

Financing community-based palliative care

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Learning objectives

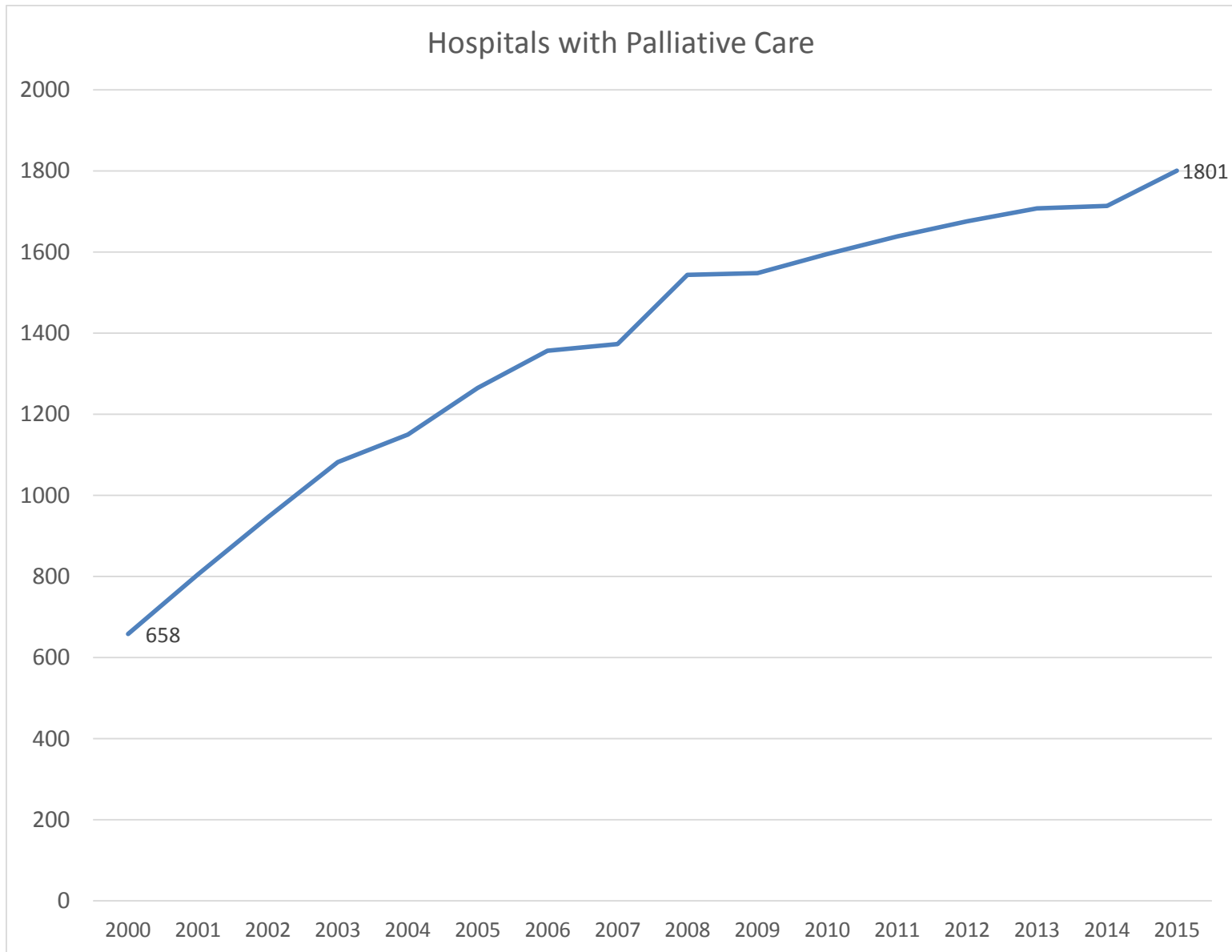
- Identify the principles of the business case for palliative care in the US
- Garner support for palliative care programs
- Recognize the barriers to research on palliative care outcomes

Think back thirty years to 1988 ...

How likely is it that palliative care would be adopted widely?

- Would hospitals invest in death & dying?
- Admit symptom management is poor?
- Given that palliative care
 - Runs counter to hospital medical culture
 - Is not required by TJC, CMS, other payers
 - Is confused with hospice
 - Produces little or no revenue
 - Its business case is built on “cost-avoidance” when most US hospitals are revenue-centric

Palliative care in 75% of US hospitals with 50+ beds



Dr. Donald Berwick on reforming healthcare

“Healthcare’s disintegration is not yet every man for himself, but it is every discipline for itself, every guild for itself. As a result, we tend to assume today that one guild’s solution will preserve quality or cut costs. The dominant assumption is that the bottom line is financial success. No comprehensive solution—a common solution—will emerge until all stakeholders. At the moment, we are in a state of escape fire.”

“I think the **toughest part of this may be in terms of the business and financing of care.** There is a tendency to assume that financial success—e.g., thriving organizations—and great care are mutually exclusive. However, **we will not make progress unless and until these goals become aligned with each other.**”

of the key share in the escape fire” of science world of the business and finance of health care, and in the world of the good, kind people who do the work of caring.

http://www.commonwealthfund.org/usr_doc/berwick_escapefire_563.pdf

10 principles of the business case for PC

1. Clinical imperative: Palliative care reduces suffering and distress
2. Hospital utilization spikes at EOL
3. EOL hospitalizations result in poor financial outcomes even in fee-for-service models
4. EOL hospitalizations can also lead to penalties in value-based purchasing
5. Community-based PC can make some hospitalizations unnecessary
6. Inpatient PC can make hospitalizations less costly
7. Clinical revenue insufficient for PC teams; subsidy needed from entity with aligned interests
8. Hospitals see positive “return on investment” with inpatient PC
9. Financial case for community-based PC is clearest for payers or at-risk providers (ACOs, HMOs)
10. Financial analyses can be done by community health systems not just academic centers

Cassel, Kerr, Kalman & Smith. The Business Case for Palliative Care: Translating Research Into Program Development in the U.S. J Pain Symptom Manage. 2015 Dec;50(6):741-9.

The Specialist Palliative Care Measurement Model

Design and Deliver SPC

- ✓ Patient-centered, family-oriented
- ✓ IDT: bio-psycho-social-spiritual needs
- ✓ Assess and manage symptoms
- ✓ Elicit goals and evaluate options
- ✓ Excellent communication, navigation

Evaluate SPC Delivery

Who:	Referring providers, IDT & patient characteristics
When:	Timing of PC relative to other events
Where:	Locations, settings
How:	Expertise, techniques, time spent; costs
How much:	Frequency, duration, intensity, breadth; costs
How well:	Standards met? Gaps in quality? Sustainable?

Evaluate SPC Outcomes

Evaluate impact on your patients

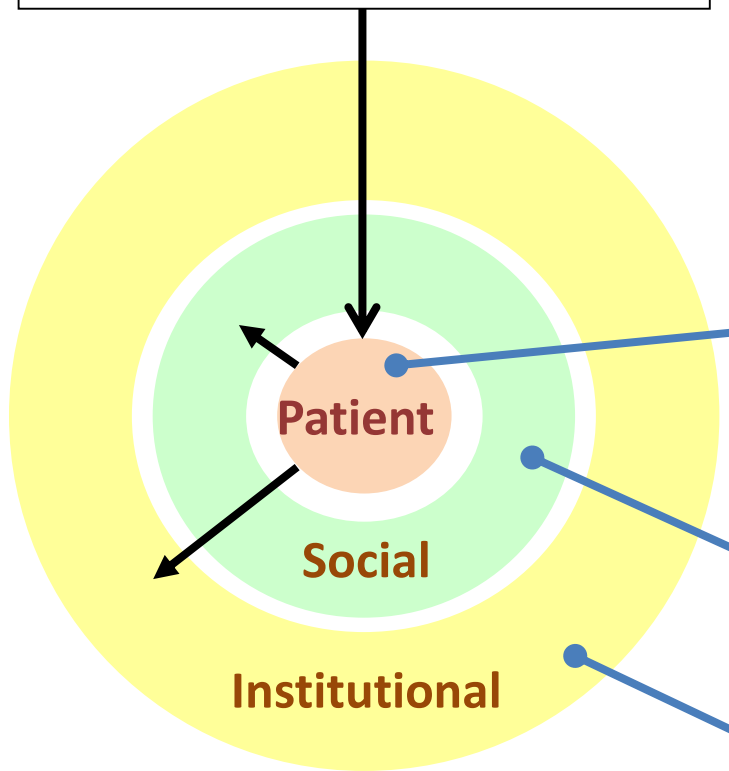
- Biological, psychological, social, spiritual needs addressed?
- Pain, other symptoms, distress are prevented and reduced?
- Subsequent care is effective, goal-concordant, not burdensome?
- Patient experience is positive?

Evaluate impact on families & referring providers

- Family – less confused, less distress; positive experience?
- Nurses, doctors – appreciate specialist help, less distress?

Evaluate impact on payers, systems, sponsors

- Shift and reduce costs?
- Improve institutional quality & performance metrics?



