

Pay-for-Performance: The Next Generation of Program Designs

R. Adams Dudley, MD, MBA

Director, UCSF Center for Healthcare Value

Assoc. Dir. for Research, Philip R. Lee Institute for Health Policy Studies

University of California, San Francisco

adams.dudley@ucsf.edu

Follow on Twitter: @RAdamsDudleyMD

Support: *AHRQ, California Health Care Foundation, California Department of Insurance, Robert Wood Johnson Foundation, Robin Hood Foundation*

No financial relationships to disclose.

Outline

- Pay-for-performance: Not knocking our socks off
- But it works
- Next generation ideas
- Linking PFP to other novel payment approaches

Summary of the P4P Literature (So Far)

- Mainly positive results, but small effects
- Some mistakes we've made in design:
 - Setting up tournaments (e.g., top 10% get a bonus)
 - Disadvantages: lower performers at baseline don't try, middle performers have uncertainty about whether there is a good ROI
 - Pay on percent performance
 - Disadvantages: encourages avoidance of difficult patients
 - Choose unimportant aspects of care to measure
 - Reasons for unimportance: topped out, minor clinical process

Pay-for-Performance in High-Medicaid Practices: Implications from a Cluster-Randomized Trial in New York City

Bardach, NS, Wang, JJ, De Leon, SF, Shih, SC, Boscarin, WJ, Goldman, LE, Dudley, RA. Effect of Pay-for-Performance Incentives on Quality of Care in Small Practices with Electronic Health Records: A Randomized Trial. *JAMA*, 2013 Sep 11;310(10):1051-9

Study Design

- **A cluster-randomized, controlled trial of incentives**
 - Clustered at the clinic level for randomization
 - Incentives also paid at the clinic level
- **P4P incentive design BASED ON PHYSICIAN FEEDBACK**

Population

- **84 small (1-2 providers) practices in New York City with a high % of Medicaid patients**
- **All practices were participants in Primary Care Improvement Project (PCIP)**
 - Electronic Health Record (EHR) with clinical decision support reminders for measures
 - Ongoing quality improvement site visits available (not required)

Incentive Structure: Pay More for What Is Harder

	Base Payment	Payment for High-Risk Patients			Total Possible Payment per Patient
	<u>Insurance:</u> Commercial <u>Co-morbidity:</u> No IVD or DM	<u>Qualifying Insurance:</u> Uninsured Medicaid	<u>Qualifying Co-Morbidities:</u> IVD or DM	<u>Combination of qualifying insurance and co-morbidity:</u> Uninsured/Medicaid <u>and</u> IVD/DM	
Aspirin	-	-	\$20	\$20	\$20
BP Control	\$20	\$40	\$40	\$80	\$80
Smoking Cessation	\$20	\$20	\$20	\$20	\$20




Maximums: \$200 per patient. \$100,000 per practice

IVD: Ischemic Vascular Disease; DM: Diabetes Mellitus

Research questions

- What is the effect of a pay-for-performance program in small, Medicaid-focused practices on cardiovascular **outcomes** and processes when the program has the following features?:
 - *Pay for each patient where the outcome is achieved (not a percent of patients, not a tournament)*
 - *Pay more for what is harder—achieving the outcome in patients who are harder for clinical or socioeconomic reasons*
- How will providers feel about the program?

Quality measures

 Antithrombotic Rx	$\frac{\text{Antithrombotic prescribed}}{\text{Patients with Diabetes or IVD}^*}$
 Blood pressure control (“BP”)	$\frac{\text{BP controlled (<140/90 or <130/80)}}{\text{Patients with hypertension}}$
 Smoking Cessation Intervention	$\frac{\text{Intervention delivered}}{\text{Patients who smoke}}$

*IVD: Ischemic Vascular Disease; TC: Total Cholesterol; LDL: Low Density Lipoprotein

Analysis

- **Difference-in-differences approach to quantify the effect size in each cohort**
 - *Compares the difference in performance change over time between intervention and control clinics*

Baseline Characteristics of Intervention and Control Clinics

Clinic Characteristics	Incentive	Control	P value
Clinicians, median (IQR)	1 (1-2)	1 (1-2)	0.77
Patients, median (IQR)	2500 (1200-4607)	2000 (1100-3500)	0.45
Time since EHR implementation, mo	9.93 (4.47)	9.57 (4.44)	0.81
QI specialist visits	5.17 (3.43)	4.24 (2.73)	0.25
Insurance, %			
Commercial	33.8 (23.9)	32.1 (21.6)	0.89
Medicare	25.6 (22.0)	26.8 (17.6)	0.32
Medicaid	35.3 (28.3)	35.7 (24.8)	0.88
Uninsured	4.3 (4.8)	4.7 (4.9)	0.60

