

The Bizarre Business Case for Patient Safety

Health Watch Webinar

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250 Years of Ambivalence

“[Doctors], on the whole, desire to cure the sick; and – if they are good doctors, and the choice were fairly put to them – would rather cure their patient and lose their fee, than kill him and get it.”

– John Ruskin, social thinker and critic, c. 1860



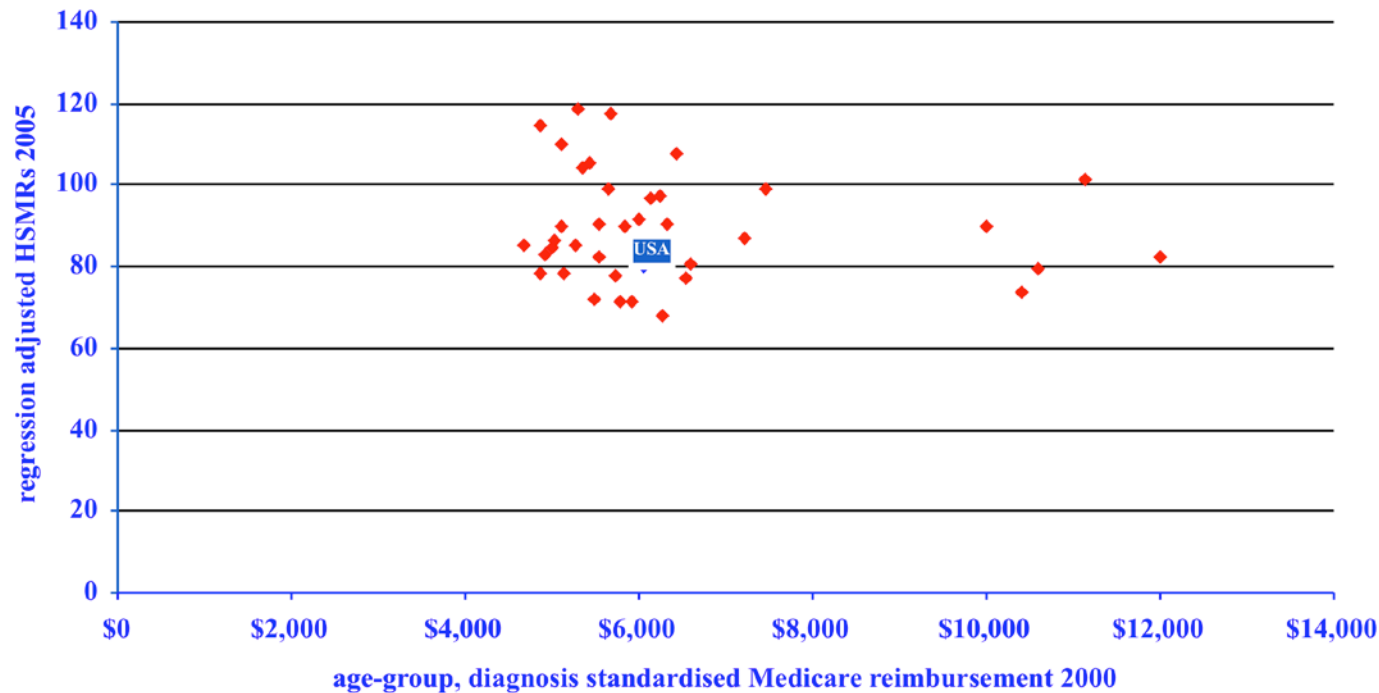
A Boston Surgeon's Business Case

Ernest Amory Codman, MD (c. 1916)

“[F]or the patient, the mortality and morbidity are reduced; for the surgeon, his illusions are dispelled; and for the hospital, greater economy....The days saved to the patient and to the hospital by more speedy convalescence mean money saved to both the patient and the hospital.”

Boston Reality, 90 Years Later

Hospital Deaths vs. Care Cost



Massachusetts Hospitals
Hospital Standardized Mortality Ratio (Jarman)

Health Quality Advisors LLC

The CLABSI Economic “Burden” (To Whom?)

“Extra hospital and SICU (surgical intensive care unit) length of stay attributable to bloodstream infection was 24 and 8 days, respectively. Extra costs attributable to the infection averaged 40,000 per survivor....The attributable mortality...is high in critically ill patients.” In survivors, “a significant economic burden.”

– Pittet, Tarara and Wenzel, *JAMA*, 1994



Errors' Cost to the Nation (Minor? Who's Paying?)

The cost of hospital errors is estimated at \$17 billion - \$29 billion in extra costs that include lost income, lost household production, disability and direct costs.