CBPC outcomes

Program / population	Positive effects	Source
PC in primary care clinic for adv CHF, COPD, cancer	Dyspnea, anxiety, spiritual well-being, sleep quality, satisfaction with care	Rabow: Arch IM 2004, JPSM 2003
Outpatient PC for adv NSC lung cancer	Survival, quality of life, depressive symptoms	Temel NEJM 2010 / JPM 2016
Home-based PC for home-bound Ca, CHF, COPD	Satisfaction, more at-home deaths, fewer ED visits and hospitalizations	Brumley JAGS 2007
Home-based PC for all conditions (cancer, CV, respiratory, etc.)	Anxiety, appetite, dyspnea, well-being, depression, nausea; hospice use; lower healthcare costs	Kerr JPM 2014, JPSM 2014
Home-based PC for MSSP (ACO) beneficiaries	Increased hospice enrollment & length; less hospital use & lower costs	Lustbader JPM 2017
Home-based PC for MA; CHF, Cancer, COPD, dementia	Less hospital use and lower healthcare costs; patient experience high	Cassel JAGS 2016
Psycho-educ telehealth for adv cancer & care-givers	Patient survival, caregiver depression	Bakitas & Dionne-Odom JCO 2015

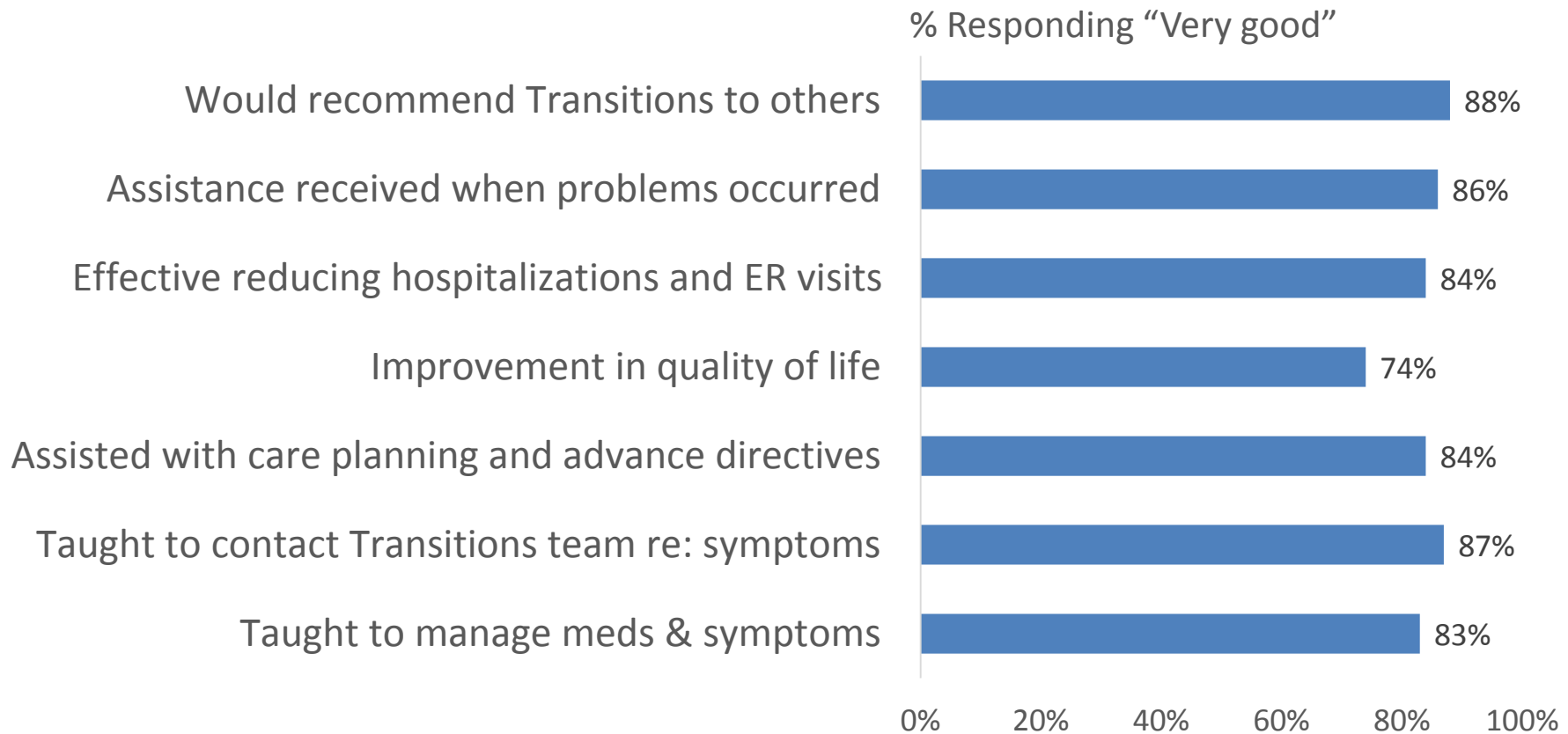
CBPC is timely and concurrent

VCU Massey Cancer Center

- 49 year-old woman diagnosed with stage IV NSCLC (with brain metastases) developed severe nausea/vomiting & vertigo 4 months into treatment.
 - Aggressive management of symptoms in supportive care clinic
 - Allowed her to improve & continue with cancer treatment while avoiding hospital admission.
 - Followed in both supportive care (PC) clinic & MedOne clinic
 - Lived 20 months after diagnosis and 16 months after first PC visit, transitioned to hospice in her final weeks of life.
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- Timing of inpatient hospital PC before death: 3 weeks
 - Timing of clinic-based PC before death: 5 months

Positive patient experience

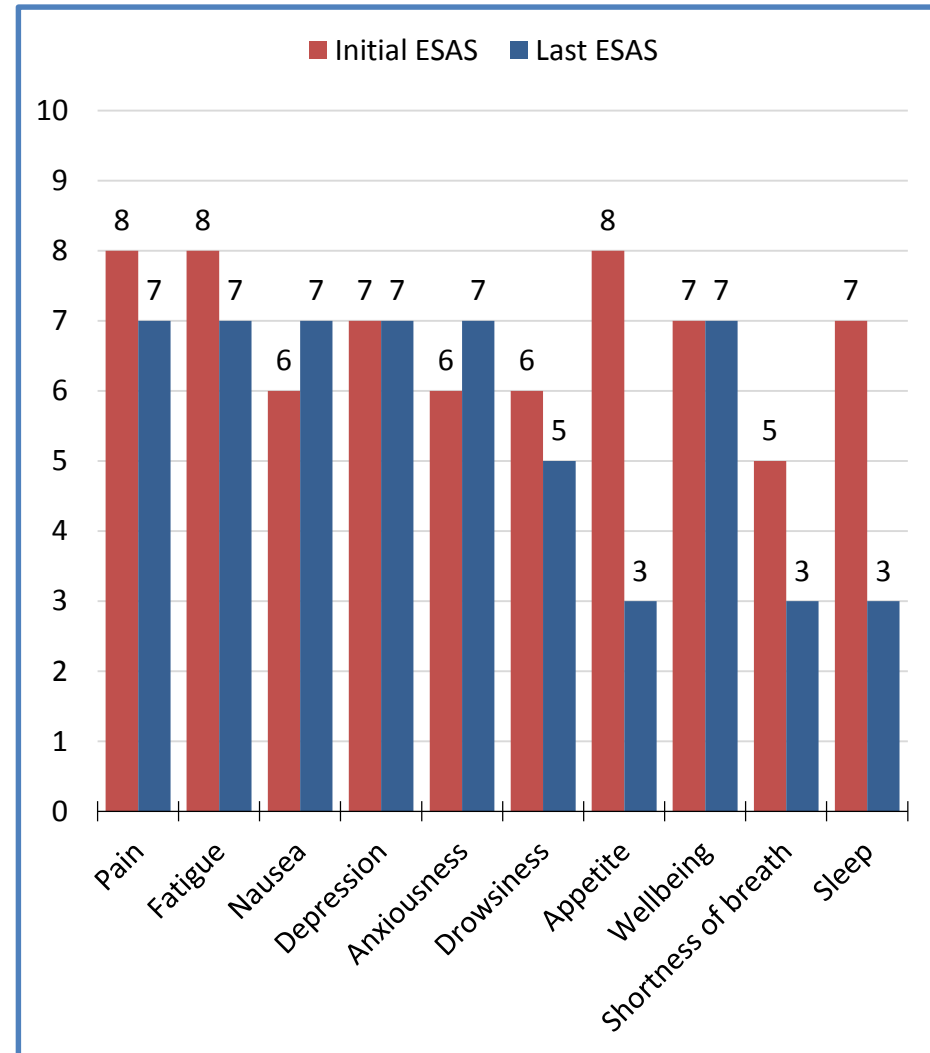
Sharp “Transitions” home-based palliative care program



Symptoms, function improved

VCU Massey Cancer Center

- 55 year old male
- Recurrence of SCC base tongue (IV-A)
- Latest treatment: cisplatin + radiation
- 17% weight loss in 3 months
- Referred for pain and cachexia
- Supportive care clinic 8 weeks
- Opioid rotation to methadone
- Metoclopramide: nausea, early satiety
- Compliant with duloxetine, psychologist
- Total testosterone=132, replaced
- Gained: +5 kg (11%)
- BMI: 15.4 → 17.3
- SPPB: 6/12 → 9/12
- 6MW: 485 → 1252 feet
- Handgrip: 33 → 38



SBBP = Short Physical Performance Battery
6MW = Six minute walk test

Why payers and at-risk providers are interested in early, ambulatory PC

- EOL care can be hugely expensive, some of which may be avoidable
- Payers and at-risk providers (HMO-owned health systems, ACOs) want to reduce expenditures
- FFS penalties for over-utilization and quality and patient experience metrics are tied to reimbursement
- For some hospitals, revenues don't keep up with costs of EOL hospitalizations (Medicare, Medicaid, uninsured)
- Some hospitals are overly full and may want to reduce the bed-days used for EOL care
- Many hospitals are not interested because reducing payer expenditures means reducing hospital revenue