Results: Baseline Performance

	Control (%)	Incentive (%)	P value
Aspirin therapy, CAD or DM	54.4	52.6	
BP control, no comorbidities	31.8	52.1	<0.05
Blood pressure control, CAD	46.0	68.4	
BP control, DM	10.4	16.8	<0.05
Cholesterol control, non-comorbid	89.7	88.2	
Smoking cessation intervention	19.1	17.1	

Year 1

Results: Baseline Performance

	Control (%)	Incentive (%)	P value
Aspirin therapy, CAD or DM	54.4	52.6	
BP control, no comorbidities	31.8	52.1	<0.05
Blood pressure control, CAD	46.0	68.4	
BP control, DM	10.4	16.8	<0.05
Cholesterol control, non-comorbid	89.7	88.2	
Smoking cessation intervention	19.1	17.1	

Year 1

Performance of Incentive Arm Compared to Control Arm

	Absolute difference in performance improvement between groups over study period (%)	P-value
Aspirin therapy, CAD or DM	6.0	0.001
BP control, no comorbidities	5.5	0.01
Blood pressure control, CAD	-9.1	0.23
BP control, DM	7.8	0.007
Cholesterol control, non-comorbid	-1.2	0.22
Smoking cessation intervention	4.7	0.02

Year 1

Providers Attitudes about the Quality Measures and the P4P Program

Begum, R, Smith Ryan, M, Winther, CH, Wang, JJ, Bardach, NS, Parsons, AH, Shih, SC, Dudley, RA. Small Practices' Experience with EHR, Quality Measurement, and Incentives. *American Journal of Managed Care*, 2013 Nov;19(10 Spec No):eSP12-8

Clinician Experiences and Attitudes towards QI

- **N=104 (74% response rate)**
- **Had a visit with QI staff (p=0.01)**
 - *Incentive 67.9%*
 - *Control 42.9%*
- **Future intention to generate QI reports (p=0.09)**
 - *Incentive 86.5%*
 - *Control 71.7%*
- **Future intention to track clinic progress on ABCS (p=0.07)**
 - *Incentive 90.6%*
 - *Control 78.3%*

