



Cost Savings, Palliative Care and the Hospital Financial Crisis

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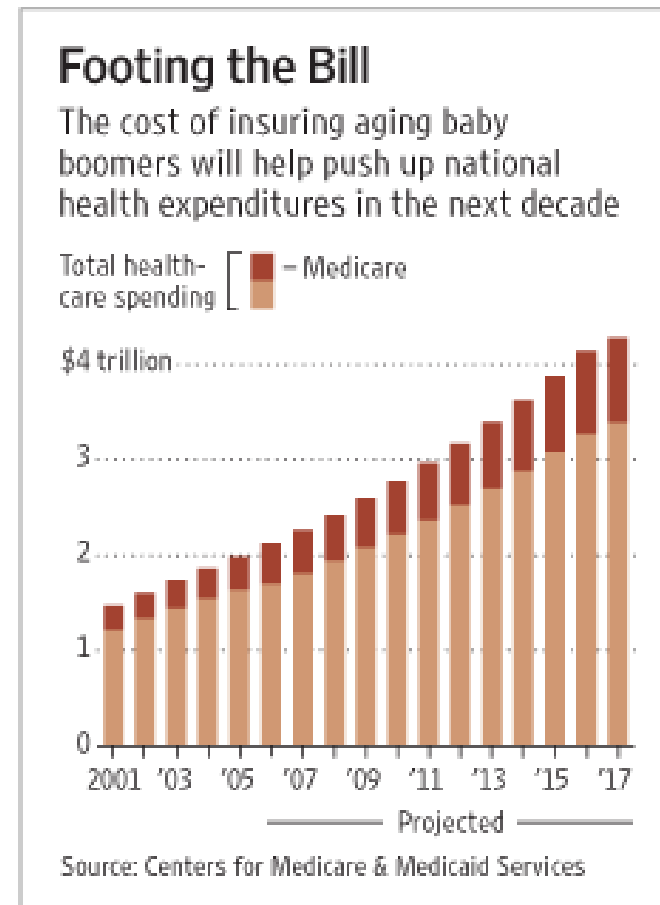
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The Financial Landscape of Healthcare – January 2008



- \$2.2 trillion dollars spent in 2007 on healthcare
- 16.3% of the GDP
- Projected growth of 6.7% year
- Medicare spending expected to increase from \$426 in 2007 to \$844 billion in 2017



Source: WSJ, 2/26/2008



The Challenges Ahead For Hospitals



- The Longevity Revolution or Silver Tsunami
- Rising prevalence of serious chronic illness
- Migration of surgical procedures to the outpatient setting

Or...

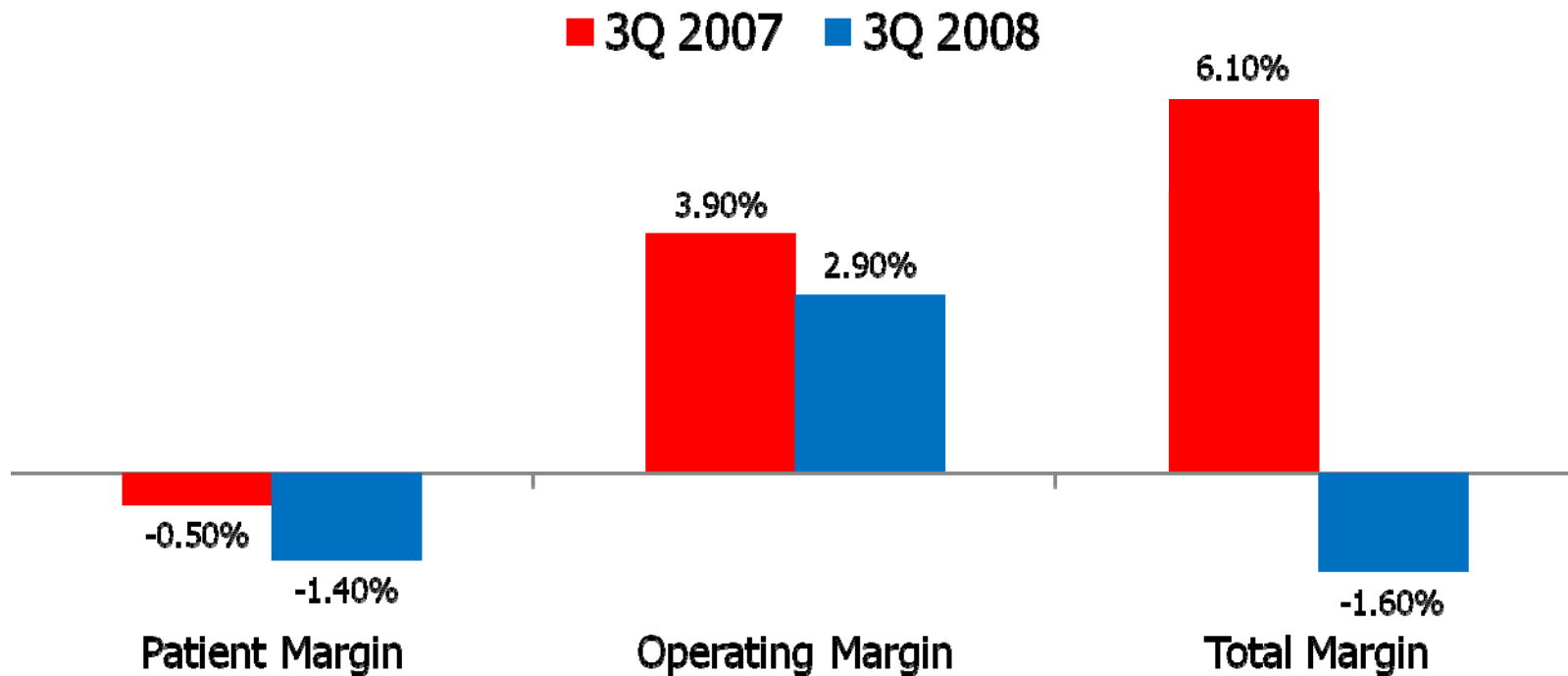
↑ Old non-surgical chronically ill patients (low margin) + ↓ young surgical patients (high margin) = A Big Problem