Expenditures for CR cancer care toward end of life

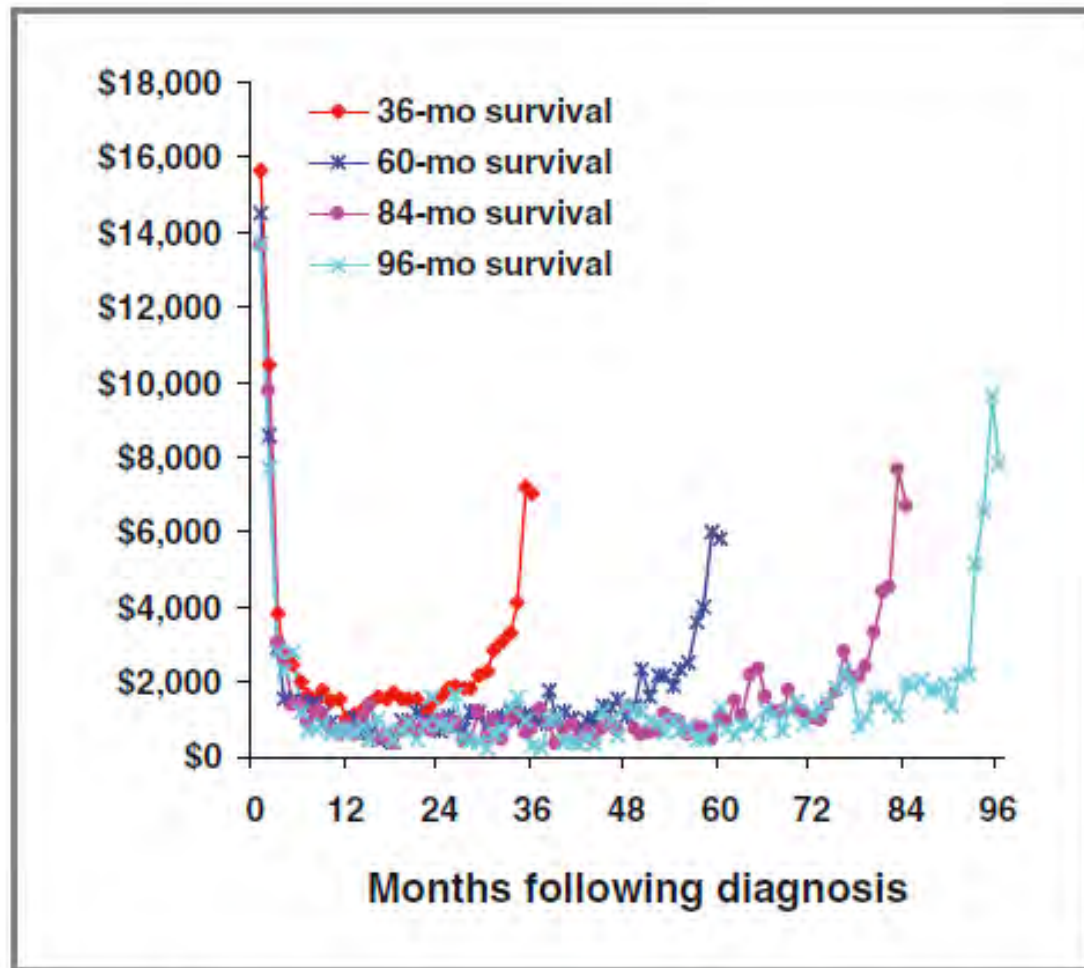
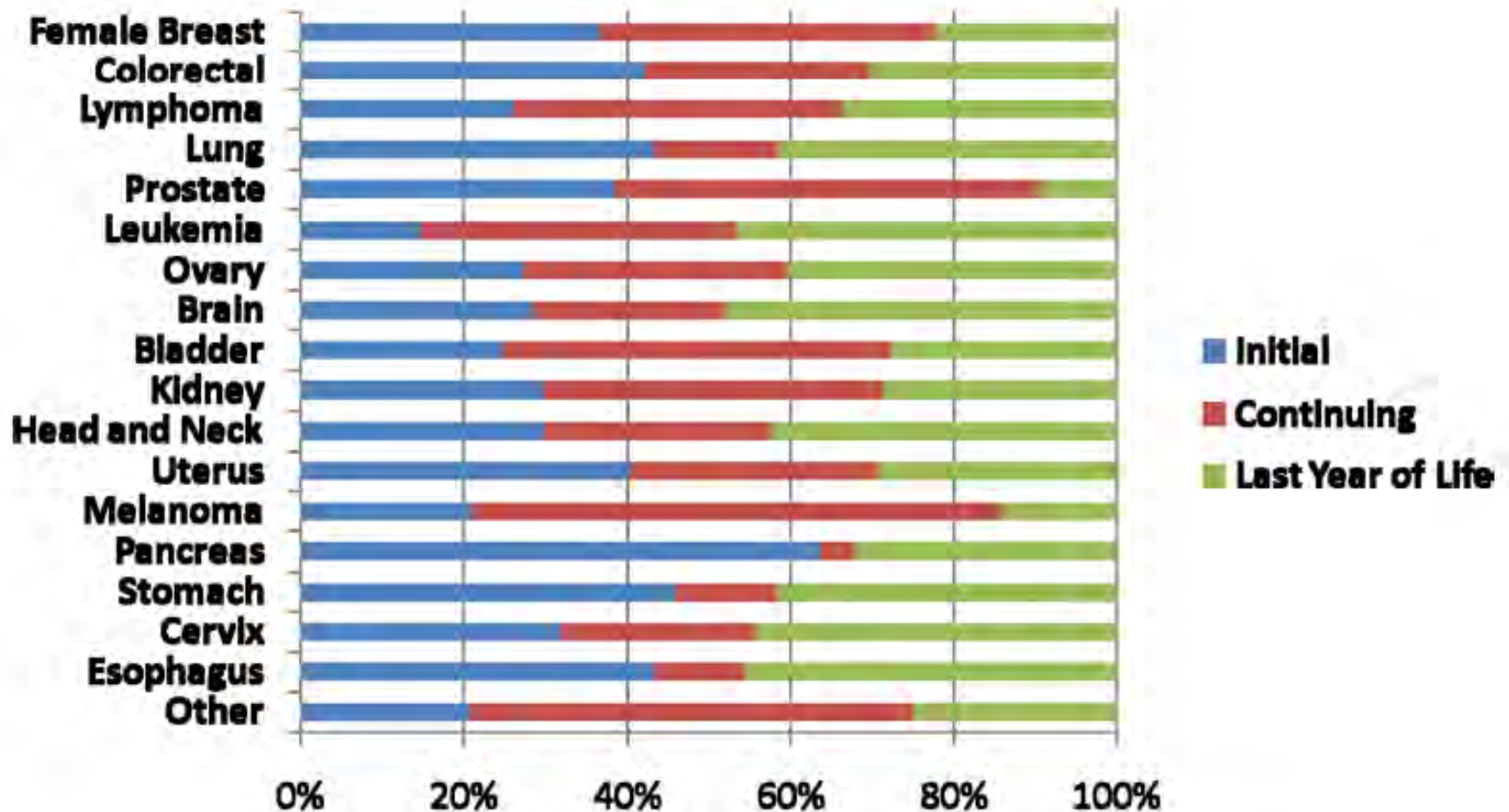


Figure 1. Monthly costs of care for colorectal cancer patients by length of survival.

EOL care rivals initial care in costs across cancers



Source: Mariotto et al., J Natl Cancer Inst 2011;103:117-128.

