Financial implications of promoting excellence in end-of-life and palliative care

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Current state of US health care

Health care for patients with advanced illness is marked by:

- Fragmented multi-specialty care; no one in charge.
- Lack of training on needs of seriously ill, including symptoms, communication, coordinated transitions.
- Lack of communication.
- Misalignment MD / hospital / payor incentives for controlling resource utilization for EOL patients.

Dartmouth Atlas Project report on cancer care finds

"…remarkable variation depending on where the patients live and receive care. Even among the nation's leading medical centers, there is no consistent pattern of care or evidence that treatment patterns follow patient preferences. Rather, the report demonstrates that many hospitals and physicians aggressively treat patients with curative attempts they may not want, at the expense of improving the quality of their last weeks and months."

http://www.dartmouthatlas.org/downloads/reports/Cancer_report_11_16_10.pdf

Clinical care challenges for seriously ill hospitalized patients

35 AMCs reviewed charts of 1,596 patients with high mortality DRGs (HIV, Ca, Resp, or HF) and 2+ prior admits. Most did not receive palliative care.

Performance measures	*Median*	*Range*
Pain assessment[a]	98.50%	83.3%–100%
Use of numeric pain scale	85.20%	13.0%–100%
Pain relieved/reduced[a]	78.30%	46.4%–91.7%
Bowel regimen with opioid	59.10%	20.0%–93.3%
Dyspnea assessment[a]	95%	52.5%–100%
Dyspnea relieved/reduced[a]	80%	37.5%–96.6%
Documentation of patient status[a]	15.60%	0.0%–100%
Psychosocial assessment[b]	17.80%	0.0%–95.0%
Patient/Family meeting[c]	40.50%	0.0%–92.3%
Discharge disposition plan[b]	55.00%	17.5%–94.0%
Discharge planner arranged services required for discharge	75.00%	20.0%–100%

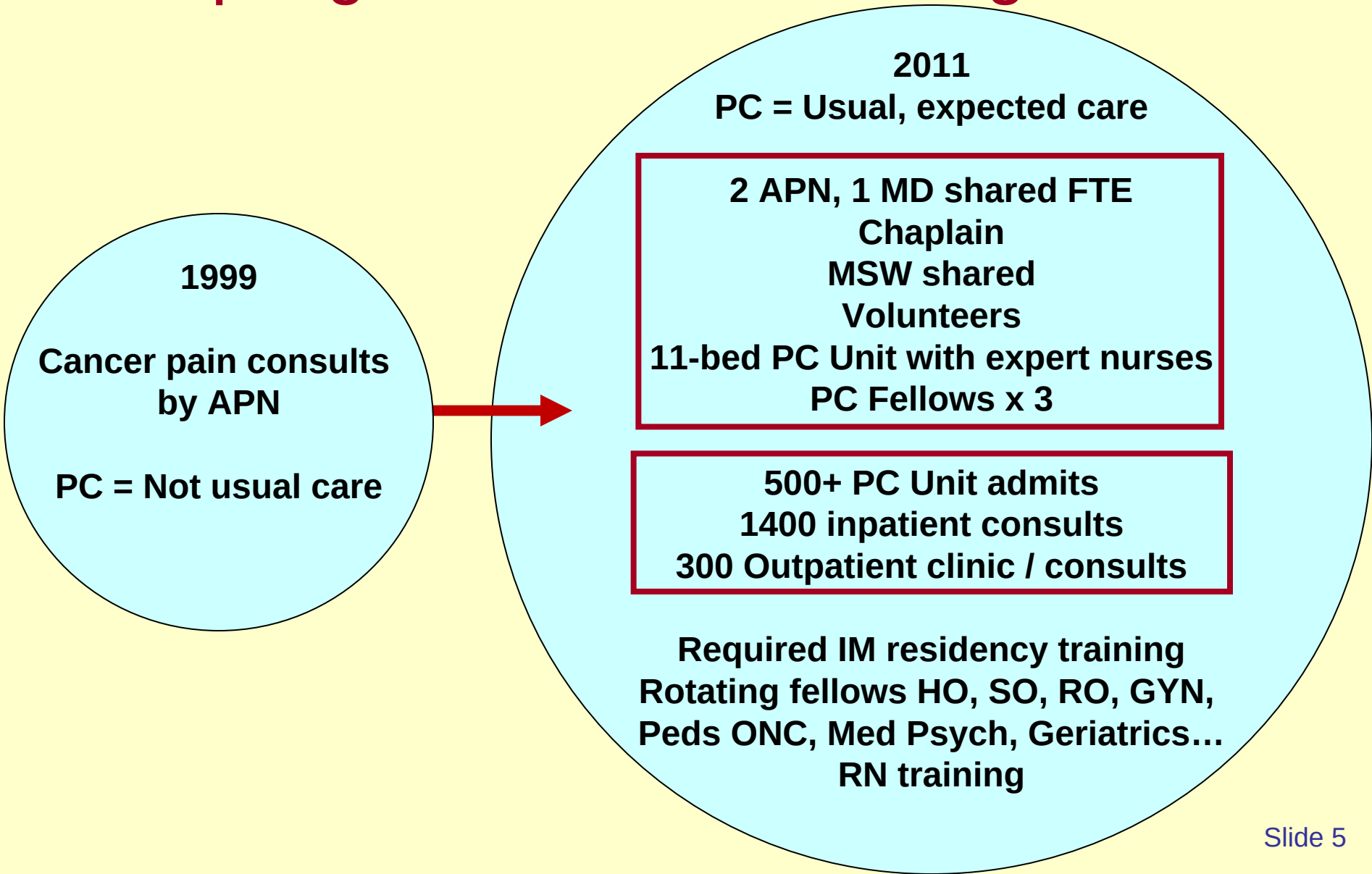
[a]Within 48 hour after admission.
[b]Within 4 days after admission.
[c]Within 1 week of admission.

