Using Performance Measurement to Improve Health Care Quality: Good Data Are Only the Beginning

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Transformation Vision: 2016

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A health care system that provides safe, timely, effective, affordable, patient-centered care for everyone in Massachusetts.

Levers of Change

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Public Engagement

Legislative & Regulatory

Finance & Payment

Governance

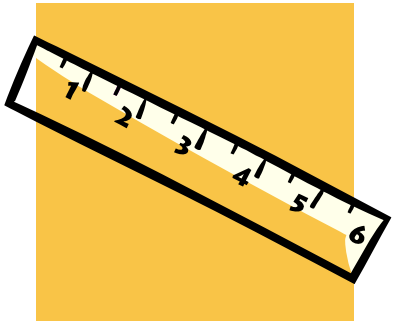
Quality & Safety Measurements

Information Technology

Organizational Readiness

Competing Demands for Time and Attention

What gets measured
becomes
what matters



A Balanced Portfolio of Measures

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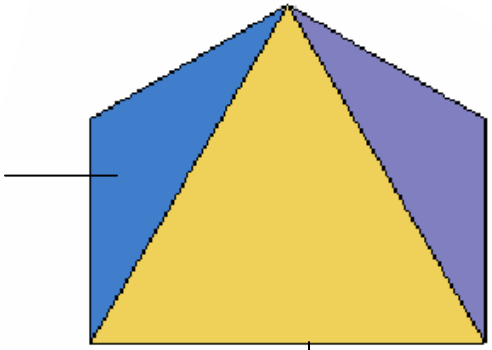
Patient Experience

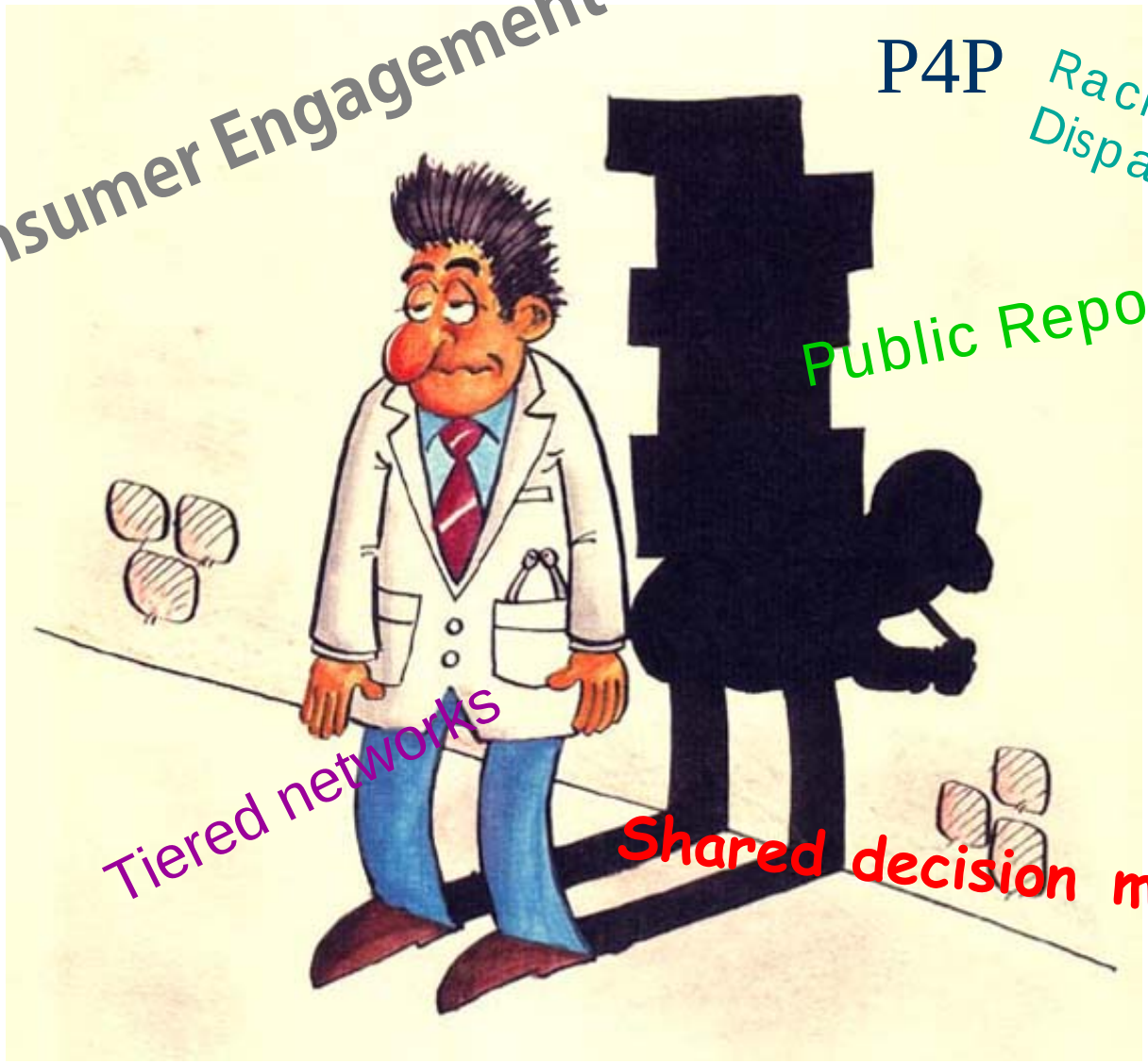


Cost / Efficiency

Clinical Performance:

- Process
- Outcomes

A health care system that provides safe, timely, effective, affordable, patient-centered care for everyone in Massachusetts.