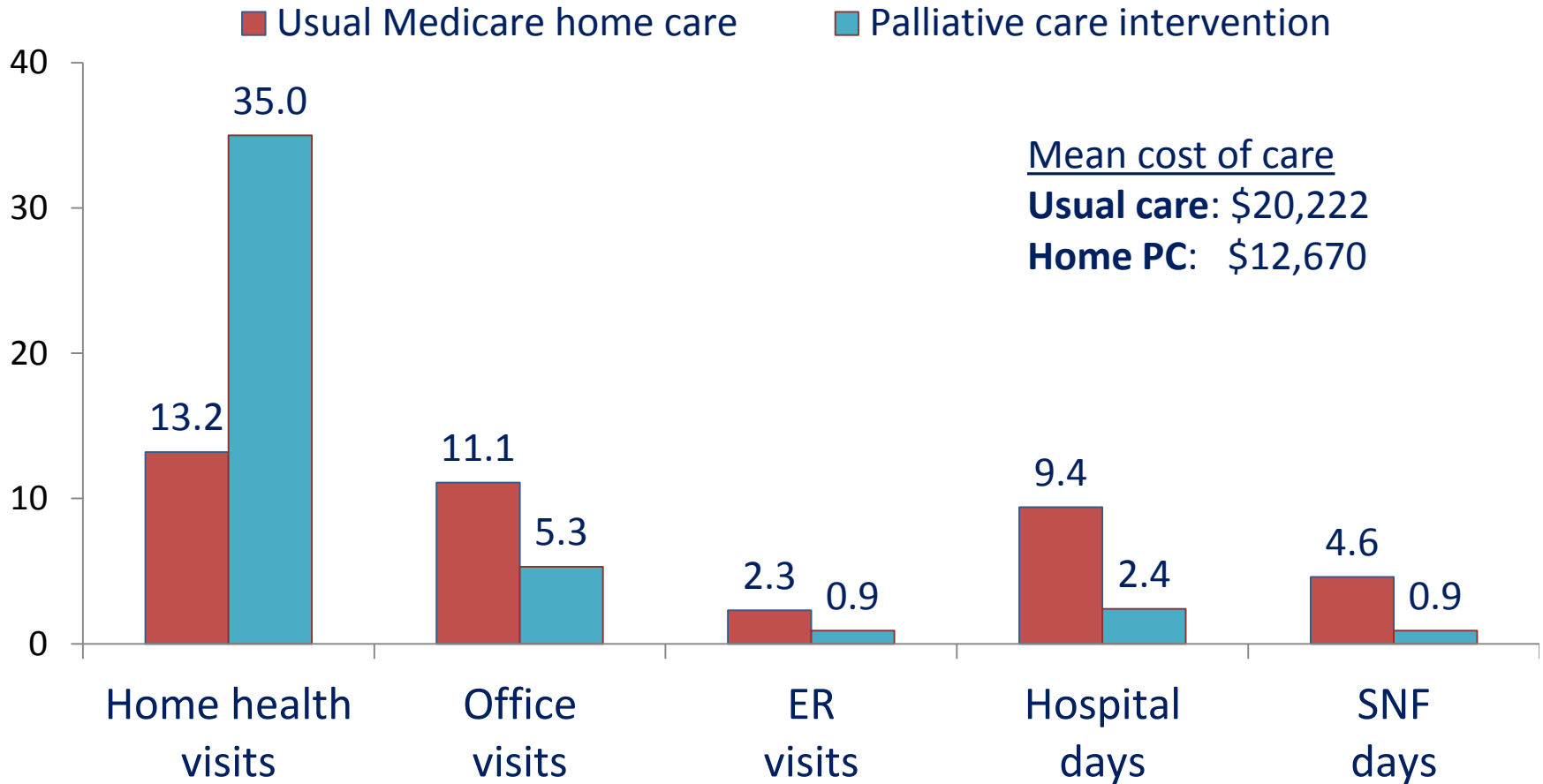
CMS: Mortality and re-admission measures affecting reimbursement

- Value-Based Purchasing score includes 30-day mortality measures
 - Deaths are all-cause, all-setting within 30 days of admission
 - AMI, HF, Pneumonia since FFY2014. COPD will be added in FFY2021, CABG will be added in FFY2022.
 - Hospice in the 12 months prior to admission, or on the first day of admission, is cause for exclusion.
- Re-admission Reduction Program
 - Re-admissions are all-cause within 30 days of discharge
 - AMI, HF, Pneumonia since FFY2013. FFY2015: Added COPD and elective hip/knee. FFY2017: Added CABG.
- Additional mortality metrics and re-admission metrics are included in Star ratings
- CMS does not take palliative care or comfort care (Z515 ICD10 code) into account for either measure

Key RCTs of CBPC measuring cost impact

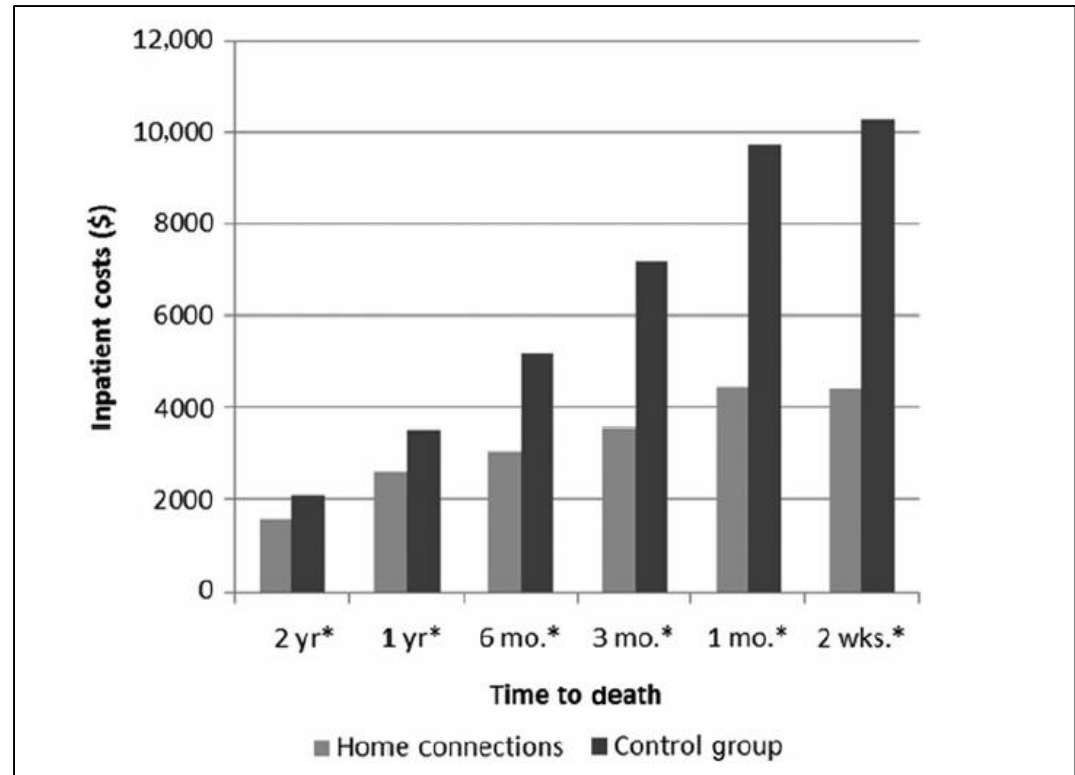
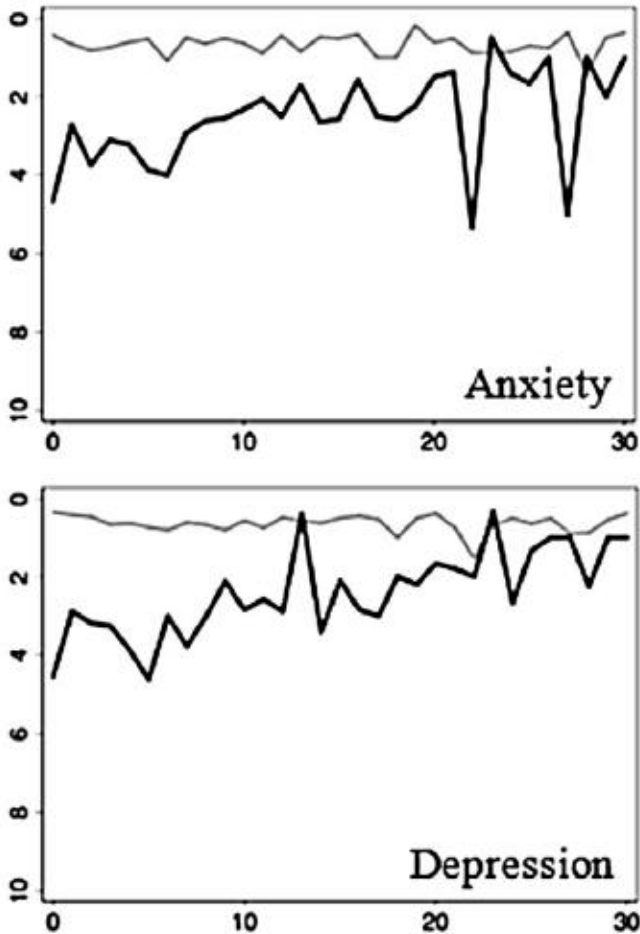
- **Brumley (2007)** compared palliative home care (n=145 for average of 196 days) to usual home care (n=152 for average of 242 days) for home-bound patients with COPD, CHF, or cancer. PC patients had greater satisfaction, were more likely to die at home, and had lower healthcare costs (net difference of \$7,552 per patient) due to fewer ED visits and hospitalizations.
- **Higginson (2009)** compared fast-tracked PC (n=25) to PC delivered after a delay of 3 months (n=21) for patients with severe multiple sclerosis. PC was delivered in both home and community settings. PC patients' caregivers had lower ratings of burden, and lower total costs of care (net difference of £1,789 per patient) after 12 weeks; included costs of healthcare and caregiving.
- **Greer & Temel (2016)** compared early outpatient PC (n=68) and usual care (70) patients who had non-small cell lung cancer diagnosed at advanced stage, enrolled 2006-2009 and died by 2013. No significant differences in total costs of care nor in final 30 days of life (e.g., \$2,527 lower costs in final 30 days of life for PC group was not statistically significant) (secondary analysis, under-powered).

