



# From Concept to Practice: Early Experience with Pay-for- Performance

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# Pay-for-Performance Groundswell

- IOM's "Quality Chasm" motivated many employers and health plans
- Most major health plans now have a pay-for-performance program for physicians and/or hospitals
- Not new, but bigger and broader than previous quality incentives (5-10 measures, 5% of revenues)



# National Examples

- Premier/CMS demonstration
  - Top performers on a set of hospital process and outcome measures receive 1 or 2% bonus
- Bridges to Excellence
  - \$50 for maintaining office systems necessary for good care
  - \$80 for meeting structure, process, outcomes criteria for diabetes care
  - \$160 for meeting structure, process, outcomes criteria for cardiac care



# Pay-for-Performance is a Work in Progress

- First generation pay-for-performance programs are experiments
- Goals of these efforts include quality improvement but also buy-in from providers, marketing
- Incentive design questions arise:
  - Market share of payer
  - Size of marginal incentive
  - Tournament, all-or-nothing, graduated rewards
  - Multi-tasking



# PacifiCare Health Systems

- Major U.S. health insurance plan with more than 2 million members across several states
- Typically contracts with large multi-specialty medical groups using professional capitation
- PacifiCare has tracked quality of care among medical groups in California for a decade
- These data have been public since 1998



# Design of PacifiCare P4P

- P4P contracts cover 163 large multi-specialty medical groups in California: beginning 1/2003
- PacifiCare accounts for an average of 15% of patients in groups
- Set targets at 75 percentile of 2002 performance (absolute standard)
- Payments began 7/2003; maximum award = 5% of overall payments



# PacifiCare Evaluation

- In 2003, the Quality Incentive Program (QIP) was launched in CA only (WA/OR control)
- First year targets included five clinical quality measures, 5 patient satisfaction measures and indicator of IT adoption
- PacifiCare's QIP rewards high performance, not improvement (fixed target)



# Overview of Analysis

- Comparison of the change in quality in CA vs. WA/OR after the QIP was introduced using quarterly performance reports
- Focus on 3 continuously reported measures (cervical cancer screening, mammography, HbA1c testing)
- Three questions:
  - Did the QIP improve quality?
  - How much did PacifiCare pay in bonuses?
  - How were bonuses distributed relative to improvement?

# Table 1. Improvement in Clinical Quality Scores for QIP Measures

	Pre-QIP	Post-QIP	Row Difference (Post – Pre)
<b>Cervical Cancer Screening</b>			
California	39.2%	44.5%	5.3% (1.6%)*
Pacific Northwest	55.4%	57.1%	1.7% (0.9%)
Column Difference (CA-NW)	-16.2%	-12.6%	3.6% (1.8%)*
<b>Mammography</b>			
California	66.1%	68.0%	1.9% (1.1%)
Pacific Northwest	72.4%	72.6%	0.2% (1.1%)
Column Difference (CA-NW)	-6.3%	-4.6%	1.7% (1.5%)
<b>HbA1c Testing</b>			
California	62.0%	64.1%	2.1% (1.0%)*
Pacific Northwest	80.0%	82.1%	2.1% (3.3%)
Column Difference (CA-NW)	-18.0%	-18.0%	0.0% (3.5%)

Source: Authors' analysis of PacifiCare physician group performance reports 2001-2004.

Notes:

(1) Predicted values obtained from GEE models of performance.

(2) Bootstrapped standard errors for row differences in parentheses. We indicate with a star (\*) a p-value of <.05.

