The National Pay for Performance Summit Beverly Hills Room, Hyatt Regency Century Plaza Hotel, Los Angeles, California Monday, 6 February 2006, 1:15p - 2:00p

Financial Incentives and Quality Improvement

Brent C. James, M.D., M.Stat.

Executive Director, Institute for
Health Care Delivery Research
Intermountain Health Care
Salt Lake City, Utah, USA International Internati

Healthcare

Healing for life

W. Edwards Deming

Organize <u>everything</u> around value-added (front line) work processes

(Quality improvement is the science of process management)

Three classes of outcomes

Physical outcomes (traditional medical "quality")

- medical outcomes: complications and therapeutic goals
- includes functional status measures (patient perceptions of medical outcomes)

Service outcomes

- satisfaction: patients and families, communities, professionals, purchasers, and employees
- includes access issues (e.g., waiting times)

Cost outcomes

- just another outcome of a clinical process
- includes the cost of the burden of disease

Quality controls cost

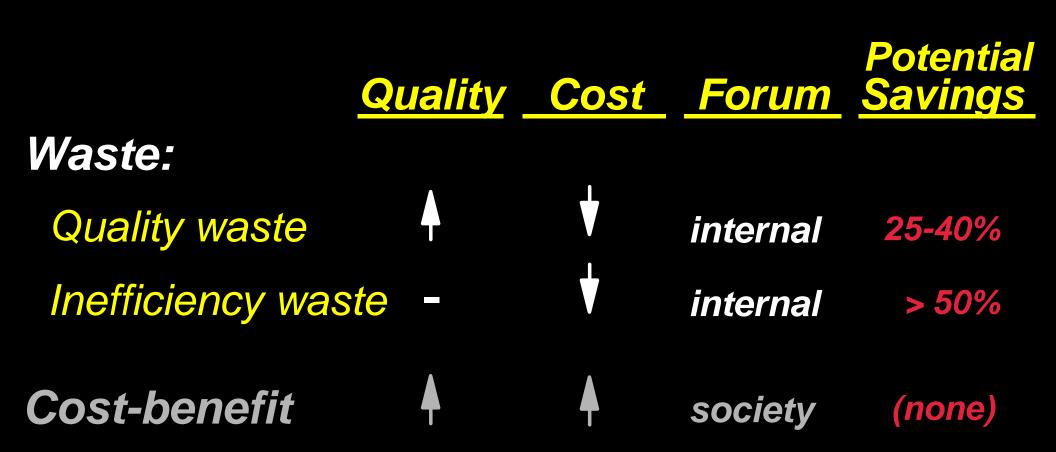
More accurately,

Quality and cost are two sides of the same coin ...

anything you do to one affects the other

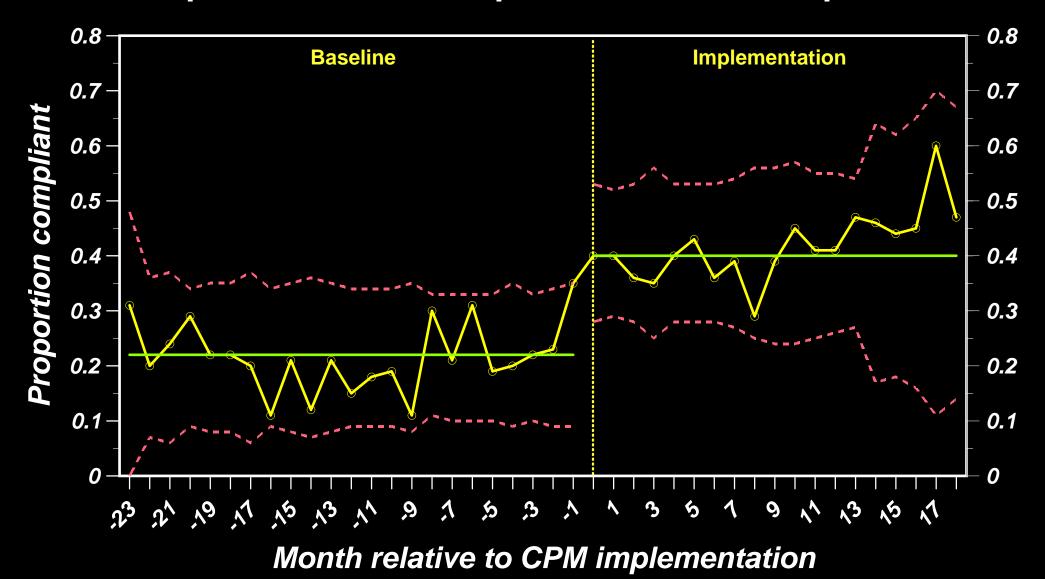
(similarly, cost controls access)