Consumer Engagement
P4P
Racial Disparities
Public Reporting
Tiered networks
Shared decision making

Guiding Principles in Selecting Performance Measures for "High Stakes" Use

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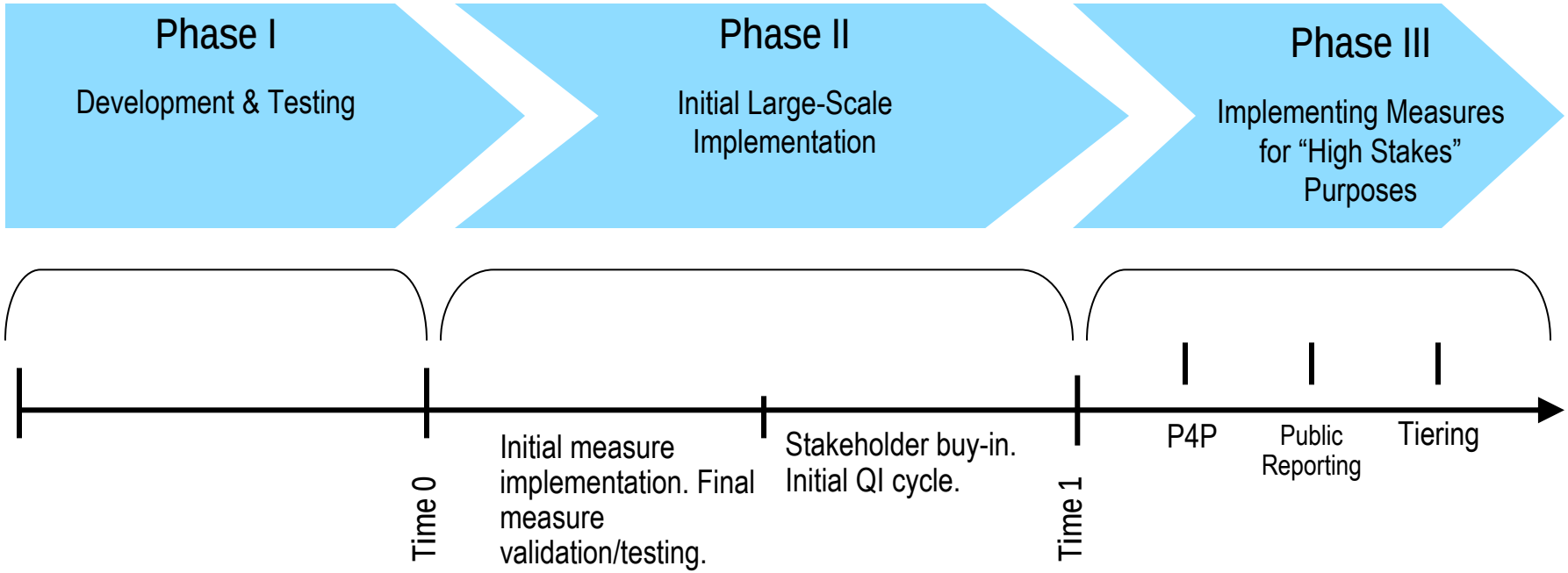
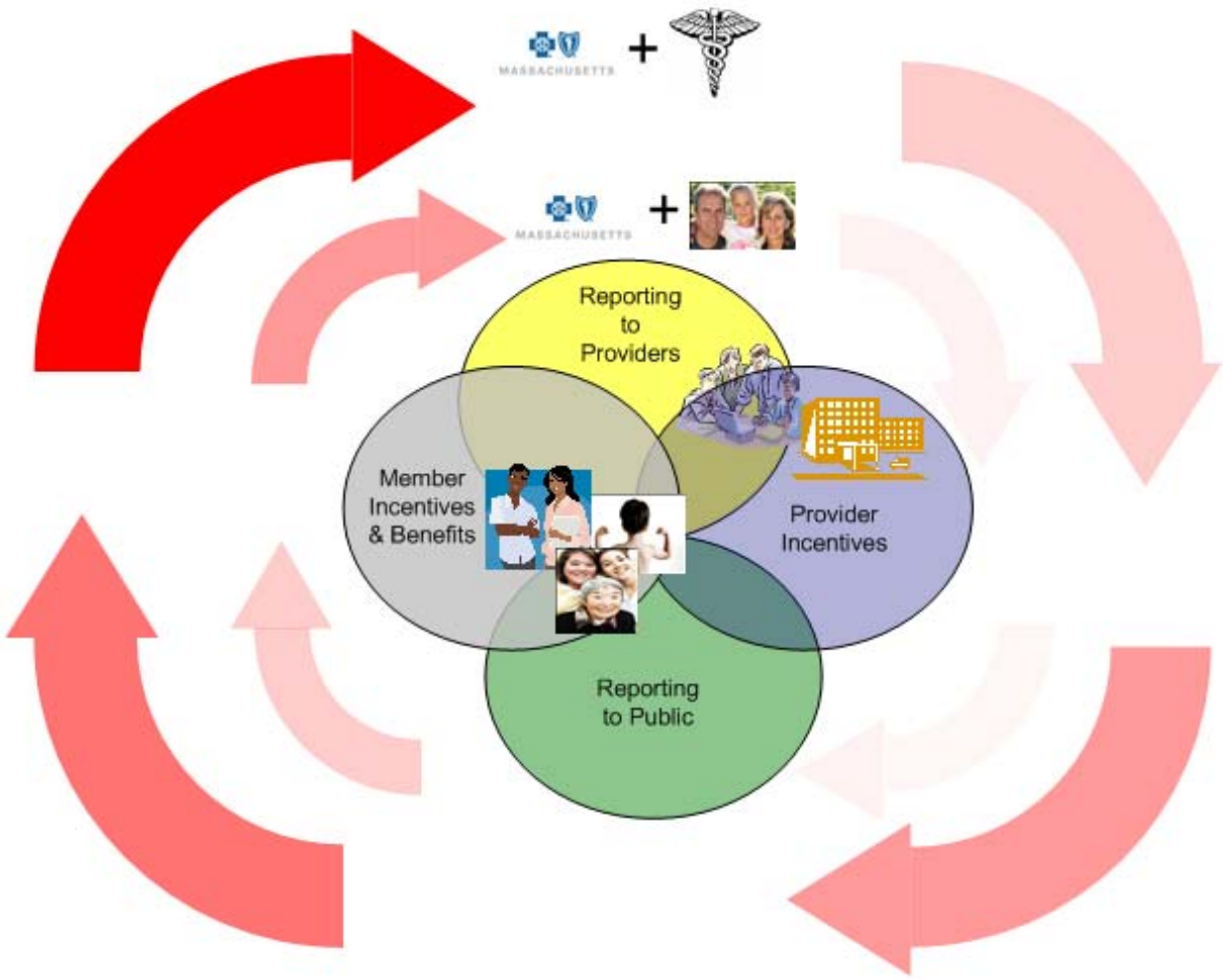
- Wherever possible, our measures should be drawn from nationally accepted standard measure sets.
- The measure must reflect something that is broadly accepted as clinically important.
- There must be empirical evidence that the measure provides stable and reliable information at the level at which it will be reported (i.e. individual, site, group, or institution) with available sample sizes and data sources.
- There must be sufficient variability on the measure across providers (or at the level at which data will be reported) to merit attention.
- The must be empirical evidence that the level of the system that will be held accountable (clinician, site, group, institution) accounts for substantial system-level variance in the measure.
- Providers should be exposed to information about the development and validation of the measures and given the opportunity to view their own performance, ideally for one measurement cycle, before the data are used for "high stakes" purposes.