Twaddle, Maxwell, Cassel et al., (2007). Palliative care benchmarks from academic medical centers. Journal of Palliative Medicine 10 (1): 86-98.

Palliative Care

- Inter-professional teams – MDs, Nurses, pharmacists, social workers, chaplains, and others
- Provide expert relief of pain and suffering
- Help clarify prognosis and set care goals
- Patient-centered; involve and support family
- Focus on complex and advanced illnesses
- May bridge the gap between “curative” and “end of life” care
- CMS, ABIM, ACGME recognized
- In 63% of hospitals with 50+ beds, and 85% of hospitals with 300+ beds
  - See http://www.capc.org/reportcard/findings

Virginia Commonwealth: A pioneer program continues to grow



Impact of Palliative Care

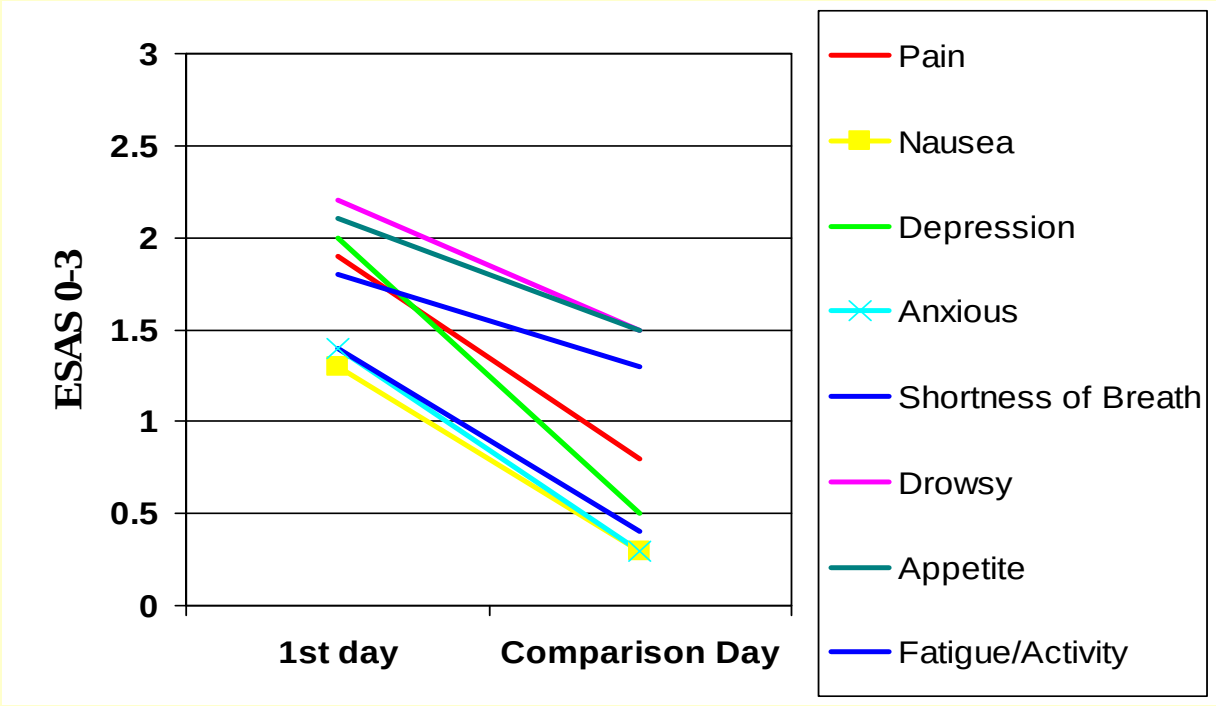
- A 41 y/o woman with Stage IV breast cancer seen in ED for severe dyspnea from lung metastases. She was seen by PC, improved with nebulized fentanyl, and admitted to the PCU for aggressive dyspnea management. The alternative under consideration was intubation and ICU admission. She improved and was discharged home with hospice.
- 67 y/o man with Stage IV, extensive lung cancer; debilitated, septic and having trouble breathing, admitted to ED. Seen by PC as well as ICU team. Admitted to ICU but after 2 days of ICU care, family asked for PC consultants to return; they had thought about what was offered and wanted to transfer the patient out of ICU to PC unit for continued life support, but outside of an ICU.
- Temel (MGH) study: Integrating PC from diagnosis forward improves quality of life; lowers depression; increases survival by 2+ months in patients with advanced lung cancer.