Quality controls cost



CAP protocol compliance

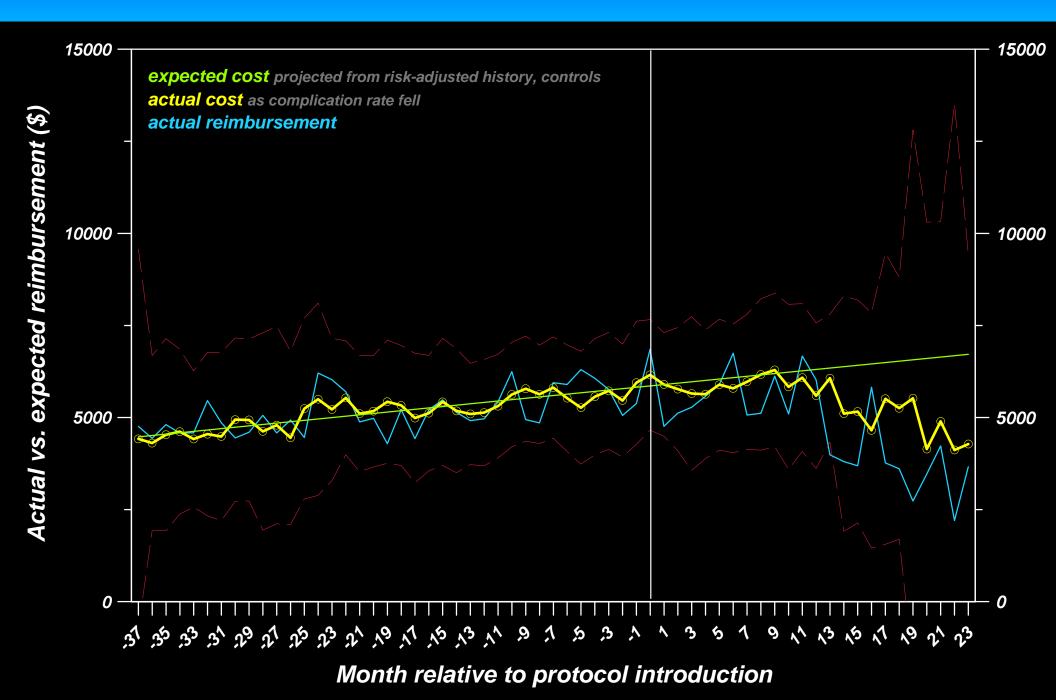
Implementation Group -- Loose Abx Compliance



Community acquired pneumonia

| | without protocol | with protocol | |
|---|------------------|---------------|-----------------|
| "Outlier" (complication) DRG at discharge | 15.3% | 11.6% | ▼ 24.7% p<0.001 |
| In-hospital mortality | 7.2% | 5.3% | ▼ 26.3% p=0.015 |
| Relative resource units (RRUs) per case | 55.9 | 49.0 | ▼ 12.3% p<0.001 |
| Cost per case | \$5211 | \$4729 | ♥ 9.3% p=0.002 |

CAP - cost versus reimbursement



Impact on net income

| | Payment mechanism | | | | |
|--------------------------------|-------------------|----------|----------|-------------|--|
| Improvement to cost structure | Discounted FFS | Per case | Per diem | Shared risk | |
| Decrease cost per unit | 1 | • | | • | |
| Decrease # units per case | | | | | |
| Decrease other units per case | • | 1 | | 1 | |
| Decrease LOS (# nursing hours) | • | | • | • | |
| Decrease # of cases | • | • | • | 1 | |
| | (45%) | (40%) | (0%) | (15%) | |