Staged Use of Performance Measurement



Advancing Quality and Safety Through Our Performance Measurement and Reporting Programs



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Alternative Quality Contract
Accelerating Progress Toward Safe, Affordable, Effective, Patient-Centered Care

Payment Reform & Performance Measurement

Key components of the alternative contract model

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Unique contract model:

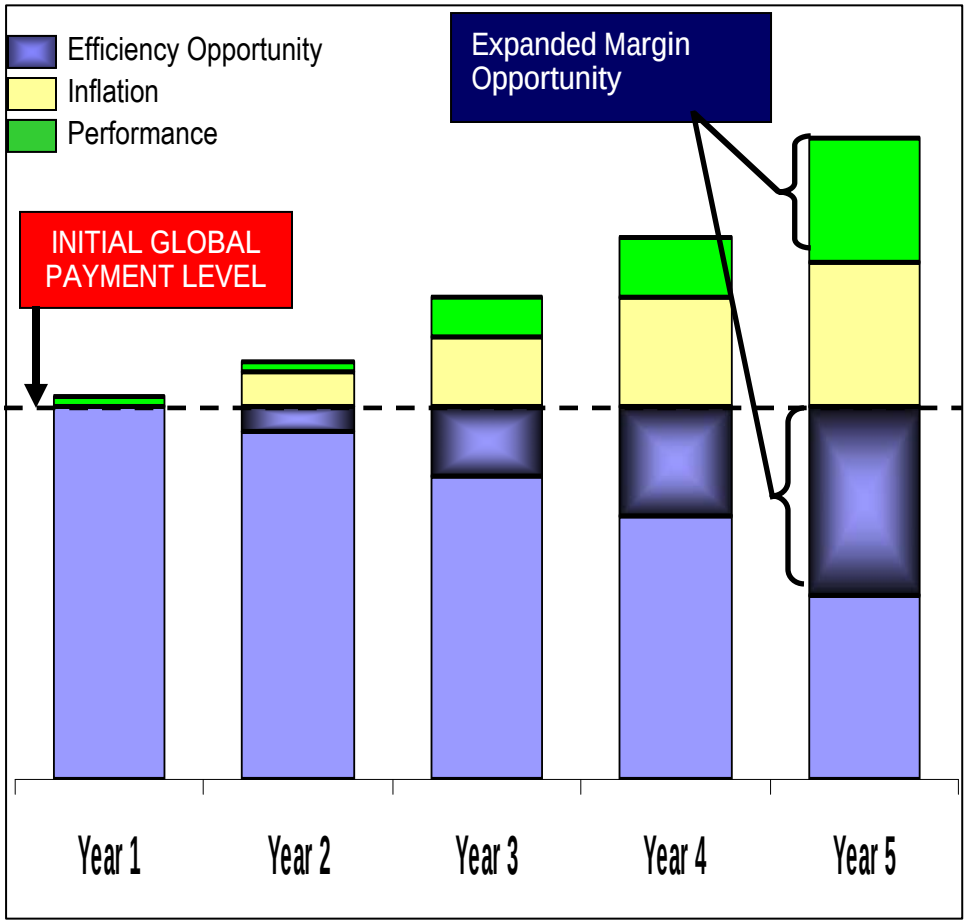
- Physicians & hospital contracted together as a "system" – accountable for cost & quality across full care continuum
- Long-term (5-years)

Controls cost growth:

- Global payment for care across the continuum
- Annual inflation tied to CPI
- Incentive to eliminate clinically wasteful care ("overuse")

Improved quality, safety and outcomes:

- Robust performance measure set creates accountability for quality, safety and outcomes across continuum
- Substantial financial incentives for high performance (up to 10% upside)



Defining Performance Measures for the AQC

Overarching goal: Measures should collectively advance care to the end-state vision of safe, affordable, effective, patient-centered care

Clinical performance measures will include process, outcomes and patient care experiences; and will encompass inpatient and ambulatory care.

AQC performance framework based on thresholds ("gates") with the following attributes:

- Gate 1 represents performance that is at initial levels deserving of financial recognition
- Gate 5 represents the "theoretical limits" of performance (end-state vision)
- Use of gates establishes rewards for both absolute performance and for performance improvement
- Use of gates affords "transparency" to providers regarding full scope of BCBSMA performance priorities and expectations

Ambulatory Measures

	Measure	Score	Weight
Process	**Depression**		
	1 Acute Phase Rx	2.5	1.0
	2 Continuation Phase Rx	1.5	1.0
	Diabetes		
	3 HbA1c Testing (2X)	3.0	1.0
	4 Eye Exams	1.0	1.0
	5 Nephropathy Screening	1.2	1.0
	Cholesterol Management		
	6 Diabetes LDL-C Screening	2.8	1.0
	7 Cardiovascular LDL-C Screening	2.1	1.0
	8 Breast Cancer Screening	1.2	1.0
	9 Cervical Cancer Screening	1.3	1.0
	10 Colorectal Cancer Screening	2.4	1.0
	Preventive Screening/Treatment		
	Chlamydia Screening		
	11 Ages 16-20	3.1	0.5
	12 Ages 21-25	1.8	0.5
	Pedi: Testing/Treatment		
	13 Upper Respiratory Infection (URI)	1.6	1.0
	14 Pharyngitis	1.4	1.0
	Pedi: Well-visits		
	15 < 15 months	2.6	1.0
	16 3-6 Years	2.0	1.0
	17 Adolescent Well Care Visits	1.5	1.0
Outcomes	**Diabetes**		
	18 HbA1c in Poor Control	3.2	3.0
	19 LDL-C Control (<100mg)	2.4	3.0
	Hypertension		
	20 Controlling High Blood Pressure	1.3	3.0
	Cardiovascular Disease		
	21 LDL-C Control (<100mg)	2.4	3.0
Patient Exper.	**Patient Experiences (C/G CAHPS/ACES) - Adult 3**		
	22 Communication Quality	1.9	1.0
	23 Knowledge of Patients	1.9	1.0
	24 Integration of Care	2.1	1.0
	25 Access to Care	2.4	1.0
	Patient Experiences (C/G CAHPS/ACES) - Pediatric 3		
	26 Communication Quality	1.0	1.0
	27 Knowledge of Patients	1.5	1.0
	28 Integration of Care	2.5	1.0
	29 Access to Care	2.8	1.0
Experimental	30 Experimental Measure A	5.0	1.0
	31 Experimental Measure B	5.0	1.0