JB Cassel & LJ Lyckholm (2007). Rethinking our M.O. *Journal of Palliative Medicine 10* (3), 649-650.

LJ Lyckholm, JB Cassel, S Hickey (2007). Palliative Care Consultation in the Emergency Department. AAHPM. Salt Lake City, UT.

JS Temel et al (2010). Early Palliative Care for Patients with Metastatic Non–Small-Cell Lung Cancer. N Engl J Med 2010;363:733-42.

Symptoms Reduced By Palliative Care Specialists



Palliative Care patients' symptom assessments 2010

n=35	Time1	Time2
# with no signif symptoms	0	17
# with 1 signif symptom	6	6
# with 2 signif symptoms	5	2
# with 3 signif symptoms	9	6
# with 4+ signif symptoms	15	4

Khatcheressian, Cassel, Lyckholm, Coyne & Smith. Oncology, September 2005

Palliative Care = Quality Care

Palliative care is quality care as defined by the National Quality Forum and the Institute for Healthcare Improvement:

- Patient-centered
- Beneficial
- Timely
- Safe
- Equitable
- Efficient

Are clinical benefits sufficient to motivate hospitals to invest in palliative care?

What else do hospital administrators want, that Palliative Care can help produce?

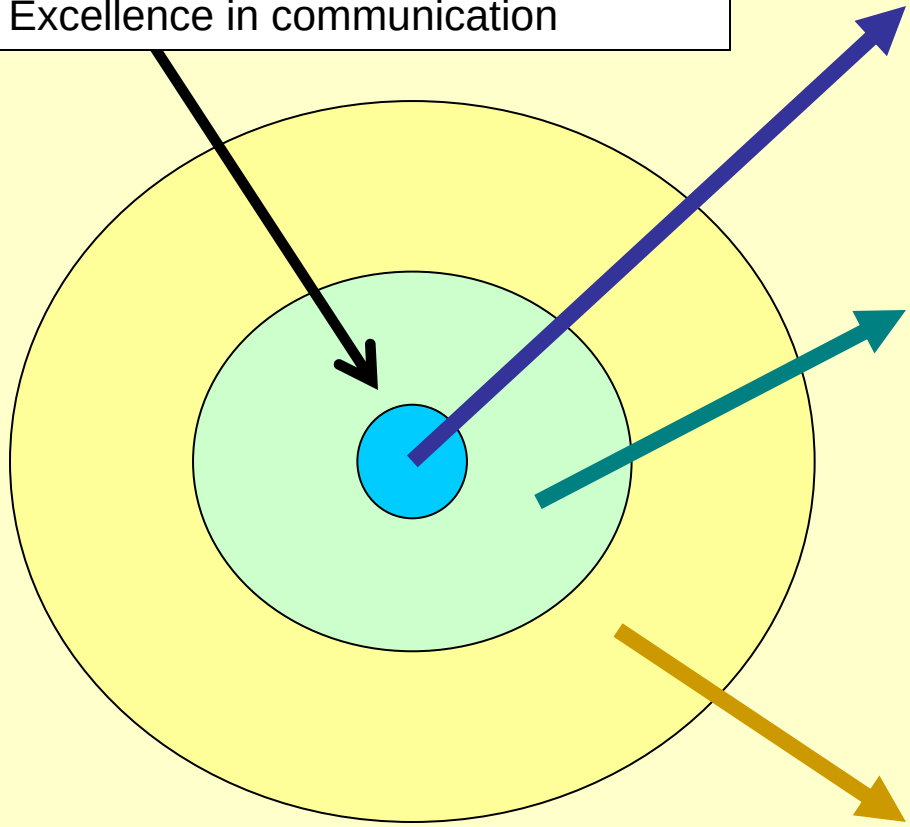
- Patient and family satisfaction
- Referring provider satisfaction
- Cost reduction when payment is flat / fixed
- Increased flow/access especially in ICUs
- Lower hospital mortality and re-admission rates