Impact on net income

Improvement to cost structure

Decrease cost per unit

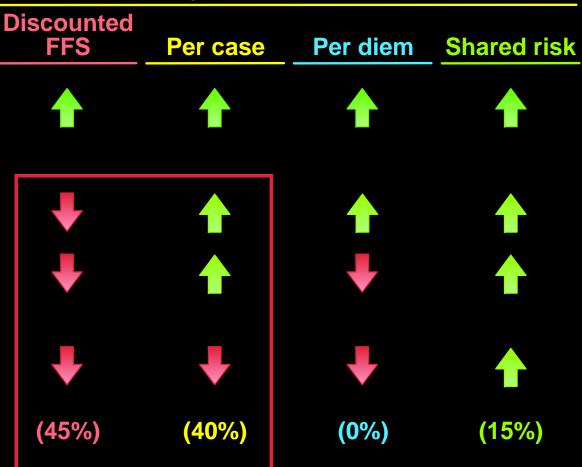
Decrease # units per case

Decrease other units per case

Decrease LOS (# nursing hours)

Decrease # of cases

Payment mechanism



Strategies to harvest quality savings

1. Target specific improvement projects

- project likely medical and cost improvements
- track to final budgets
- select projects with internal savings

2. Use in contract negotiations

- e.g., demonstrate that clinical improvement has produced a superior total cost compared to competitors, even with a lower fee-for-service discount
- always looks worse within current budget cycle, but savings appear in subsequent cycles
- 3. Partner with purchasers: "shared risk" contracts

All of these strategies require sophisticated cost and clinical outcome information

Operationalizing QI savings

- Put a finance person on every improvement team
 - predict work process changes;
 - play through payer mix
 - into existing expense and income budgets.
- Market clinical quality (medical outcomes)
 - service quality drives market share;
 - think branding strategies;
 - create patient-level demand for access, then
- Use quality results in commerical contracting (shared savings)
- Medicare / Medicaid ???

Pay for performance methods

Quality premiums:

- Condition specific
- extra payments (usually a percentage)
- quality targets (intermediate [process] and final medical or service outcomes, often in comparison to competing groups)

Shared savings:

- Condition specific
- separate quality performance thresholds
- cost comparison group (national? local? your own history?)

Issues:

- cost and quality data systems (often presently don't exist)
- full versus partial process view (suboptimization)
- lead times for savings (who makes up-front investment? who reaps final savings?)