The Effect of the Economic Crisis on Hospitals



Total, Operating, and Patient Margins, 3rd Quarter 2007 vs. 3rd Quarter 2008*



* *Total Hospital Margin = (Total Net Revenue – Total Expenses) / Total Net Revenue; Operating Margin = (Operating Revenue - Total Expenses) / Operating Revenue; Patient Margin = (Net Patient Revenue - Total Expenses) / Net Patient Revenue.*

Source: AHA. (November 2008). Rapid Response Survey, The Economic Crisis: Impact on Hospitals.



What will hospitals need to do to survive and prosper?



- Increase revenues
 - Increase profitable service lines – high margin, short stay, surgical admissions
- Reduce expenditures
 - Reduce LOS
 - Standardize care of uncomplicated admissions

Is this a feasible solution in 2009?



What is Driving Hospital Expenditures?



- Changing population demographics
 - Unprecedented gains in life expectancy
 - Aging of the baby boomers
 - # of people over age 85 will double to over 10 million in 2030 (3% of the population)
 - 20% of the population will be over age 65
- Increase in the prevalence of chronic disease
- A healthcare industry structured to manage acute episodic illness
- Technology imperative
- Regional variations in practice patterns



A Solution...



- Care focused on complex chronic serious illness
- Goal directed not disease-directed treatments
 - Goals drive treatments rather than technology
- Consensus/evidence-based uniform practice patterns



Goals of Palliative Care...



- To relieve physical and emotional suffering of patients and caregivers
- To improve patient/caregiver-professional communication and decision-making
- To coordinate continuity of care across settings
- To match care to patient needs
- To do this simultaneously with all other appropriate medical treatments



Palliative Care Helps Hospitals



- Palliative care programs provide a means of...
 - Reducing expenditures
 - Cost avoidance (programmatic expansion) & cost reduction (existing programs)
 - Improving throughput as hospitals shrink bed capacity
 - Reduce inappropriate ICU admissions
 - Decrease ICU lengths of stay
 - Reducing low-margin admissions
 - Early hospice referral
 - Outpatient clinics
 - Emergency department pilot programs

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 discharged alive, 2630 palliative care patients (89%) were matched to 18 427 usual care patients, and of the 2388 palliative care patients who died, 2278 (95%) were matched to 2124 usual care patients. The palliative care patients who were discharged alive had an adjusted net savings of \$1696 in direct costs per admission ($P = .004$) and \$279 in direct costs per day ($P < .001$) including sig-

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 not significantly different from usual care costs.

Conclusion: Hospital palliative care consultation teams are associated with significant hospital cost savings.

Arch Intern Med. 2008;168(16):1783-1790



Direct Cost and ICU Outcomes



Costs	Live Discharges			Hospital Deaths		
	Usual Care	Palliative Care	Δ	Usual Care	Palliative Care	Δ
Per Day	\$830	\$666	\$174*	\$1,484	\$1,110	\$374*
Per Admission	\$11,140	\$9,445	\$1,696**	\$22,674	\$17,765	\$4,908**
Laboratory	\$1,227	\$803	\$424*	\$2,765	\$1,838	\$926*
ICU	\$7,096	\$1,917	\$5,178*	\$14,542	\$7,929	\$7,776*
Pharmacy	\$2,190	\$2,001	\$190	\$5,625	\$4,081	\$1,544***
Imaging	\$890	\$949	(\$58)***	\$1,673	\$1,540	\$133
Died in ICU	X	X	X	18%	4%	14%*

* $P < .001$ ** $P < .01$ *** $P < .05$

Source: Morrison et al. Arch Intern Med 2008



The Bottom Line



- Compared to usual care, palliative care consultation results in significant cost savings
 - \$174/day or \$1696/admission for patients discharged alive
 - \$374/day or \$4,908/admission for patients who die in hospital
- Comparing costs/day for 48 hours before and after consultation, palliative care consultation resulted in significant cost reductions
 - \$238/day for patients discharged alive
 - \$574/day for patients who die in hospital

Source: Morrison et al. Arch Intern Med 2008



Impact of Palliative Care



Estimated Benefits	Low	Medium	High
Patient cases (% of discharges)	2%	4%	6%
Patient cases (cases/year)	405	809	1214
Savings due to reductions in direct costs/case	\$1,196,216	\$2,392,432	\$3,588,648
Intervention cost/case	(\$550)	(\$356)	(\$356)
Costs of intervention net of revenues	(\$222,571)	(\$288,128)	(\$432,192)
Increase in net income	\$973,645	\$2,104,304	\$3,156,457

300 Bed Hospital Example Using CAPC-PCLC Study Results. Higher estimates for the low scenario represent less efficiency due to scale and also variations in revenue

Source: Siu et al. Health Affairs, 2009