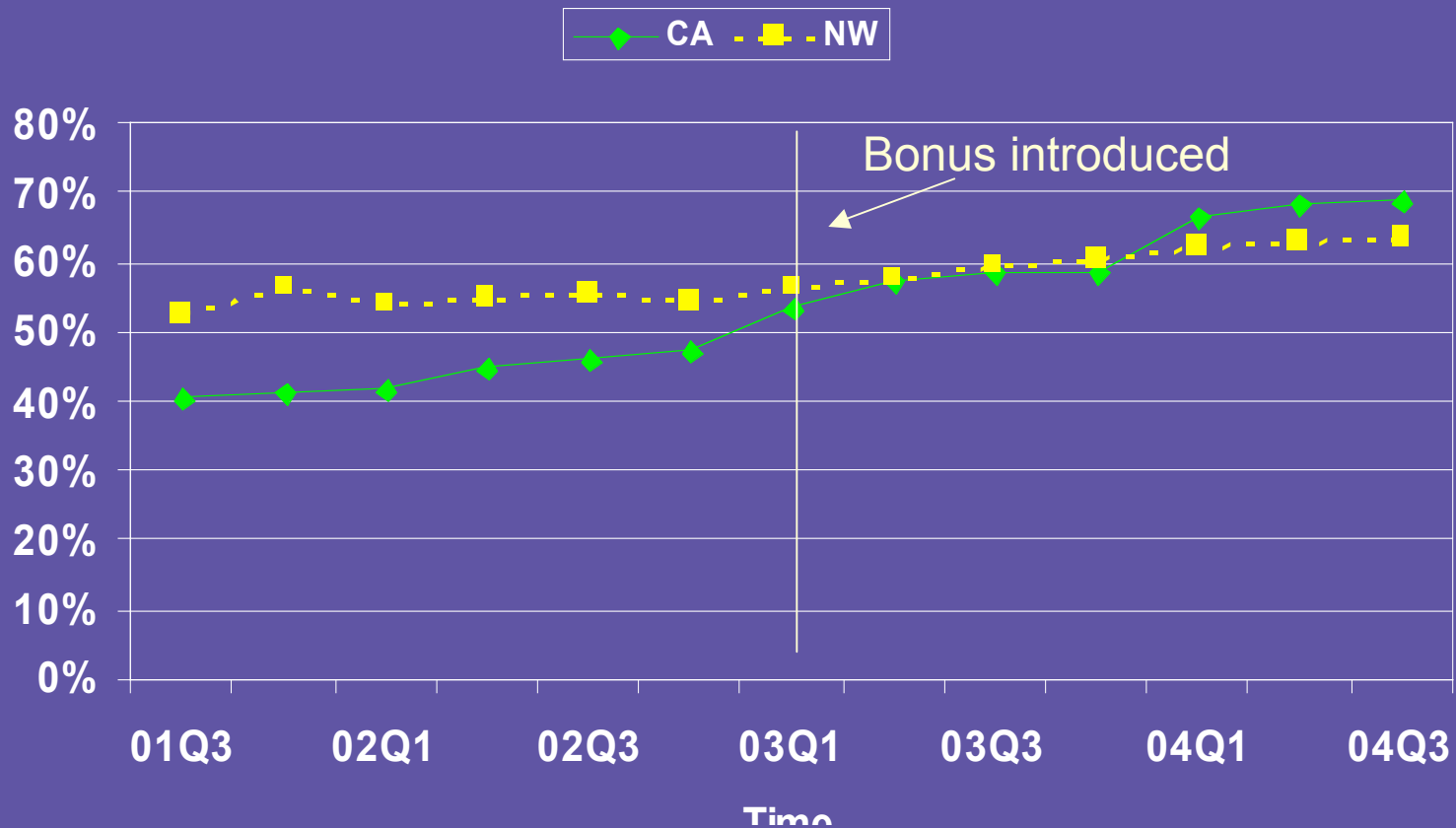
(3) For the purposes of this analysis we define the post-QIP period as beginning with the data reported for the first quarter of 2003.



## Table 2. Quality Improvement after the QIP and Bonus Payments to California Groups with High, Middle or Low Baseline Performance

Quality Domain	Total PacifiCare Members	Pre-QIP Rate	Post-QIP Rate	Improvement (Post-Pre)	Bonuses Paid in Year 1
<b>Cervical Cancer Screening</b>					
Group 1	597,091	53.6%	56.0%	2.5% (0.8%)	\$ 436,618
Group 2	287,610	40.8%	48.1%	7.4% (2.4%)	\$ 127,632
Group 3	305,041	23.0%	34.1%	11.1% (3.9%)	\$ 26,859

# Performance Over Time on Cervical Cancer Screening, California and Pacific Northwest





# Econometric issues

- Analysis of changes in California trend (linear and quadratic) showed no positive effect of QIP for all three measures
- Alternative error structures did not change estimates (when they converged)
- Regression to the mean likely to be part, but not all of the differential improvements across groups



# Increasing the Impact of Pay-for-Performance

- Need to better understand the true cost of improvement (including foregone revenues)
- Begin to increase magnitude of financial rewards for QI to reflect this cost
- Increased scope of quality measures
- More attention to motivating all providers in the network



# Important Open Questions for Policy and Research

- Will there be substantial unintended consequences?
  - Dumping, selection
  - Negative spillovers
- How will this affect total spending?