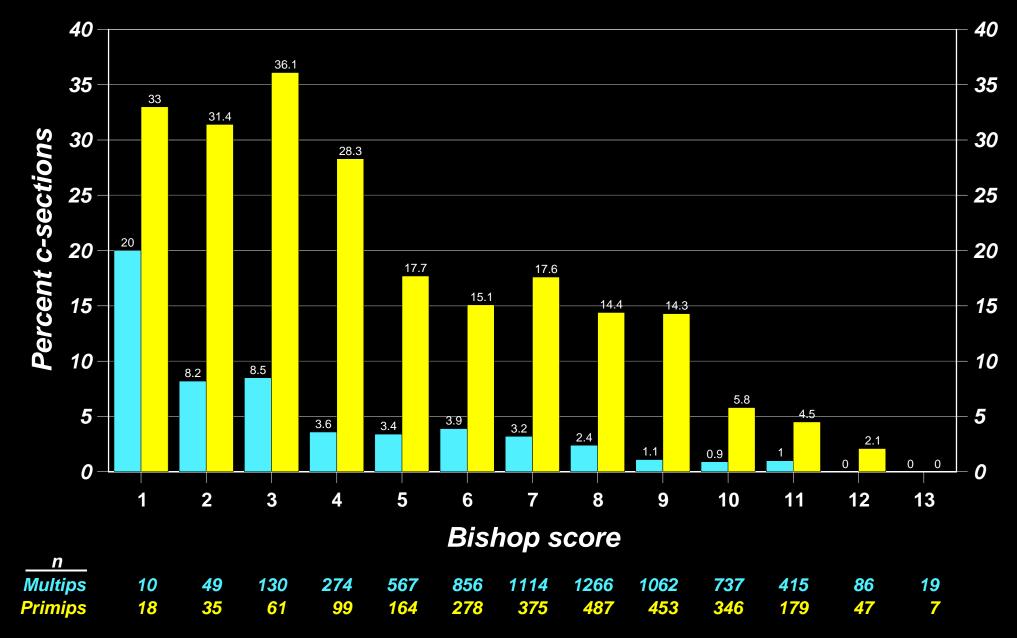
NICU admits by weeks gestation

Deliveries w/o Complications, 2002 - 2003



Unplanned c-section rates

Electively induced patients by Bishop score, Jan 2002 - Aug 2003

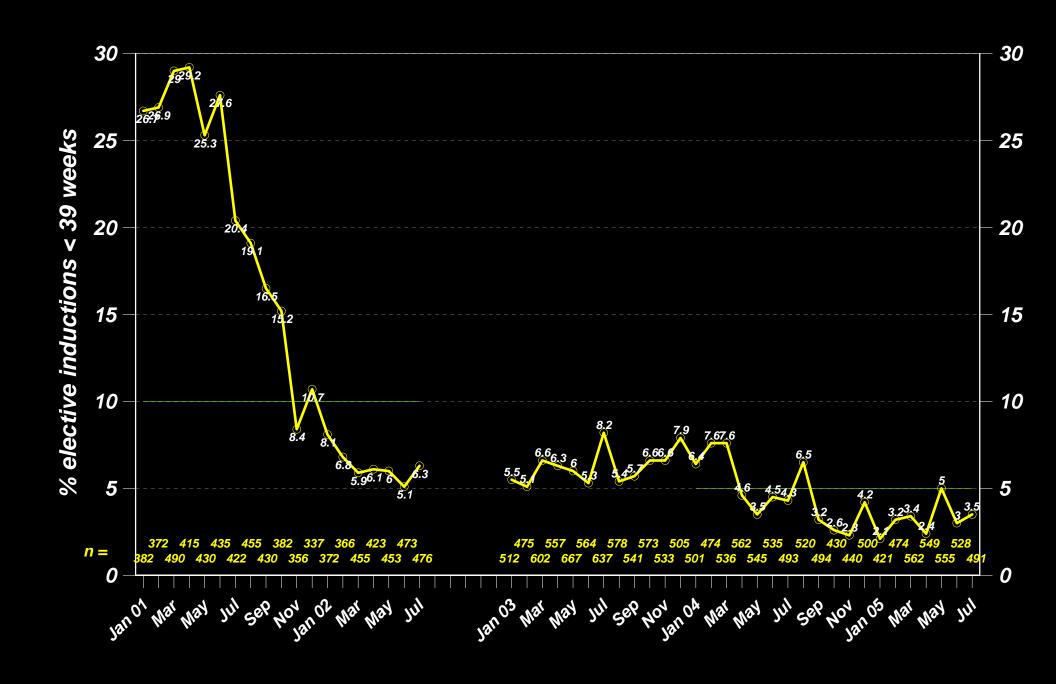


Average hours in labor & delivery

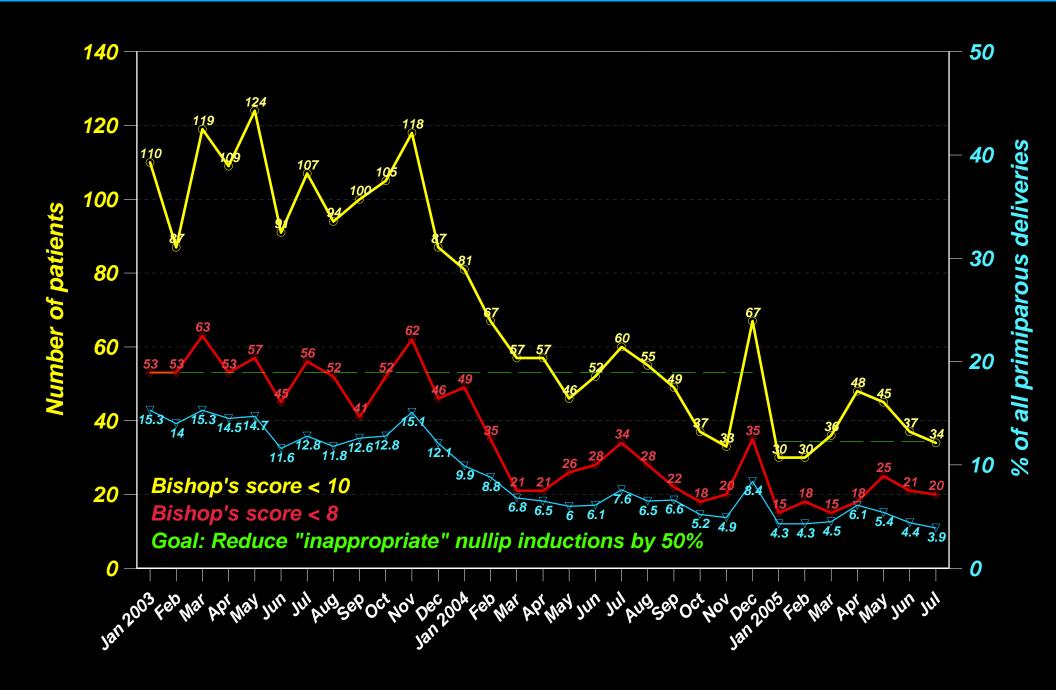
Electively induced patients by Bishop score, Jan 2002 - Aug 2003