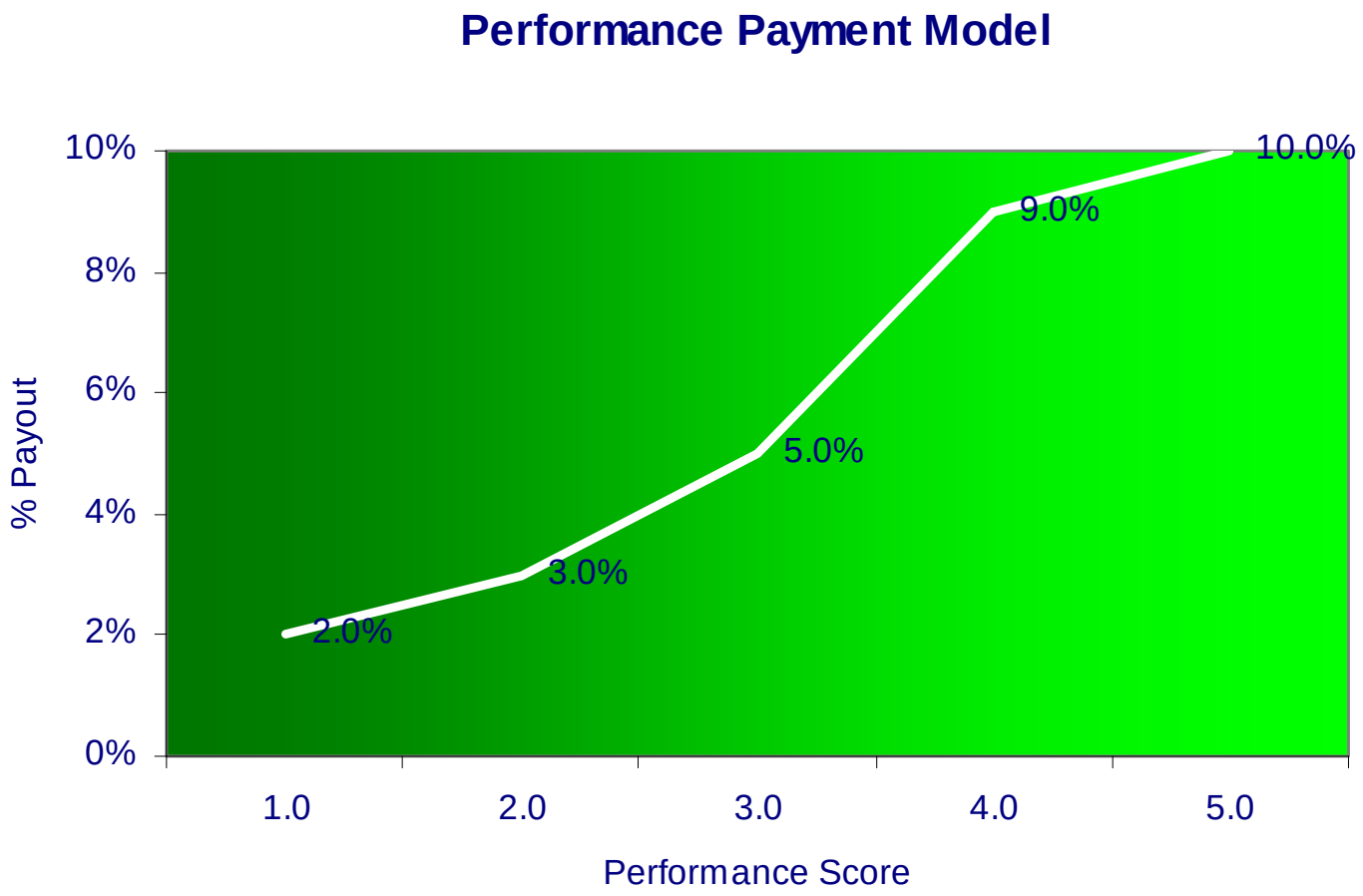
Hospital Measures

Measure		Score	Weight
AMI			
1	ACE/ARB for LVSD	2.0	1.0
2	Aspirin at arrival	2.5	1.0
3	Aspirin at discharge	1.5	1.0
4	Beta Blocker at arrival	1.5	1.0
5	Beta Blocker at discharge	1.3	1.0
6	Smoking Cessation	1.0	1.0
Heart Failure			
7	ACE LVSD	1.3	1.0
8	LVS function Evaluation	1.0	1.0
9	Discharge instructions	1.8	1.0
10	Smoking Cessation	3.0	1.0
Pneumonia			
11	Flu Vaccine	2.5	1.0
12	Pneumococcal Vaccination	2.9	1.0
13	Antibiotics w/in 4 hrs	1.4	1.0
14	Oxygen assessment	1.0	1.0
15	Smoking Cessation	3.1	1.0
16	Antibiotic selection	3.0	1.0
17	Blood culture	3.5	1.0
Surgical Infection			
18	Antibiotic received	1.3	1.0
19	Received Appropriate Preventive Antibiotic	1.4	1.0
20	Antibiotic discontinued	3.0	1.0
21	In-Hospital Mortality - Overall	3.0	1.0
22	Wound Infection	2.1	1.0
23	Select Infections due to Medical Care	2.8	1.0
24	AMI after Major Surgery	2.4	1.0
25	Pneumonia after Major Surgery	3.4	1.0
26	Post-Operative PE/DVT	2.0	1.0
27	Birth Trauma - injury to neonate	1.0	1.0
28	Obstetrics Trauma-vaginal w/o instrument	1.5	1.0
Hospital Patient Experience (H-CAHPS) Measures			
29	Communication with Nurses	4.0	1.0
30	Communication with Doctors	3.0	1.0
31	Responsiveness of staff	2.5	1.0
32	Discharge Information	2.8	1.0
33	Experimental Measure C	5.0	1.0