– *Crossing the Quality Chasm*, Institute of Medicine, 2001

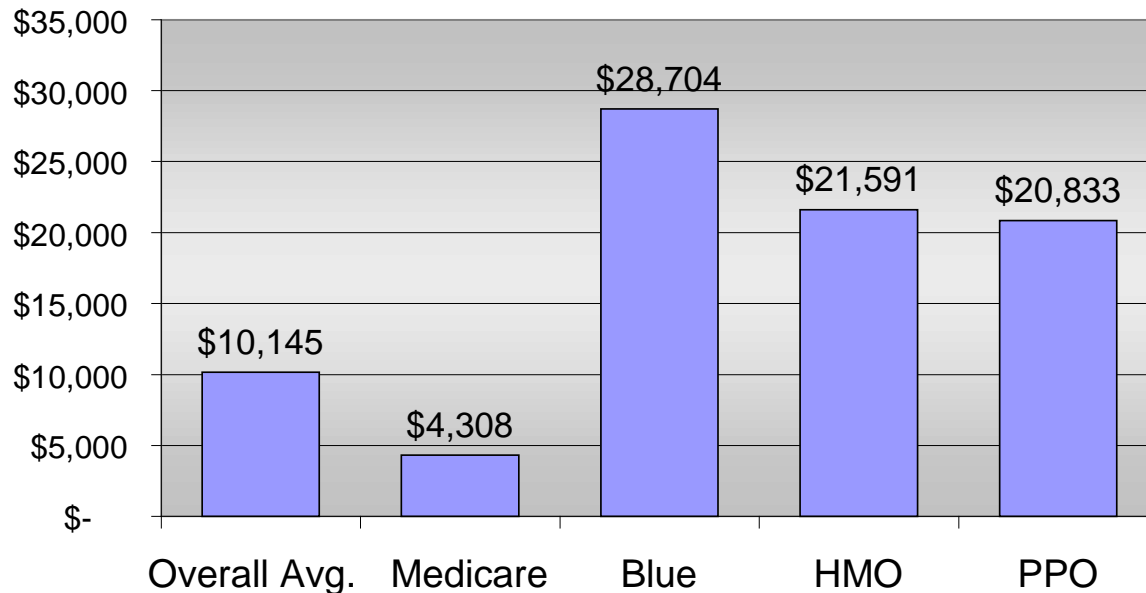
Medical costs, increased mortality costs and lost productivity from hospital errors cost the nation \$19.5 billion in 2008.

– Society of Actuaries and Milliman, 2010

Convincing the Hospitals

“No, really, it’s costing you money.”

Average Additional Payment per Admission with Hospital-acquired Infection



DRG adjusted analysis of 232,994 admissions in 5 states across 13 facilities

CLABSI c. 2006

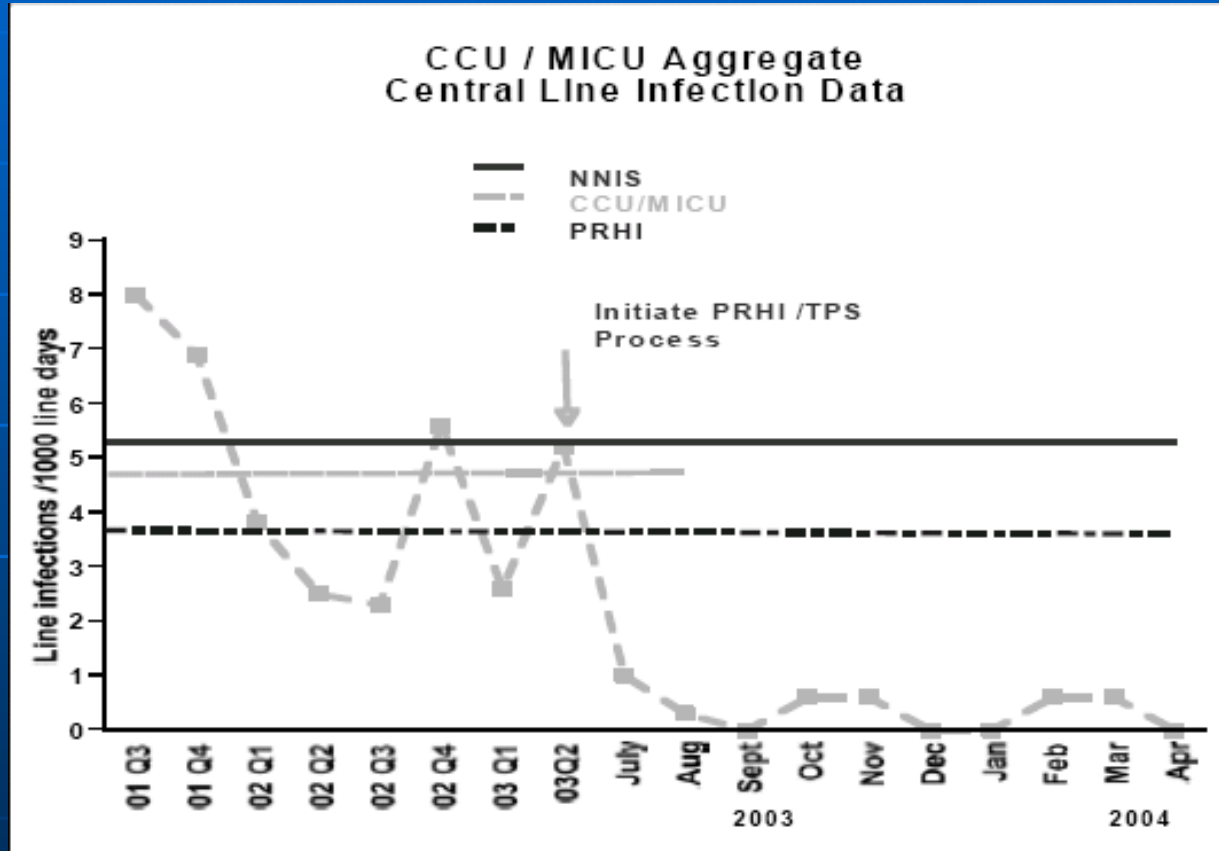
“A tacit but potentially significant barrier to the eradication of HAIs in general, and CLABs in particular, rests in the complexities of the reimbursement system. There is a widespread but unsubstantiated belief that CLABs contribute to...increases in outlier payments....Accordingly, we examined the actual payments and expenses...