Palliative care programs assist with all of these kinds of outcomes

PC outcomes

Palliative care elements:

- Patient-centered, family-oriented
- Advanced symptom management
- Excellence in communication



Primary impact is on patient

A. relief of pain and other symptoms

B. clarification of prognosis and goals of care

C. may result in changes to kind of care provided

Secondary impact: if A-C achieved

D. family – less confused, more satisfied

E. nurses, doctors – appreciate specialist help

F. ICU utilization – some pts shift to acute m/s

G. costs – reduced if care is more PC-specific

H. revenue – reduced if PC reduces procedures or admissions

Tertiary impact: if D-H achieved

I. more access to ICU, less hospital "diversion"

J. improve nurse, MD satisfaction, less burnout

K. awards, hospital reputation improves

L. volunteering, donations increase

M. culture of care changes in hospital, community

N. better for payors, society

Cassel & Kerr (2007). "Measuring the impact of palliative care: Hospital, patient, and provider perspectives". U Illinois - Chicago.

Hospital context

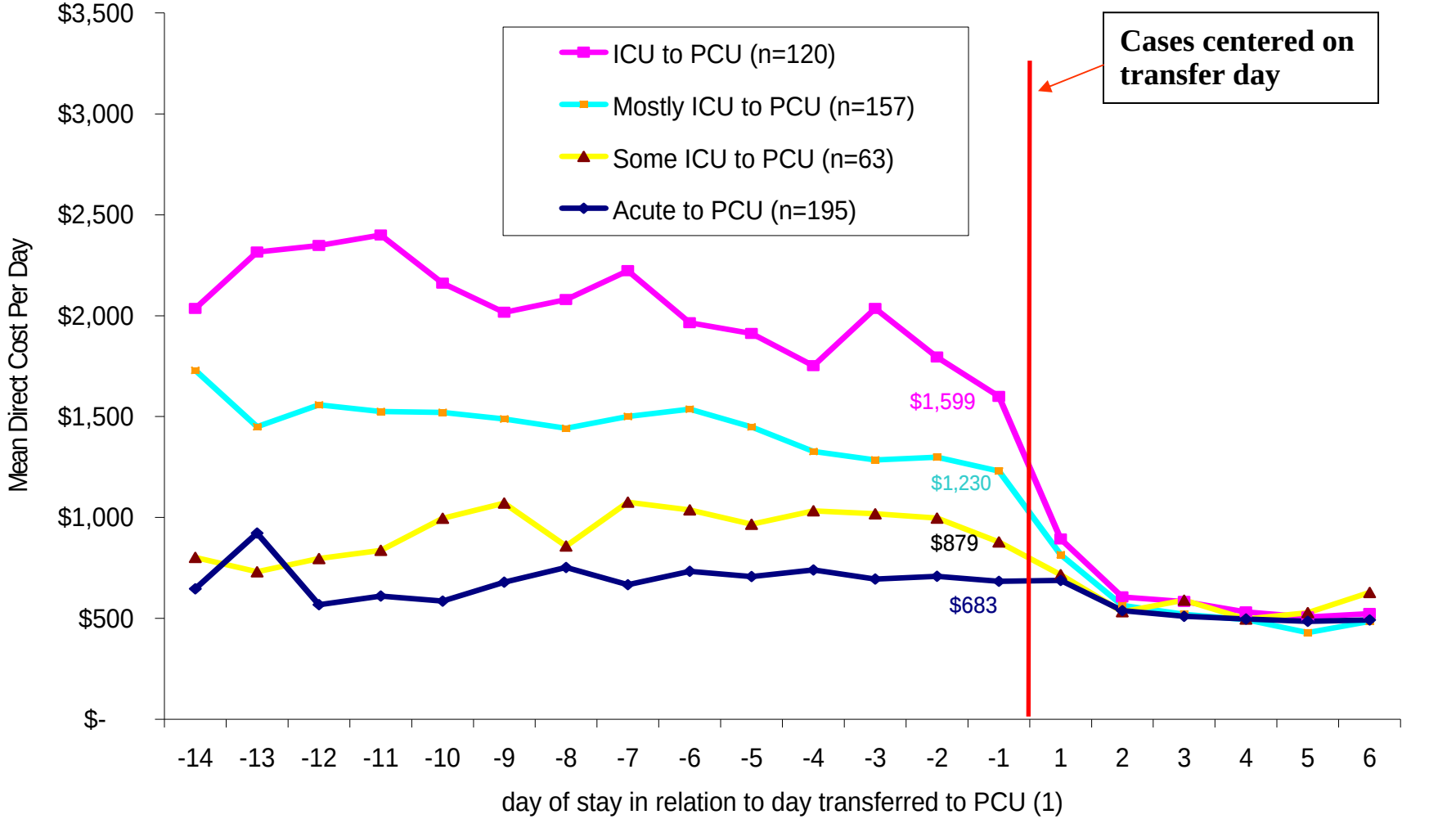
Metric	Adult admissions ending in death	Adult survivors with high risk of mortality *	All other adult survivors	Total adult admissions
# Admissions	785	1,955	23,949	26,689
% Admissions	3%	7%	90%	100%
% Inpt Days	5%	19%	75%	100%
% ICU Days	19%	44%	37%	100%
% Direct costs	9%	23%	69%	100%
Avg LOS	10.7	15.5	5.0	5.9
Avg LOS in ICU	5.8	5.3	0.4	0.9
CMI (avg DRG weight)	3.86	4.05	1.50	1.75
Direct cost / day	$ 3,006	$ 2,136	$ 1,643	$ 1,810
Direct cost / admission	$ 32,043	$ 33,143	$ 8,168	$ 10,699
Medicare %	51%	54%	30%	33%
# admits with Palliative Care **	352	441	909	1,702
% admits with Palliative Care	45%	23%	4%	6%
Distribution of Palliative Care	21%	26%	53%	100%