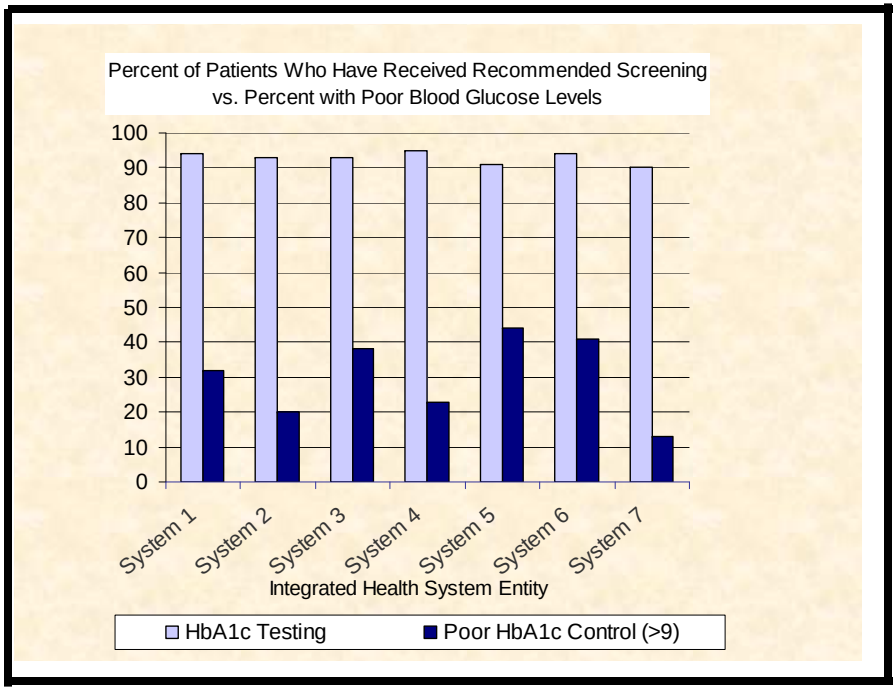
Weighted Ambulatory Score	2.2	Weighted Hospital Score	2.3

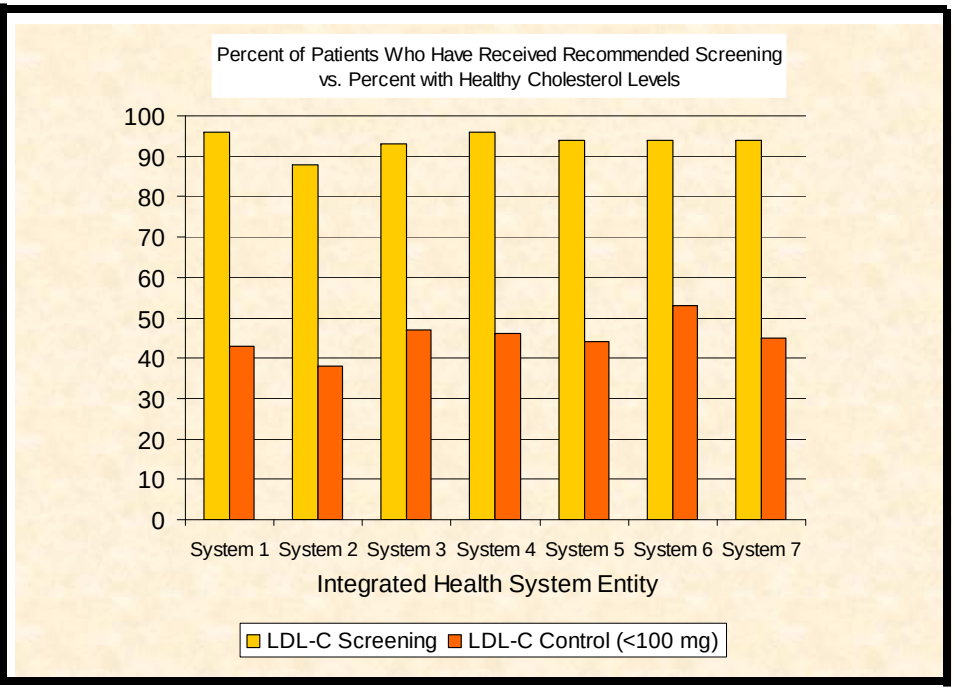
Aggregate Score 2.3

Performance Achievement Model



Diabetes Care:
Process is nearing perfection, outcomes are far from it





Source: MHQP, 2005 HEDIS process and outcomes measures

Barriers to Adherence

Cognitive

Financial

Logistical

Motivational

Global Payment as A Tool for System Reform

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"…Relative to other options, global payment has the greatest potential for encouraging shifts in health care resource use from low-value to high-value services. To counter the possibility of undertreatment, global payment should be implemented in the context of ongoing performance measurement and reporting. Expanding global payment will also encourage provider to become more organized…."

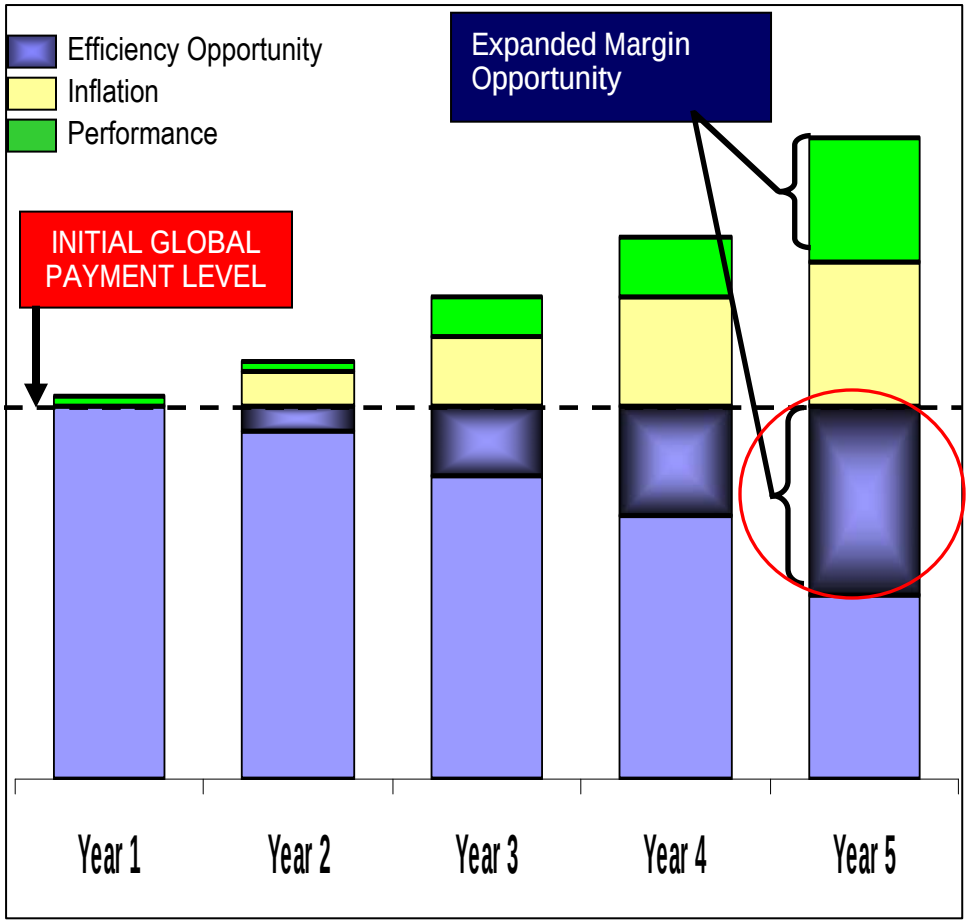
"…There are obviously important challenges for global payment, including developing credible risk-adjustment mechanisms and finding provider systems willing to accept global risk."