RCT: Palliative Care at Home



Symptoms controlled, costs lower

“Home Connections” (Buffalo NY)

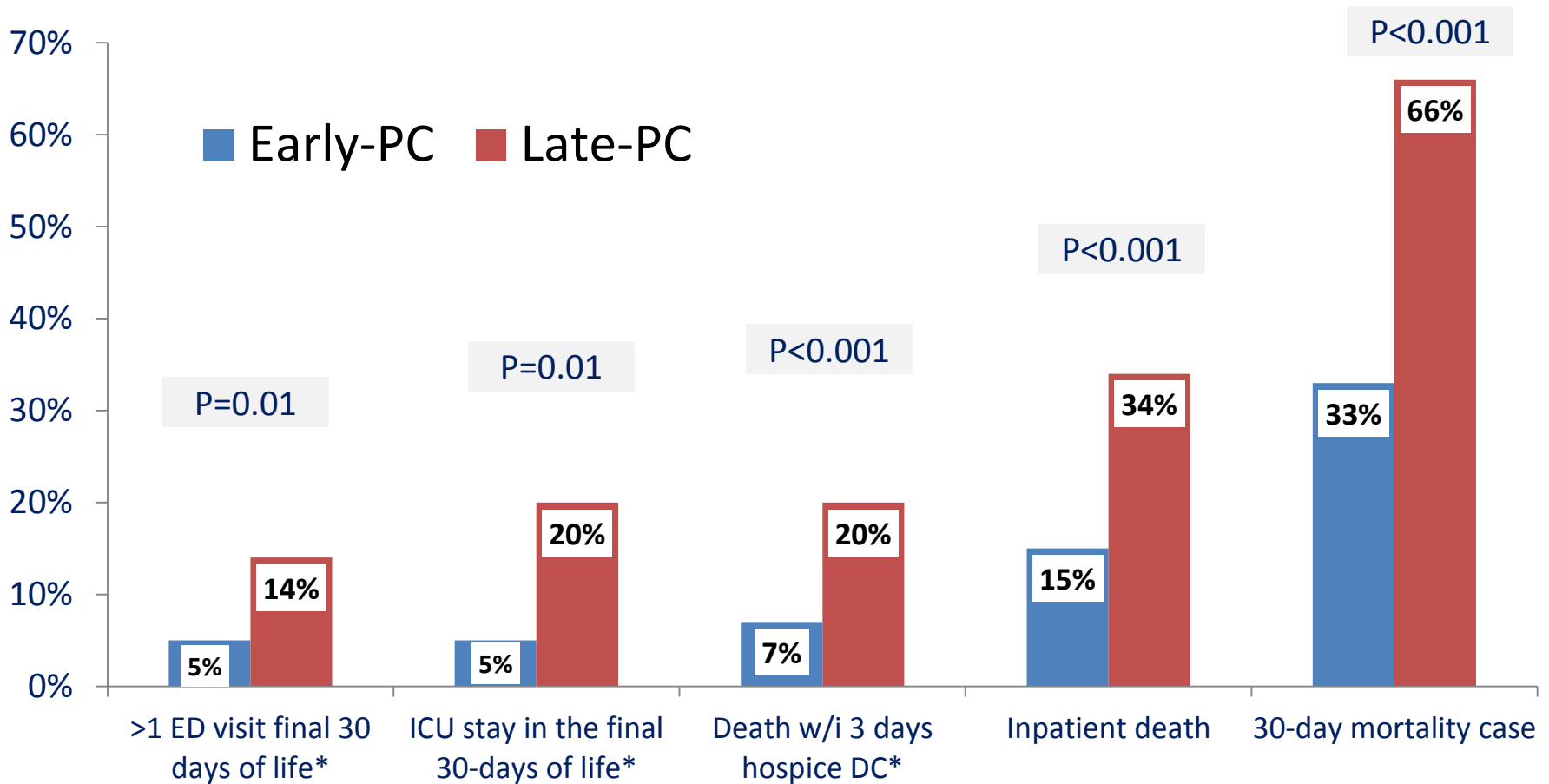


Mean ESAS item scores (y-axis) as a function of the week of enrollment (x-axis) within groups categorized by the score at enrollment: good scores (0-2) on onset are represented by the gray line and moderate (4-6) and/or poor (7-10) scores at onset are represented by a black solid line (n=428).

- [Kerr, Donohue, Tangeman et al. \[Cost outcomes\] JPM 2014 Dec;17\(12\):1328-35.](#)
- [Kerr, Tangeman, Rudra et al. \[Clinical outcomes\] JPSM. 2014 Nov;48\(5\):883-92.](#)

UCSF Symptom Management Service

297 cancer patients, 204 with Late-PC: first PC within 90 days of death
 93 with Early-PC: first PC >90 days preceding death

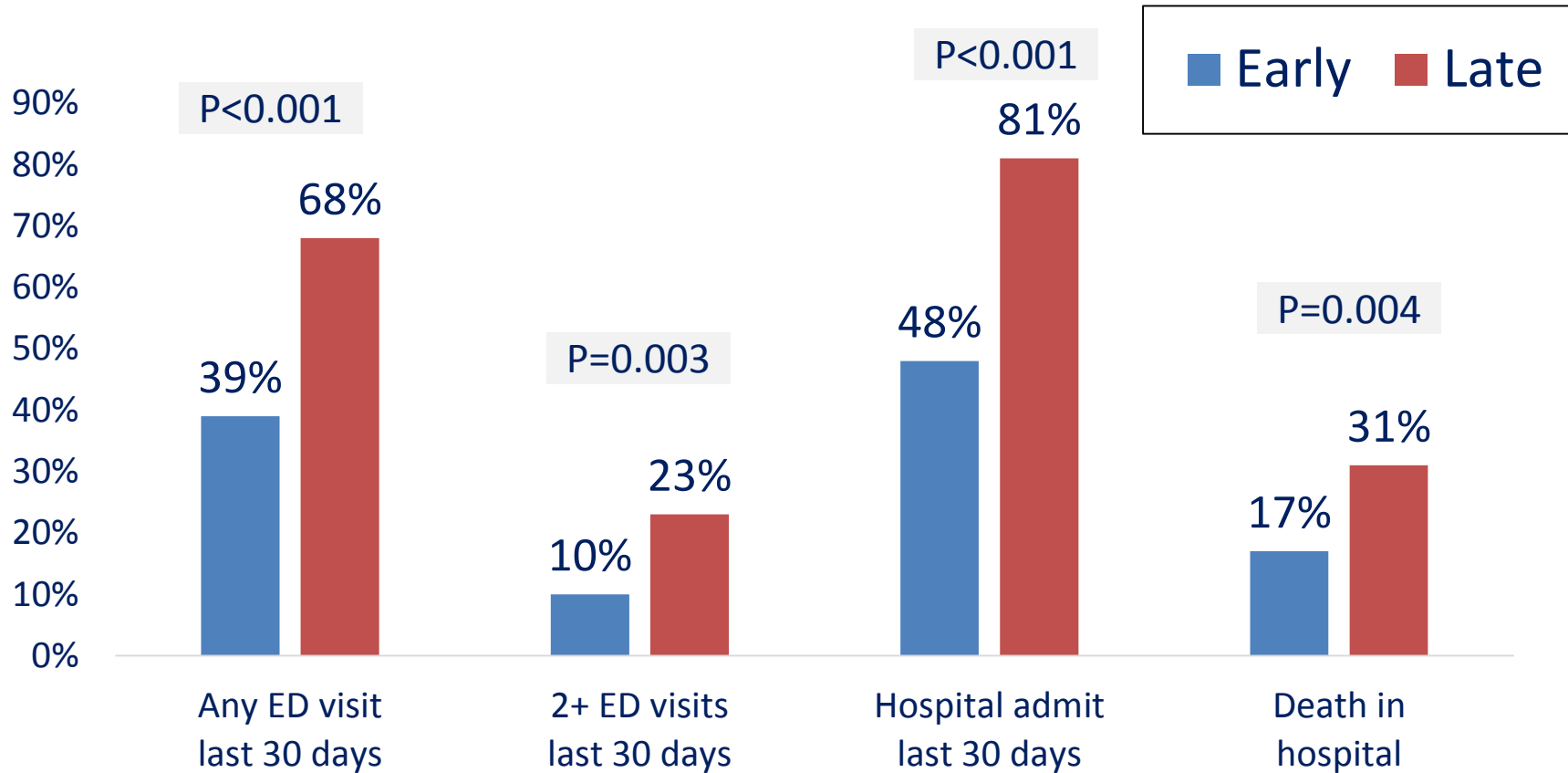


*NQF measures

Scibetta C, Kerr K, Mcguire J, Rabow MW. *The Costs of Waiting: Implications of the Timing of Palliative Care Consultation among a Cohort of Decedents at a Comprehensive Cancer Center.* J Palliat Med. 2016 Jan;19(1):69-75.