From VCU Health System, FY2010, n=26,689 adult admissions

* defined as discharge to hospice, or (APR-DRG ROM subscore of 4 and an SOI subscore of 3 or 4)

** Palliative Care Consultation, or Palliative Care Unit, during this hospitalization

Typical PC Cost Reduction Outcomes



KR White, KG Stover, JB Cassel, TJ Smith. (2006). Non-Clinical Outcomes of Hospital-Based Palliative Care. *Journal of Healthcare Management 51* (4), 253-267.

8 Hospital study of cost reduction

ORIGINAL INVESTIGATION

Cost Savings Associated With US Hospital Palliative Care Consultation Programs

R. Sean Morrison, MD; Joan D. Penrod, PhD; J. Brian Cassel, PhD; Melissa Caust-Ellenbogen, MS; Ann Litke, MFA; Lynn Spragens, MBA; Diane E. Meier, MD; for the Palliative Care Leadership Centers' Outcomes Group

Background: Hospital palliative care consultation teams have been shown to improve care for adults with serious illness. This study examined the effect of palliative care teams on hospital costs.

Methods: We analyzed administrative data from 8 hospitals with established palliative care programs for the years 2002 through 2004. Patients receiving palliative care were matched by propensity score to patients receiving usual care. Generalized linear models were estimated for costs per admission and per hospital day.

Results: Of the 2966 palliative care patients who were

nificant reductions in laboratory and intensive care unit costs compared with usual care patients. The palliative care patients who died had an adjusted net savings of $4908 in direct costs per admission ($P=.003$) and $374 in direct costs per day ($P<.001$) including significant reductions in pharmacy, laboratory, and intensive care unit costs compared with usual care patients. Two confirmatory analyses were performed. Including mean costs per day before palliative care and before a comparable reference day for usual care patients in the propensity score models resulted in similar results. Estimating costs for palliative care patients assuming that they did not receive palliative care resulted in projected costs that were