In 54 patients whose care was complicated by a CLAB, the loss from operations average \$26,885 per patient, despite a sizeable increase in payments...The losses were not specific to a given payer.”

–Shannon et al., *AJMQ*, 2006

CLABSI Reduction/Goals c. 2004

Allegheny General, Pittsburgh



“A Conspiracy of Error and Waste”

CCU/MICU and HAI A Big Return on Investment

- **Total Savings**
 - CLAB= \$1,235,765 (2 years)**
 - VAP= \$1,003,162 (1 year)**
- **Highmark PFP = \$2,100,000**
- **HAI elimination Initiatives = +\$4,338,927**
- **Investment = \$34,927**
- **126 additional ICU admissions**
- **47 lives saved**

Source: Shannon, Allegheny General Hospital, to APIC, 2006

“Clap your hands if you believe”

The Business Case is Compelling

But need never substitute for the
moral imperative to prevent
infections



Source: Ken Segel, Value Capture, to APIC, 2006

Another View of Who Pays

Hospital Costs and Reimbursement for Surgical Patients With and Without Complications

	Costs: resources used by the hospital (\$)	Reimbursement: amount paid to the hospital (\$)	Hospital profit (profit margin) (\$)
No complications	10,978	14,266	3,288 (23)
With complications	21,156	21,911	755 (3.4)
Increase in reimbursement		7,645 (54)	

Values in parentheses are percentages.

“When surgical complications occur, **hospitals experience a decline in profits and profit margin per case**, but reimbursement usually covers their costs. In contrast, **payors always lose money** with complications.”

Source: JB Dimick et al. *J Am Coll Surg*, 2006

Are we there yet?

- “HAIs result in considerable operating losses in almost all cases.” Denise Murphy et al., APIC Briefing, February, 2007
- “Infection prevention pays from every possible angle.” Denise Murphy, *Modern Healthcare*, May, 2014

Lack of Information gives way to...

“The majority of [medical literature] publications did not provide financial information adequate to make an informed business case-based decision to implement patient safety interventions.”

–Schmidek and Weeks, *Jt Comm J on Quality and Patient Safety*, 2005

...the “compelling” business case

- “In 2008, CMS stopped paying hospitals for cases involving ‘never events’....The results of [our ICU patient safety program] *should further encourage hospitals.*”
Waters et al., *AJMQ*, 2011
- “The impact on hospitals of reducing surgical complications suggests *many will need shared savings programs with payers.*” – Krupka, Sandberg and Weeks, *Health Affairs*, 2012
- “*Hospitals may have to work with payers to reduce complication rates, which can be costly.*” – Patel et al., *App Health Econ Policy Review*, 2013

More “compelling” evidence

- For children in the hematology and oncology units, CLABSIs increased costs by “nearly \$70,000...*If all of these costs can be recovered* by preventing these infections, this suggests potentially significant value of prevention efforts.” – Wilson et al., *Am J Inf Control*, 2014
- “Although hospitals and payers reduce costs by preventing CLABSIs, *hospitals would also decrease their margins.*” – Hsu et al., *Am J Med Qual*, 2014
- “*Payer support, such as covering or funding some intervention costs and imposing financial penalties on hospitals when patients develop CLABSIs, could encourage uptake and dissemination of the program [to prevent them].* – Herzer et al., *BMJ Open*, 2014

Why I love the conclusions, but doubt the numbers

- If you focus on treatment costs, then calculate the impact of “kill ‘em or cure ‘em;” i.e., the balance between injuries and deaths shifting could save money without care improving
- If you calculate savings based on ICU beds filled, then admit some hospitals will profit by not improving care.

The Bottom Line

All it takes is culture change



Betsy Lehman, c. 1994