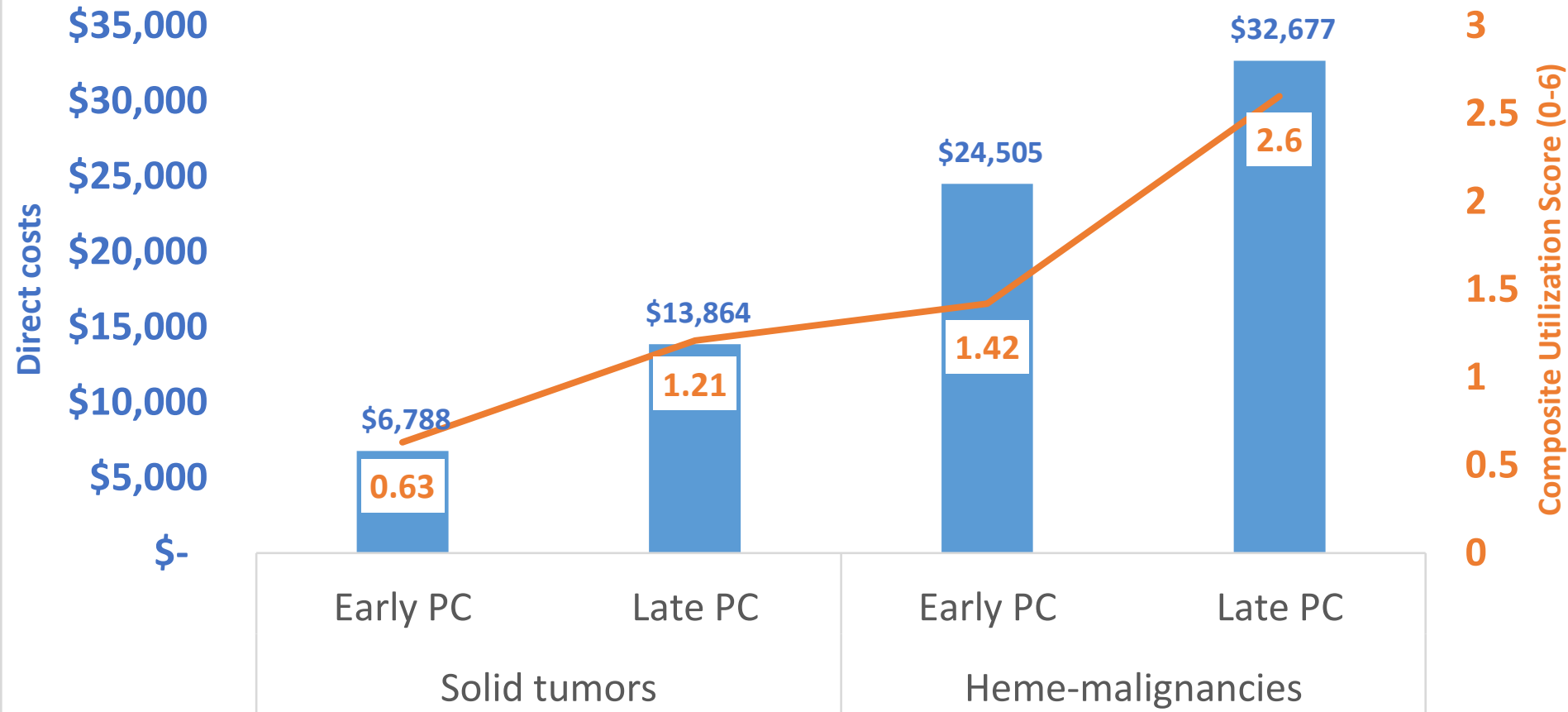
MD Anderson

366 cancer patients, 246 with Late-PC: first PC within 90 days of death
120 with Early-PC: first PC >90 days preceding death



VCU study early vs. late PC

433 pairs solids, 50 pairs hemes



Solids: $p < .0001$ for costs and composite score. Hemes: $p = .041$ for costs, $p = .001$ for composite.
Interaction effects: $p = .439$ for direct costs, $p = .023$ for composite score

Home-based PC – observational studies

Programs:	Lehigh Valley OACIS	Home Connections	Sharp Transitions	Prohealth Care Support
Papers	Lukas 2013	CW Kerr 2014	Hoefer 2013; Cassel 2016	Lustbader 2016
Location	East central PA	Buffalo NY	San Diego	Queens/Long Island, NY
Sponsor	Health System	Payer-hospice partnership	Medicare Advantage plan	Medicare ACO
Avg Age	74	84% >= 65	82+	85
Race / ethnicity	94% white	NA	81% white	92% white
Payors	NA	88% Medicare	Medicare Advantage	Medicare ACO
Enrollment criteria	Advanced, life-limiting illness	Advanced chronic illness	CA, CHF, COPD, dementia, frailty	Adv cancer, severe dementia, COPD with home O2, adv HF, or homebound frailty
Model / staffing	NPs with nurse coord. Caseload of 100 pts per NP. Referrals for off-hours calls & other disciplines.	MD, RN, SW, others as needed. 24x7 call.	MD, RN, SW, others as needed. Emphasis on prognostication and ACP. 24x7 call. Acute and maintenance phases.	MD, RN, SW. Caseload 90 pts per RN. PC and ACP (MOLST).

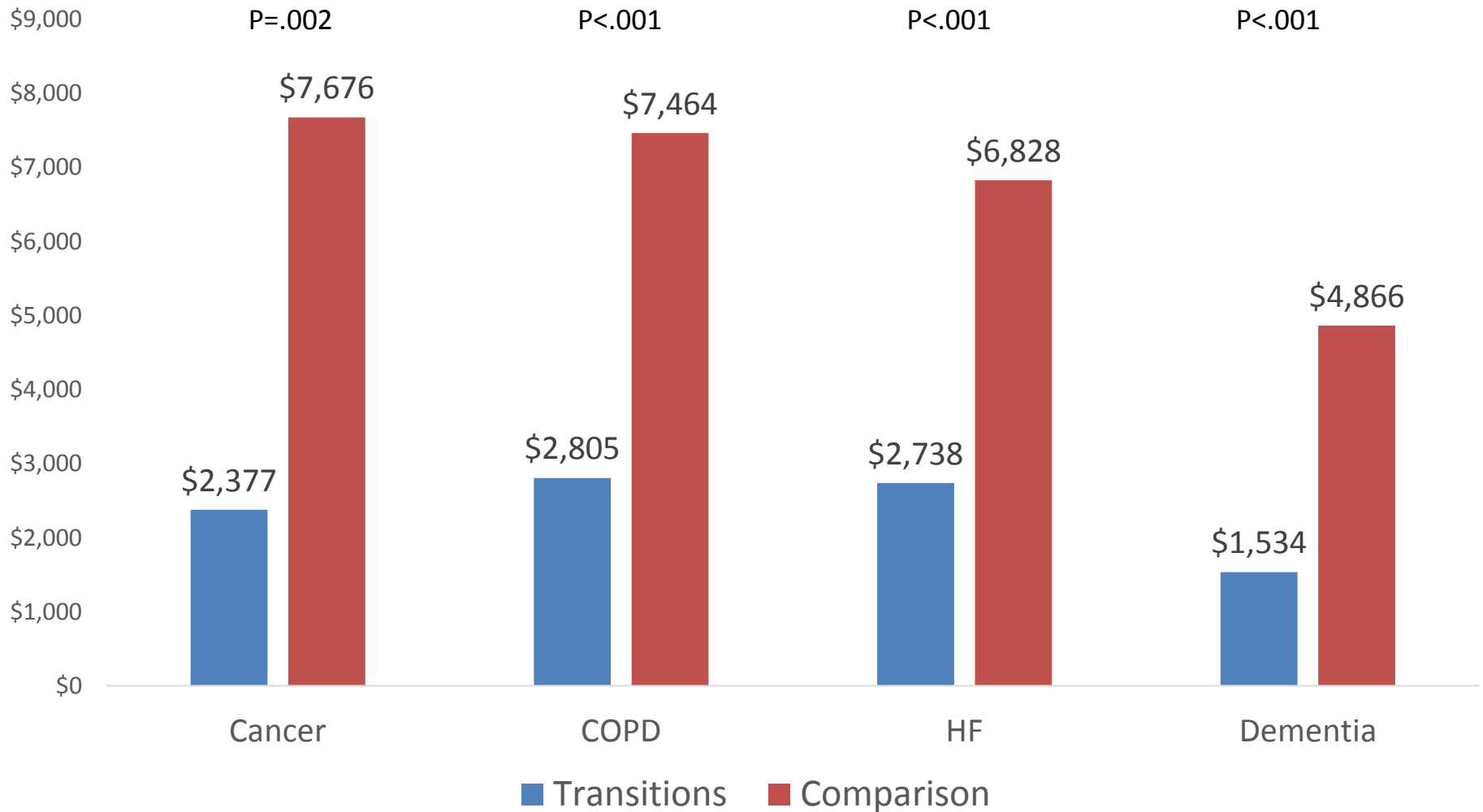
Home-based PC studies, cont'd

Programs:	Lehigh Valley OACIS	Home Connections	Sharp Transitions	Prohealth Care Support
Months enrolled	9 overall	3.9	4.8 cancer, 7.2 others	2
Cost impact	Costs \$3,400 lower after OACIS	\$3,908 lower at 3 months; \$6,270 lower final month	\$2,690 lower per month for dementia to \$4,258 lower for cancer	\$12,000 lower final 3 months of life
Hospital use impact	Lower rates of admits and re- admits, shorter LOS, pre- vs. post-OACIS enrollment	Lower but no rates provided	34%-44% for PC, vs. 74%-85% UC	34% lower for PC
Hospice enrolled	NA	More: 70% PC, 25% UC	NA	More: 57% PC, 37% UC
Hospice duration	NA	Longer: 34 days PC, 9 days UC	NA	Longer: 34 days PC, 10 days UC

“Transitions” Program Description

- Sharp HealthCare in southern California is at risk for the cost of care for patients in its Medicare Advantage plan. To improve clinical outcomes and manage costs, Sharp created the Transitions program in 2007.
- Concurrent care home-based program designed for patients with advanced chronic illness who would benefit from support provided by a specialist palliative care team, comprised of doctors, nurses, spiritual care providers and social workers.
- Four components: in-home medical consultation, ongoing evidence-based prognostication, caregiver support, and advance health care planning.