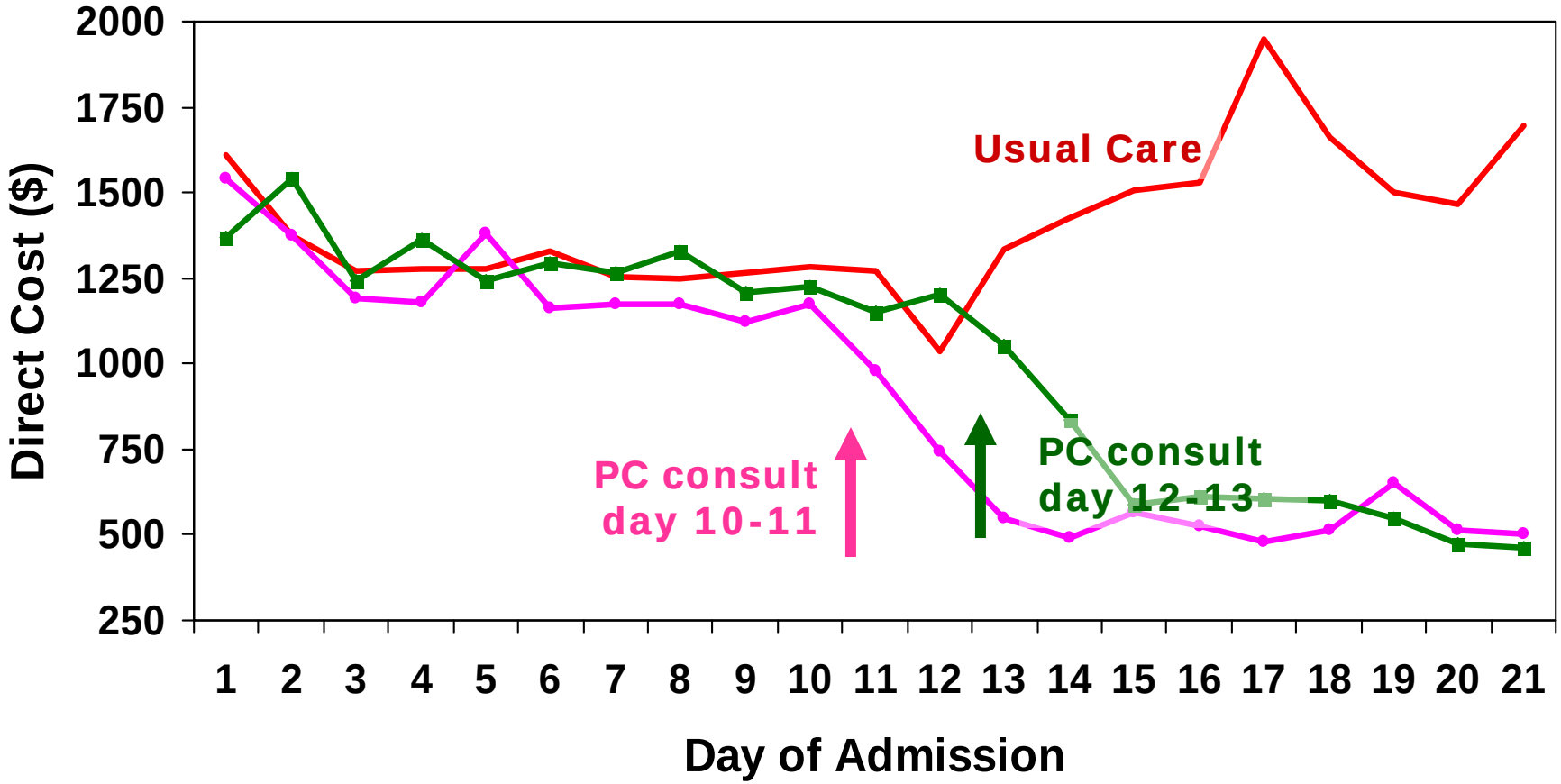
Morrison, Penrod, Cassel et al. (2008). Cost savings associated with US hospital palliative care consultation programs. Archives of Internal Medicine 168 (16), 1783-1790.

8 Hospital Study of Cost Reduction

Direct cost per day	Survivors	Decedents	
48 hours before PC	$843	$1,163	
48 hours after PC	$605	$589	**Average**
Difference	$238 (28%)	$574 (49%)	$406

Morrison, Penrod, Cassel et al. (2008). Cost savings associated with US hospital palliative care consultation programs. Archives of Internal Medicine 168 (16), 1783-1790.

8 Hospital Study of Cost Reduction



Morrison, Penrod, Cassel et al. (2008). Cost savings associated with US hospital palliative care consultation programs. Archives of Internal Medicine 168 (16), 1783-1790.