Quality Reports^a

Understood the information in the reports

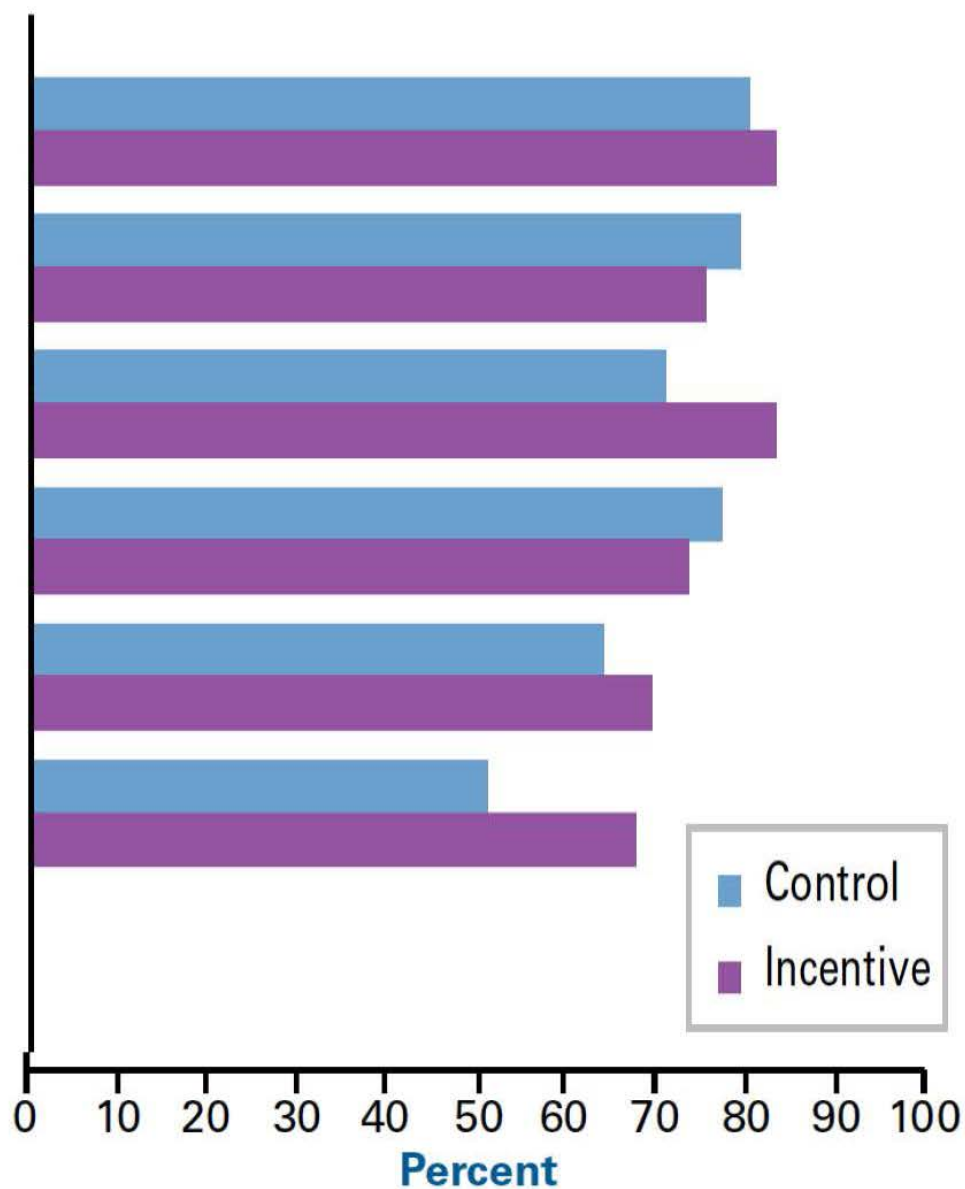
Prioritization of ABCS was appropriate

Received and reviewed quality reports^b

ABCS were clinically meaningful

Reports had enough information

Reports accurately reflected progress on ABCS^b



EHR Functionalities^c

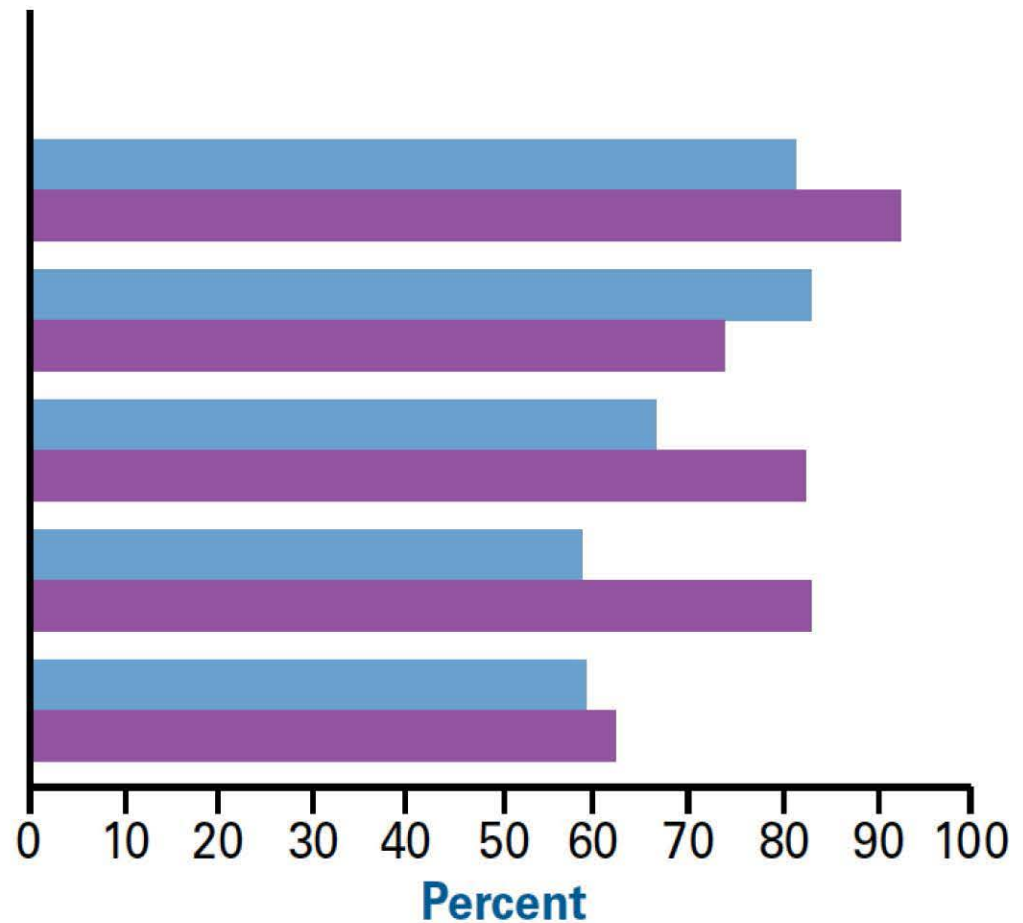
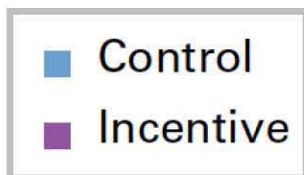
Clinical Decision Support System^d

Smart forms^e

Use registry to generate patient lists^f

Order set (already within the EHR)^b

Flow sheet (part of progress note)^g



Future of P4P

- **Pay more for what's harder**
- **Pay for each patient (not %s or tournaments)**
- **Avoid topped out measures**

- **P4P probably more acceptable when introduced in a context where support for improvement is also available**

- **Advice to clinics: invest in using QI tools—
decision support, registries**