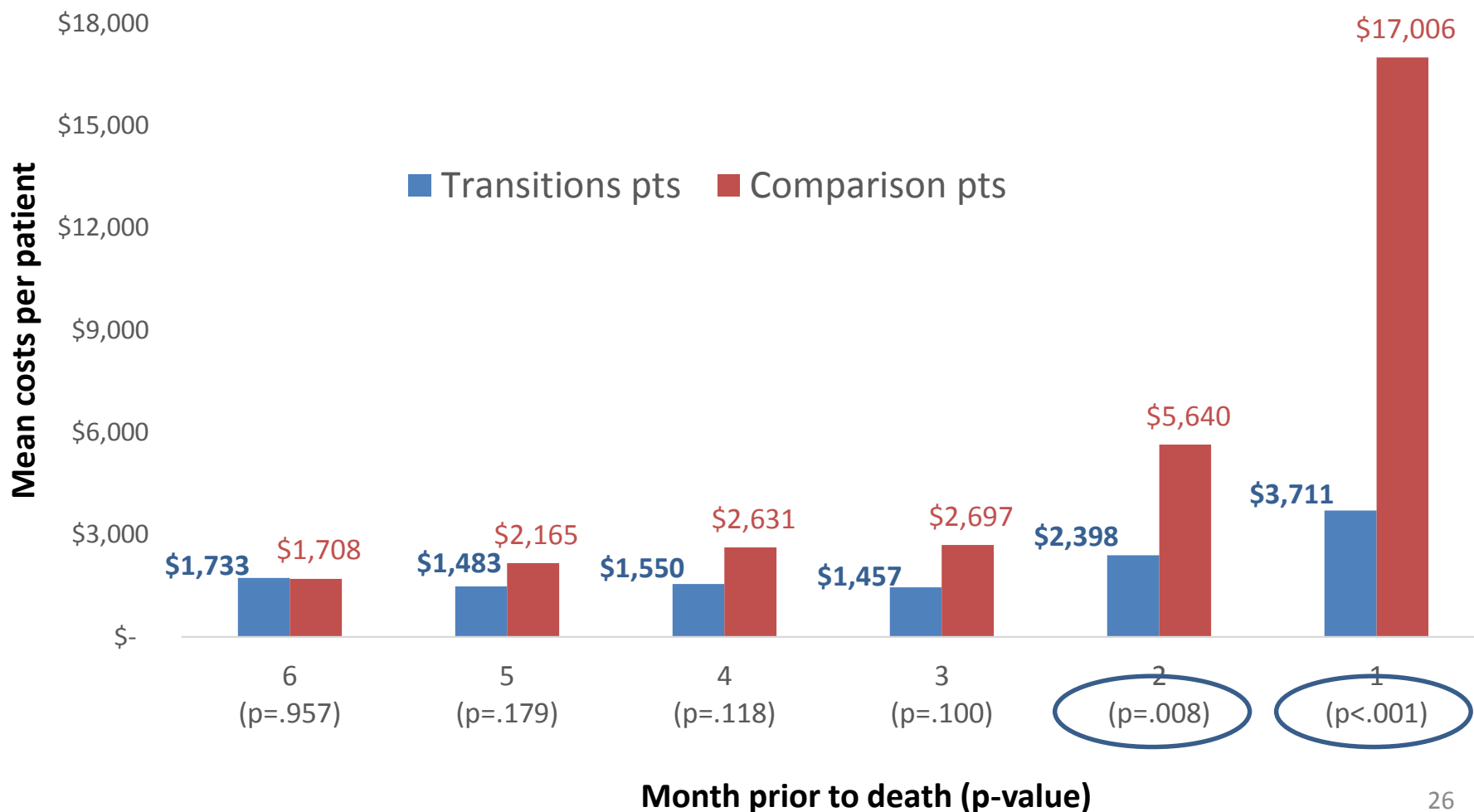
Total healthcare costs per month



Does not include hospice care nor Transitions costs

Mean healthcare costs per patient per month

178 Transitions pts enrolled for at least six months prior to death and 515 matched comparison patients. Does not include hospice or Transitions program costs.



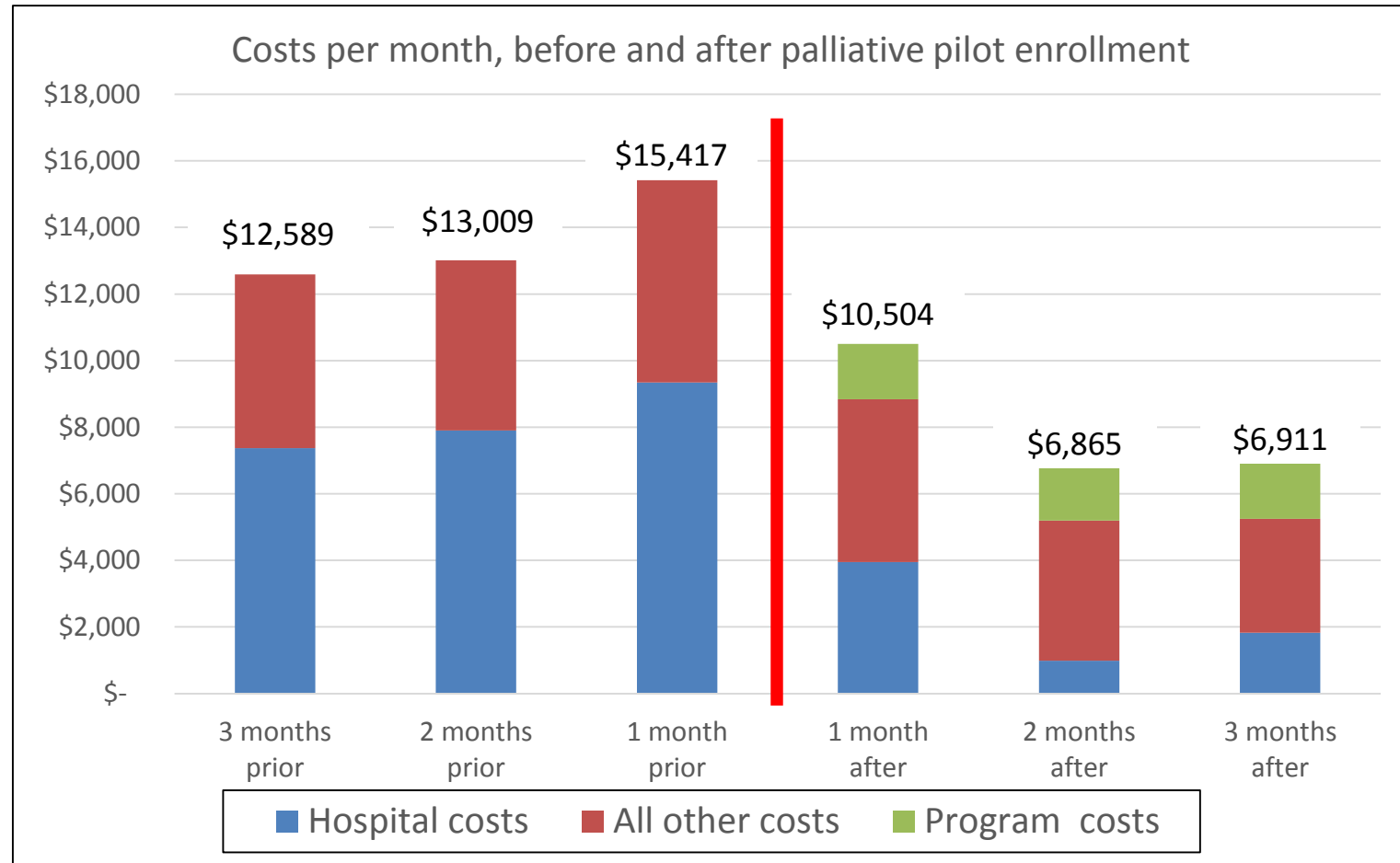
Program costs compared to costs avoided

- Average of \$642 per patient per month cost of providing Transitions services.
- We then added those to the cost of care per month for the Transitions group.
- Net savings per patient per month:
 - Cancer: \$4,258
 - COPD: \$4,017
 - CHF: \$3,447
 - Dementia: \$2,690

Brumley RCT 2007 (CHF, Ca, COPD): \$4,535 net savings per patient per month in 2014 dollars

Medicaid CBPC pilot

Partnership Health Plan – Medicaid beneficiary pilot



N=51 pilot patients with ≥ 90 days PHC Medi-Cal coverage prior to pilot enrollment, and enrolled for 90+ days. Program costs tallied as maximum PMPM global, quality, and outcome payments. Excludes start-up costs.

http://www.partnershiphp.org/Providers/Quality/Documents/Strategic%20Initiatives%202017/PHC%20Palliative%20Care%20Program%20Summary_3_23_17.pdf

Predictable CBPC impact on utilization

- ↓ Acute care hospitalizations/readmissions
- ↓ Emergency department/urgent care visits
- ↓ Deaths in acute care facilities
- ↓ Aggressive care in final month of life
- ↓ Total costs of care
- ↑ Hospice utilization
- ↑ Hospice length of service

Business case anchored in identifying which entity benefits fiscally from such impacts

When are quality and fiscal incentives aligned?