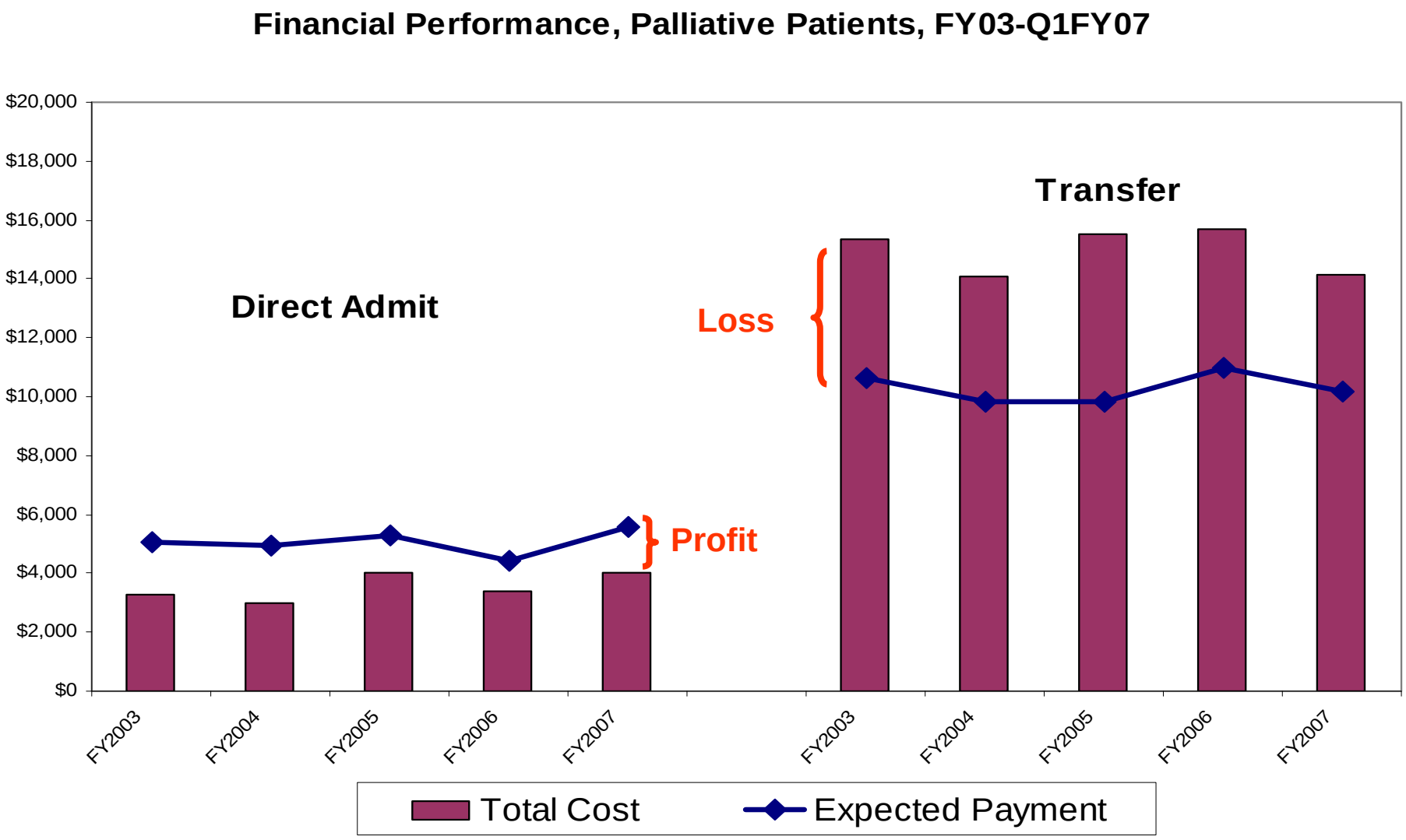
Palliative care on day 8 of a 12-day hospitalization: whose costs are reduced?

- Most palliative care patients fall under per-case payment structures
  - 69% Medicare, 11% Medicaid, 20% other (Morrison 2008)
  - In most Medicare, Medicaid, TriCare, and uninsured / indigent cases, payment to hospitals is “flat” per case – regardless of LOS or cost
  - Medicaid: 35 states pay via per-case basis similar to DRGs, and 9 states pay per-diem
- Thus hospitals’ cost reduction usually helps the hospitals’ bottom line, because payments are flat
- But, payors do not usually see a reduction in expenditures from this late-in-stay intervention
- Exception: when later procedures are avoided

What about moving PC intervention to day 1?

- Some are trying to move palliative care intervention earlier in the admission, even in the Emergency Dept.
- Since this can dramatically alter the intensity of the admission and avoid some procedures entirely, DRG assignment and reimbursement may be much different.
- Appropriate measure is net margin: total reimbursement minus total costs.
  - Kerr Cassel & Pantilat, AAHPM, 2011.

