weeks in the Two Study Groups

A FACT-L

B LCS

C TOI
Twelve – Week Outcomes of Assessments of Mood

![Bar chart showing the comparison between standard care and early palliative care for HADS-D, HADS-A, and PHQ-9 symptoms.](chart.png)
Other Outcomes

- 105 (70%) of patients died by end of study
- 54% of the standard care patients received “aggressive care” at EOL
- 33% of the study patients received “aggressive care” at EOL
- Code status documented in EMR for 28% of standard care patients vs. 53% of palliative care patients
- Hospice median duration for standard care patients was 4 d and for palliative care patients 11 d
- Median survival in the palliative care group patients was 11.6 months vs. 8.9 months for standard care patients.
Palliative Care: Not Just for Cancer Patients

<table>
<thead>
<tr>
<th>Disease</th>
<th>Hospice</th>
<th>Non-hospice</th>
<th>Change in days</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>337</td>
<td>329</td>
<td>+ 9</td>
</tr>
<tr>
<td>CHF</td>
<td>402</td>
<td>321</td>
<td>+81</td>
</tr>
<tr>
<td>Lung Cancer</td>
<td>279</td>
<td>240</td>
<td>+39</td>
</tr>
</tbody>
</table>
“The need for palliative care is greater than ever. Further efforts are needed to realize the integration of palliative care in the model and vision of comprehensive cancer care by 2020.”

Palliative Care at Cancer Diagnosis Improved Overall Survival

Early Palliative Care: 11.6 months
Standard care: 8.9 months
$P = .02$
Palliative Medicine Including EOL discussions Improves Clinical Outcomes

- Lower ventilator use (1.6% vs. 11.0%)

- Less likely to receive chemotherapy in 60 days before death (Odds ratio: 0.47, \( P=.05 \))

- Fewer ICU admissions (4.1% vs. 12.4%)

- Fewer hospital days in the months prior to death whether living in nursing home or at home

- Earlier hospice enrollment and longer time in hospice
  - Higher patient and caregiver quality of life

PTSD

• 21.9% of the caregivers of those that died in the ICU had PTSD compared to 4.4% that did not die in the ICU

• Dying in the hospital increased the risk for complicated bereavement from 5.2% to 21.6%

Wright AA, Keating NL, Place of death, correlations with quality of life of patients With cancer and predictors of bereaved caregivers’ mental health. JCO 2010;28:4457-64.
Palliative Medicine Improves Patient and Caregiver Outcomes

Patients

• Decreased clinical depression in early palliative care in cancer patients (16% vs. 38% for standard care, $P= .01$)
  – Older studies have mixed results

• Better patient quality of life

• Less discomfort for patients in nursing homes

Caregivers

• Better patient quality of life leads to improved caregiver outcomes

• Palliative medicine improved caregiver satisfaction in 7 of 10 studies.

ASCO and NCCN 2012: Palliative Care as Diagnosis as New Standard in Cancer Care

Palliative care can be part of standard care for patients with metastatic cancer or high symptom burden given improved patient and caregiver outcomes and reduced societal burden through cost-savings

National Comprehensive Care Network (NCCN 2012)

Palliative care screening for all patients at time of cancer diagnosis


National Cancer Care Network Guides: 2012 Palliative Care.

http://www.nccn.org/professionals/physician_gls/f_guidelines.asp#supportive
Trajectories of Life Threatening Illnesses

Figure 5. Trajectories of eventually fatal chronic illnesses. Source: Lynn and Adamson 2003.
Conceptual Shift for Palliative Care

Where is your organization in changing from old to new paradigm medicine?

Dx

Death

Diane Meier, Making the Case 2010
Palliative Specialist?

“You have to be prepared for everything in this job.”
Thank You.