Source: Mechanic RE, Altman SH. *Health Affairs* 2009

HEALTH AFFAIRS
The Policy Journal of the Health Sphere

Key components of the alternative contract model

Performance Improvement: Cost and Efficiency



Practice Pattern Variation Analysis (PPVA)

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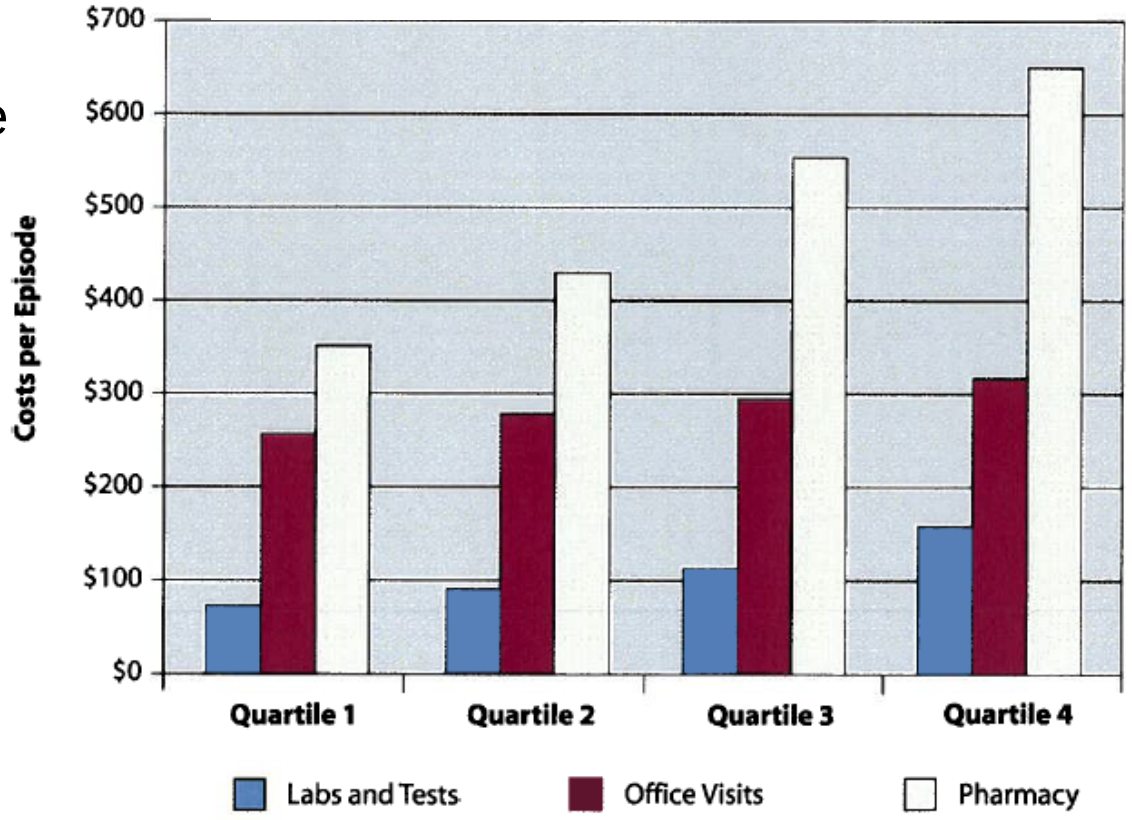
Unpacking differences in the treatment components of specific episodes across clinicians in a single, defined medical specialty

The results are highly actionable because they get to the root of variations in treatment costs for a defined and highly-specific clinical circumstance among physicians of the same specialty



Source: Greene RA, et al. *Health Affairs* 2008; w250-259

FMA Medical Practice Pattern Tool (example)

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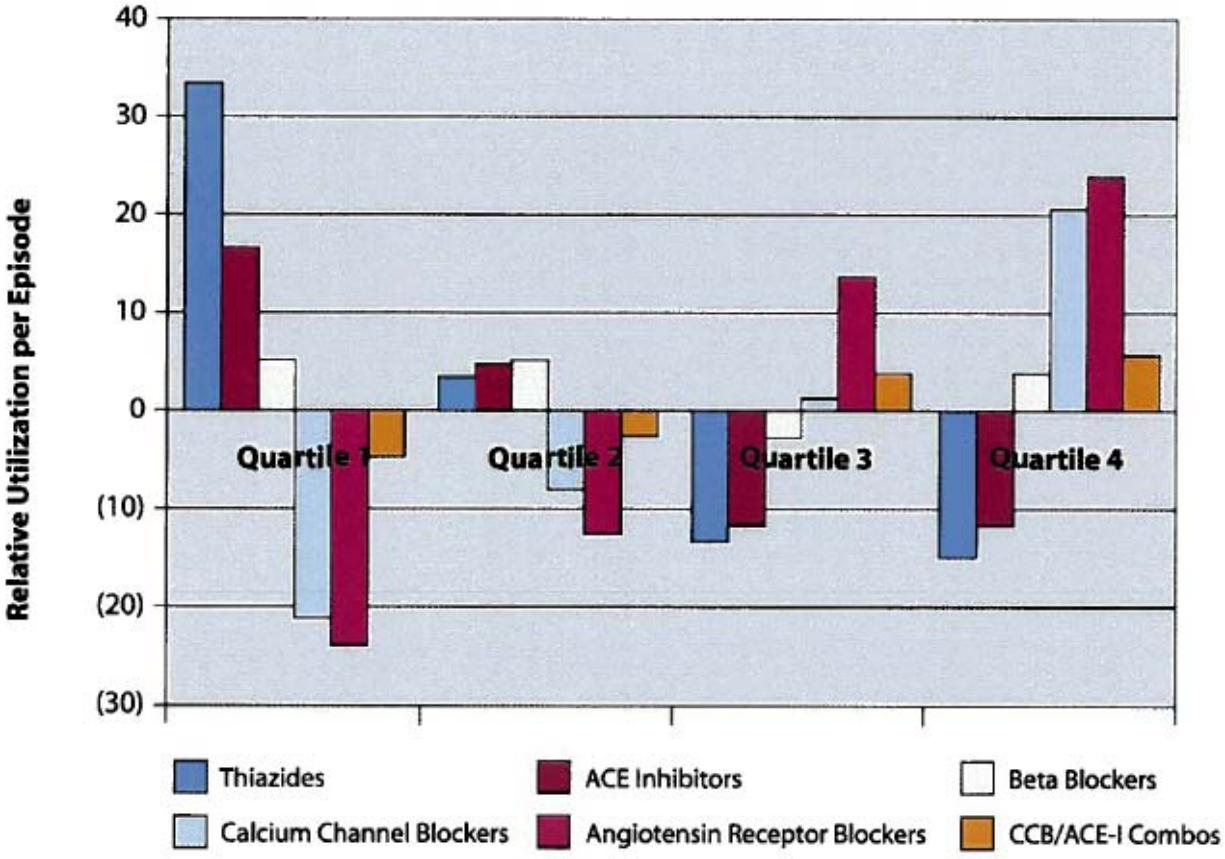
Hypertension Treatment Pattern Variation