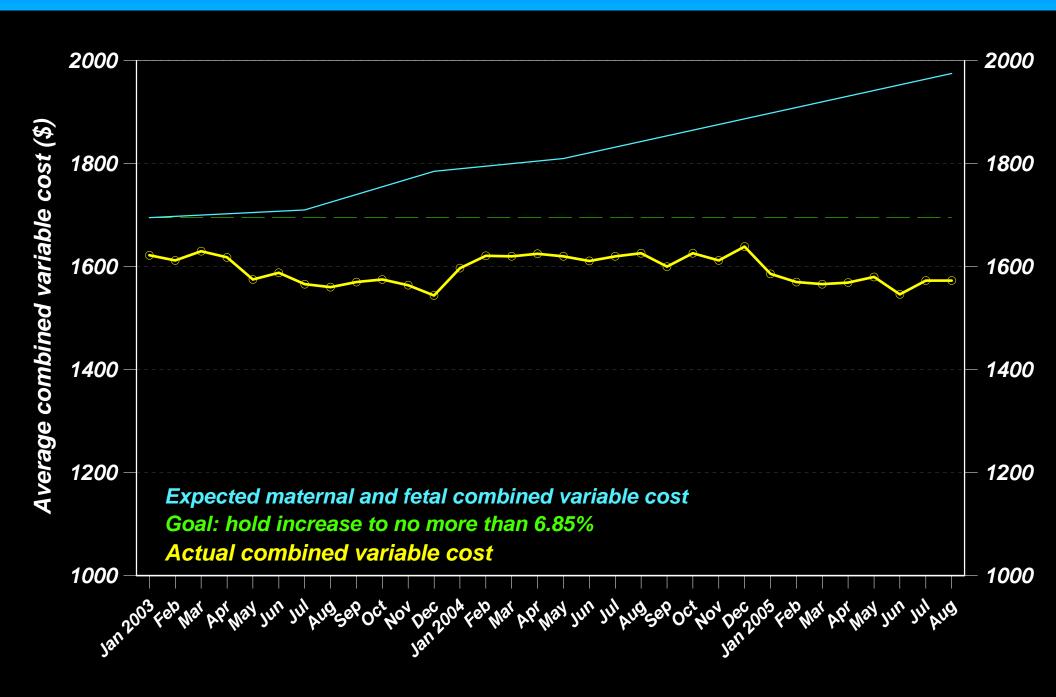
Elective inductions < 39 weeks



Primiparous elective inductions



Labor & delivery variable cost



Quality-based cost improvement

Combined maternal and neonatal variable cost

Deliveries without complications resulting in normal newborns Actual - expected cost, based on year-end 2000 with PPI inflation