- When there is risk for total health expenditures
 - Payers, HMO-owned health systems, entities with risk-bearing contracts
- When there are rewards for lowering costs (ACOs)
- When there are penalties for over-utilization (readmissions)
- When quality and patient experience metrics are tied to reimbursement (CMS value-based purchasing)
- When revenues don't keep up with costs (Medicare, Medicaid, uninsured)
- When demand for inpatient resources exceeds supply (overly full hospitals)

Sponsors / funders: 1) Hospitals & health systems

- **Hospital / health system leaders** generally want
 - Standard, predictable palliative care services
 - Positive patient/family experience (CAHPS, letters)
 - Positive financial outcomes
 - Low program costs, low admission costs, short LOS
 - Help avoid re-admissions and 30-day mortality
 - Good care reflected in high ratings and rankings
 - No angry families, lawsuits, investigations, bad headlines

Sponsors / funders: 2) Hospice & home-care

- **Hospice or home-care leaders** generally want
 - Standard, predictable services at low cost
 - Referrals from other providers / settings
 - Good care reflected in high ratings and rankings
 - Positive patient/family experience (CAHPS, letters)
 - Positive financial outcomes
 - No angry families, lawsuits, investigations, bad headlines

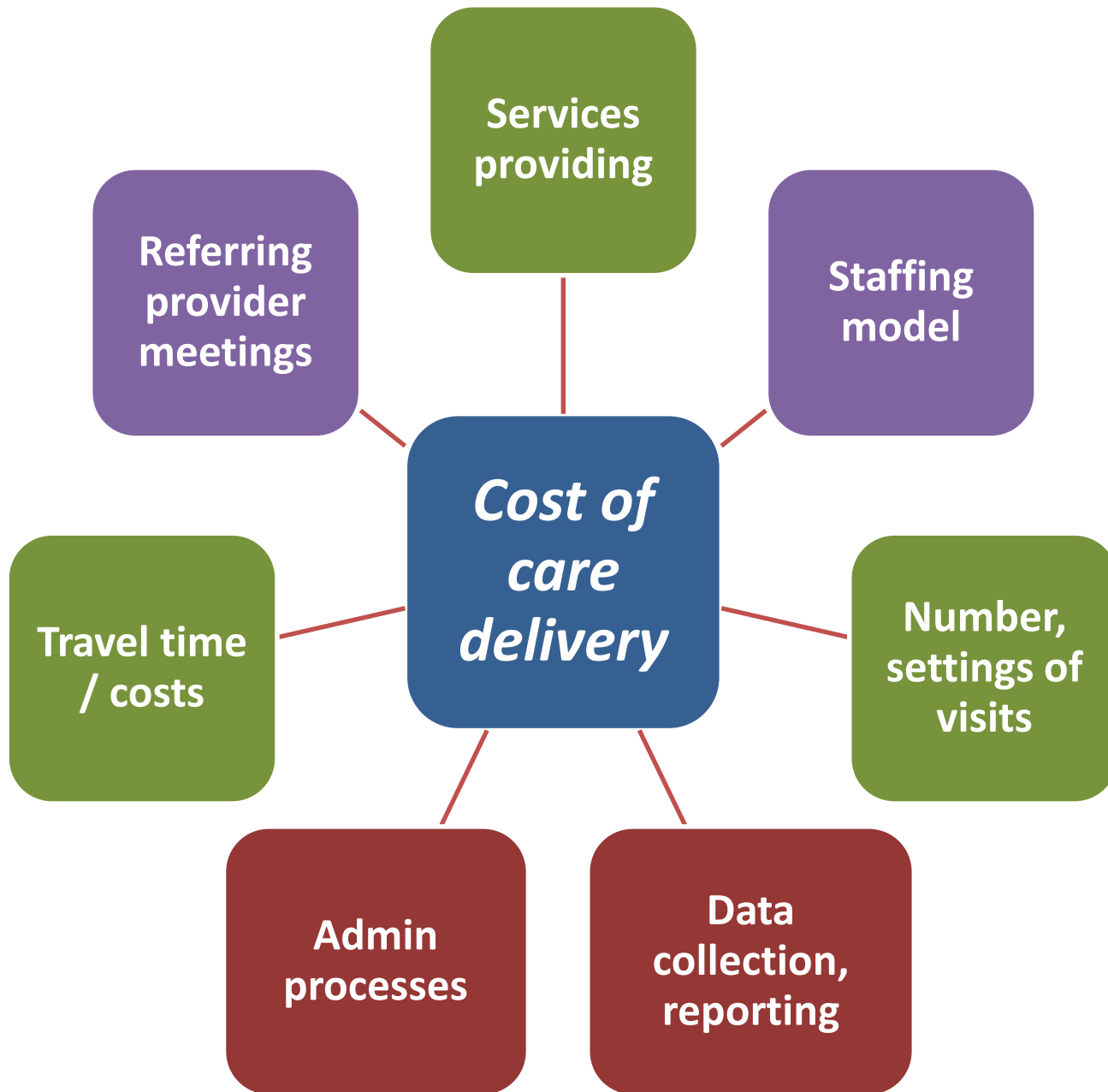
Sponsors / funders: 3) Health plans, ACOs

- **Health plans, ACOs leaders** generally want
 - Standard, predictable services at low cost
 - Reduced expenditures for EOL care
 - Positive return-on-investment
 - No angry families, lawsuits, investigations, bad headlines

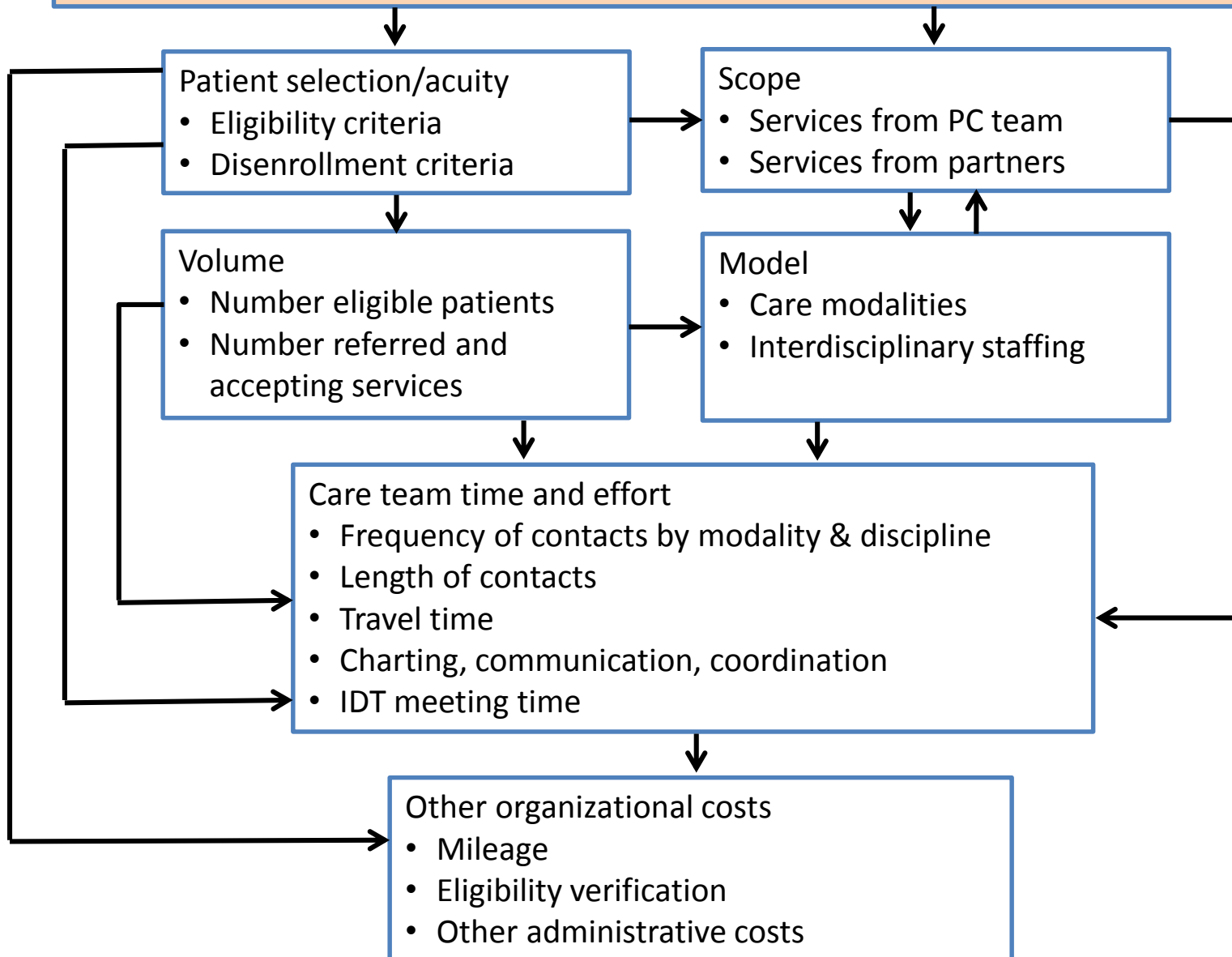
Estimating program costs

- Bad contracts (no win-win) happen when there is no shared (payer-provider) understanding of
 - What exactly will be done for patients
 - Clinical and non-clinical effort required to deliver those services
 - Effort required to comply with administrative requirements built into a contract
- Generating a good cost estimate requires input from clinical and administrative perspectives
- Spending a couple of hours estimating costs and exploring the effect of your choices is a really good investment of time

<https://www.chcf.org/resource-center/payer-provider-partnerships-for-palliative-care/>



Patient population attributes that impact your model and effort
(poverty, isolation, mental health, addiction, language, clinical complexity, etc.)



Key Points of the Emerging Business Case for CBPC

- CBPC improves patient outcomes
- CBPC changes setting of care, utilization, costs
- Some entity will be at risk for over-utilization of hospital care – find it
- Multiple ways to align fiscal incentives and quality outcomes
- Research demonstrates various methods of quantifying cost impact
- Inconsistent findings on role of hospice
- Pay attention to other programs' target population, demographics, program model, program costs and impact