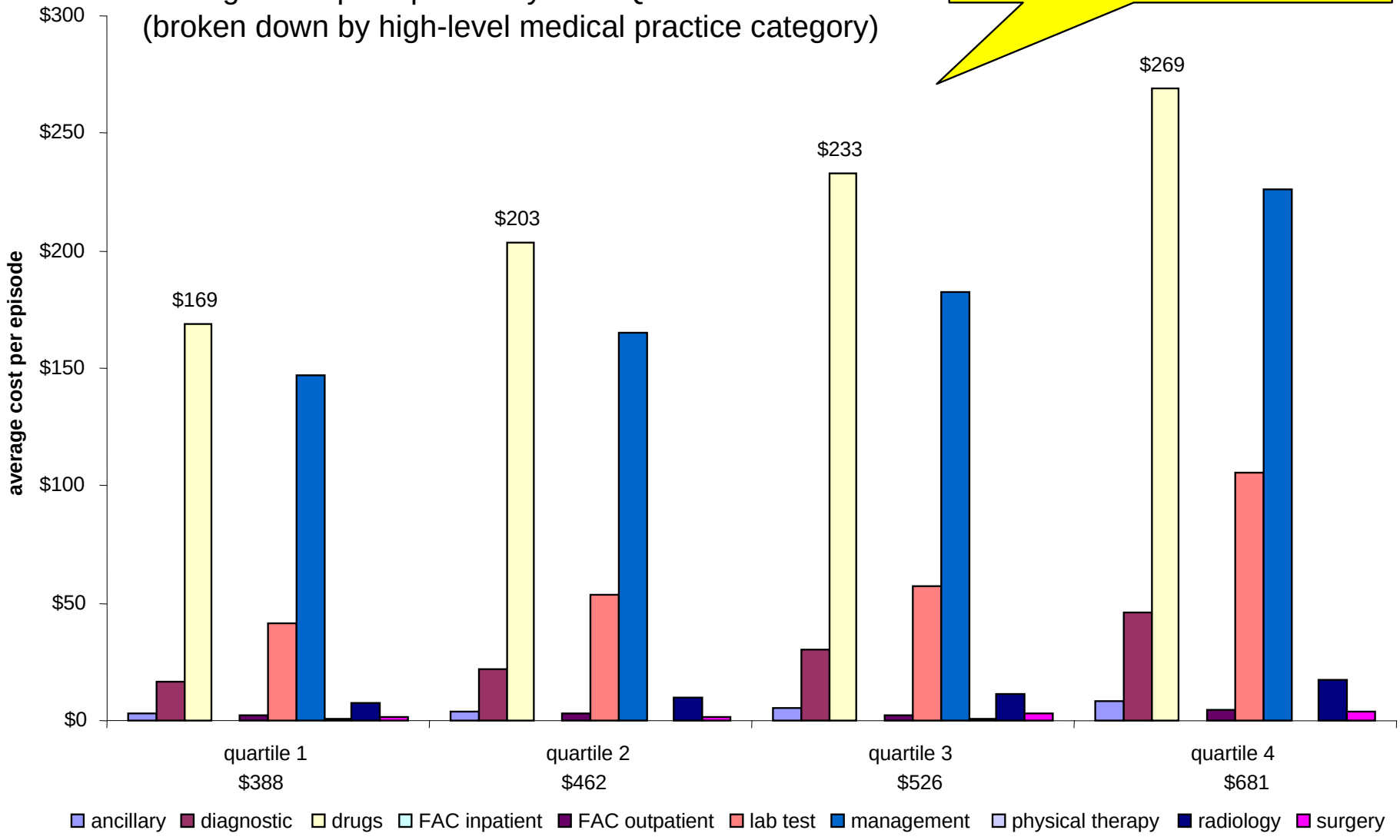
Source: Greene RA, et al. *Health Affairs* 2008; w250-259

Benign Hypertension, Without Comorbidity
Primary Care Physicians
2007

Pharmacy costs ($22M) account for 43% of total costs for episodes in this analysis.