Early contact reduces cost more than revenue



Data from Mt Carmel health system, Columbus OH

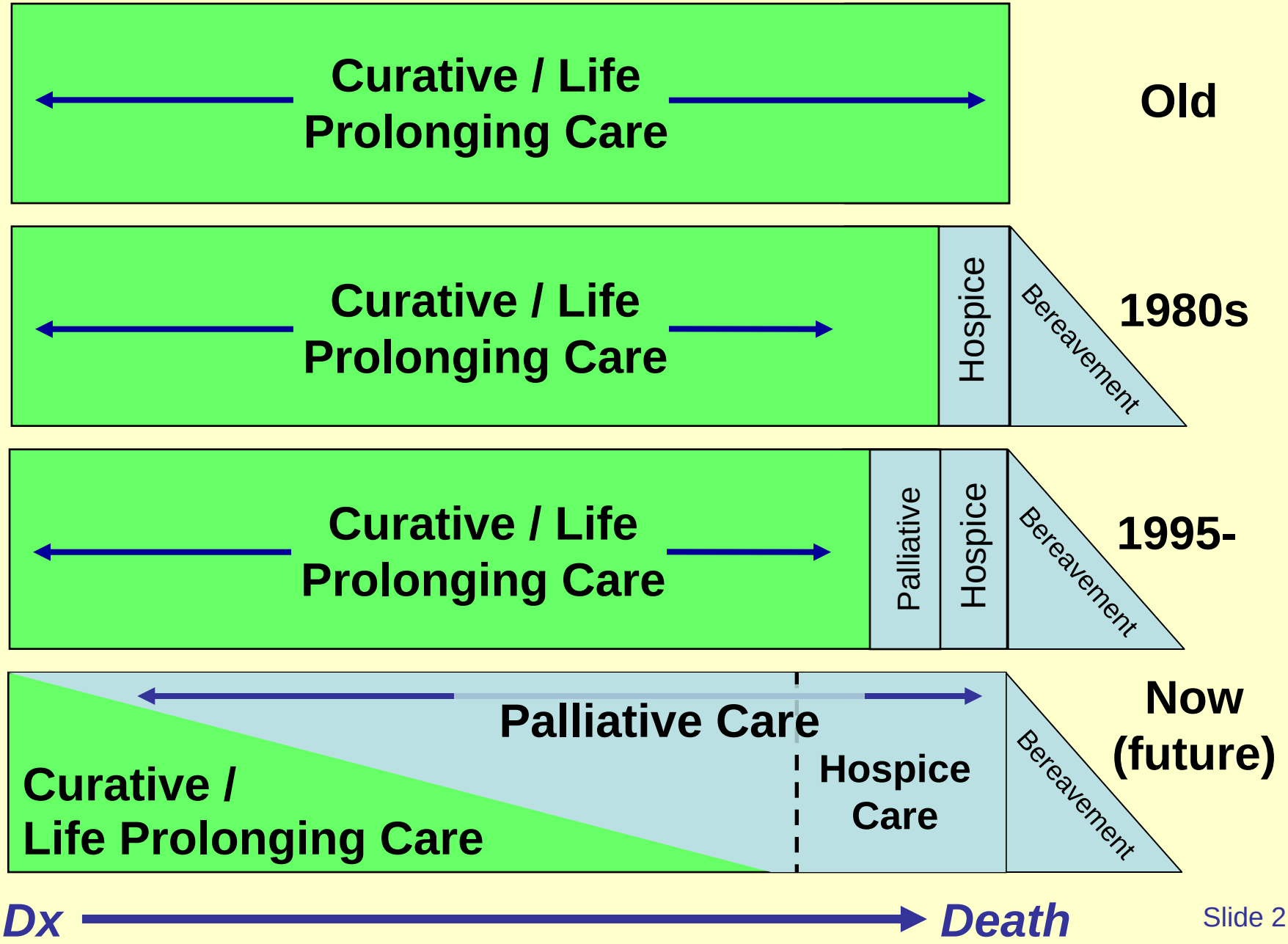
Future evolution of palliative care will be driven both by hospitals and payors

- Integration of ambulatory PC with disease-focused care (e.g., cancer, CHF, COPD)
- Rabow 2003
- Brumley 2003, 2007
- Temel 2010 – NEJM paper on PC integrated with cancer care for NSCLC pts
- Fewer ER visits, fewer hospitalizations
- Hospitalizations are less intensive & costly
- Thus payors see impact on expenditures – just as they do with hospice
- Hospital administrators will need to see that this is still a “win” for them

Payors increasing the incentives to do this

- 30-day mortality rates → quality
- 30-day re-admission rates → quality and reimbursement
- Bundled payments
- “Accountable care” organizations
- Some hospitals already have reasons:
  - Tertiary hospitals overly full
  - End-of-life admissions often cost more than hospitals receive in reimbursement

Medical model continues to evolve



Palliative Care Increases Quality and Decreases Costs

- Reduces pain and symptom burden
- Honors patients' values and choices
- Increases quality of life for patients and families
- Maintains and increases survival
- Inpatient PC reduces hospital costs
- High-volume ambulatory PC may reduce payor, patient costs
- Improves the education and training of the current and next generations of healthcare providers

In collaboration with…

- VCUHS PC program & VCU Massey Cancer Center
  - Dr. Laurie Lyckholm, Palliative Care Medical Director
  - Patrick Coyne, MSN, PC Clinical Director
  - Mary Ann Hager, MSN, Administrator, Oncology Business Unit
  - Dr. Gordon Ginder, Director, Massey Cancer Center
  - Lisa Shickle, MS, Analytic Services, Massey Cancer Center
- Kathleen Kerr & Dr. Steve Pantilat at UCSF
- Dr. Tom Smith, Johns Hopkins
- Lynn Spragens, Dr. Dave Weissman, Dr. Diane Meier, Center to Advance Palliative Care (CAPC)
- Other Palliative Care Leadership Centers
  http://www.capc.org/palliative-care-leadership-initiative/overview

Questions and Discussion