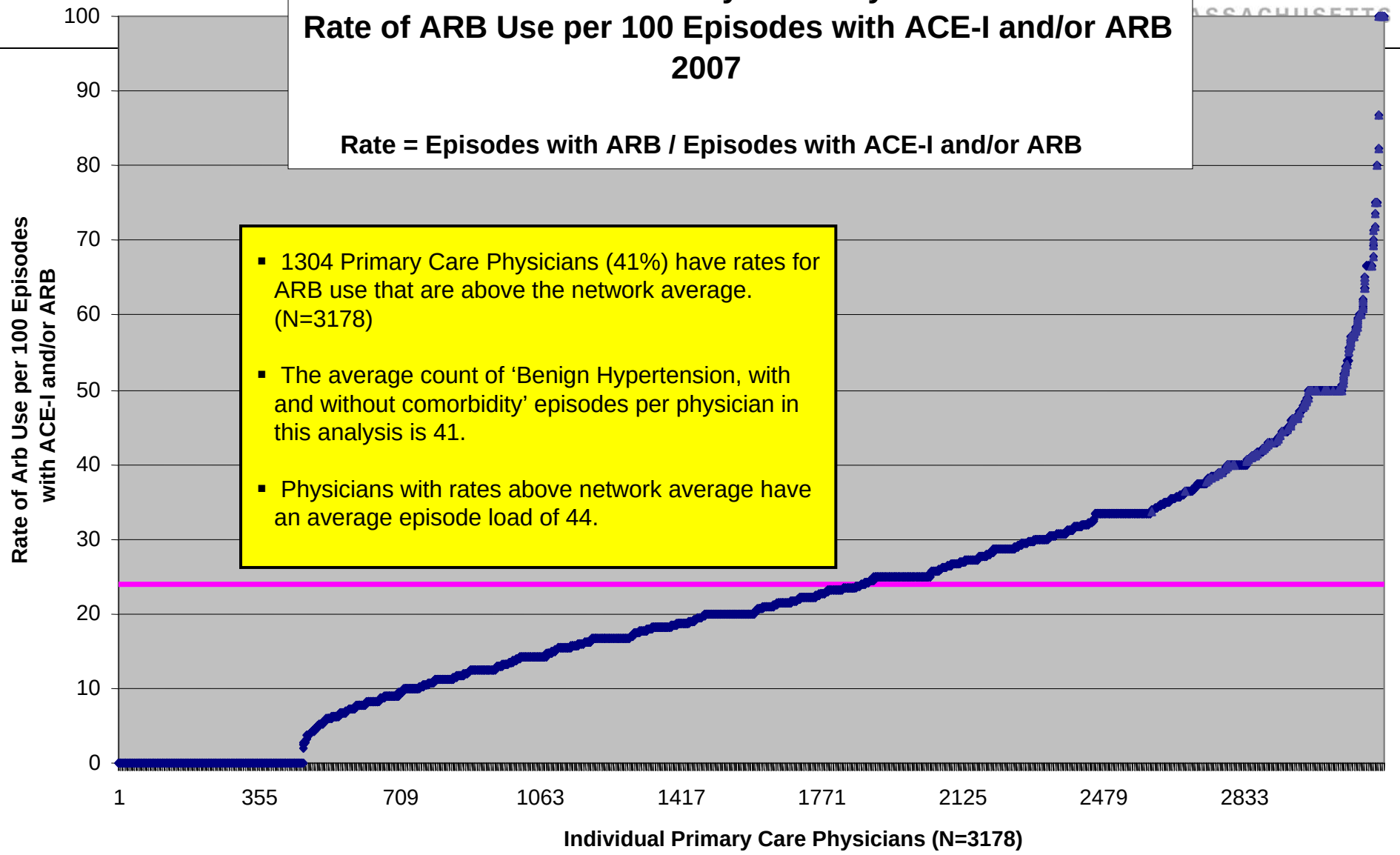
Pharmacy cost is the most significant source of variation and accounts for 30% of total variation.

Average Cost per Episode by Cost Quartile
(broken down by high-level medical practice category)

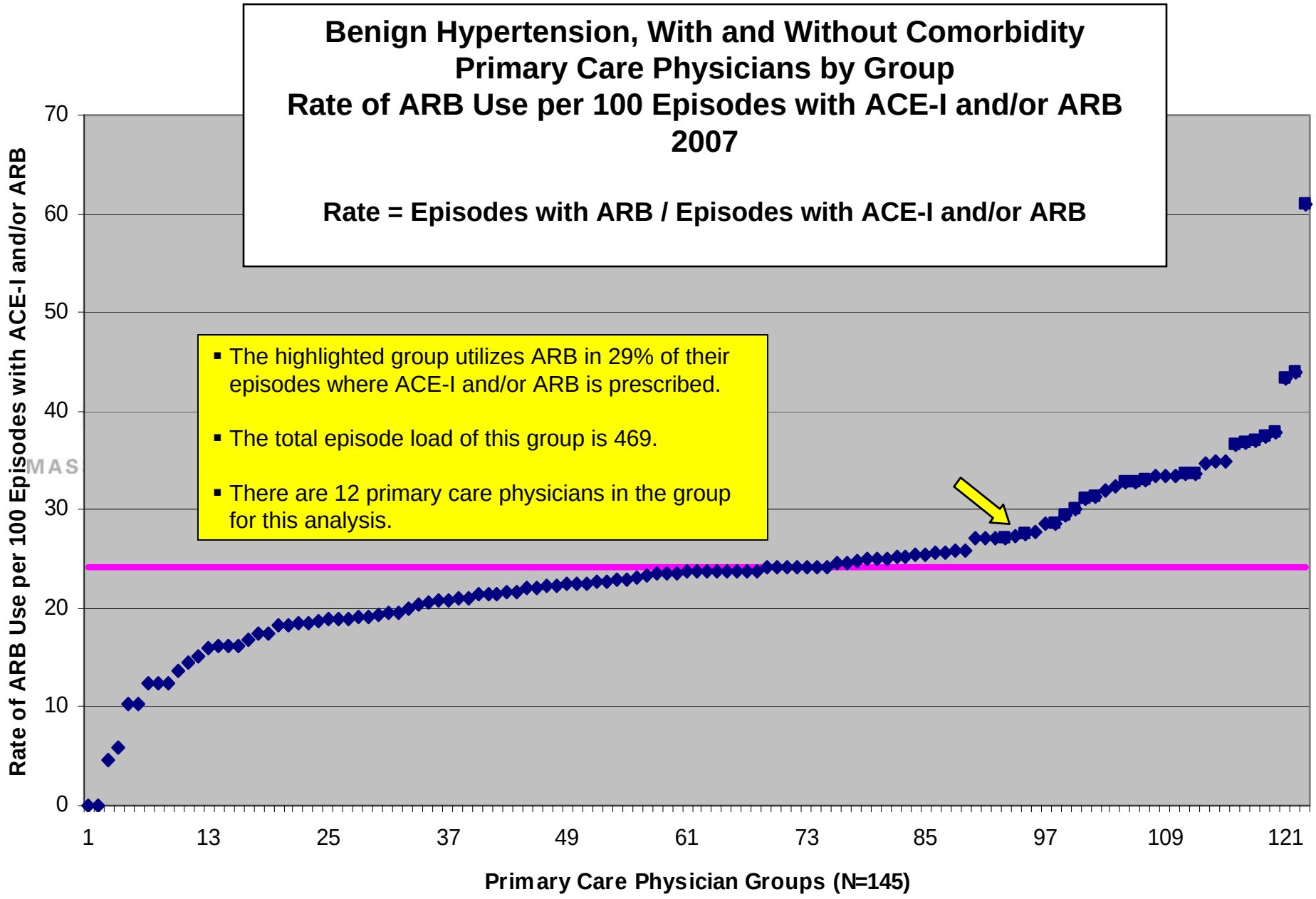


Benign Hypertension, With and Without Comorbidity
Individual Primary Care Physicians
Rate of ARB Use per 100 Episodes with ACE-I and/or ARB
2007

Rate = Episodes with ARB / Episodes with ACE-I and/or ARB

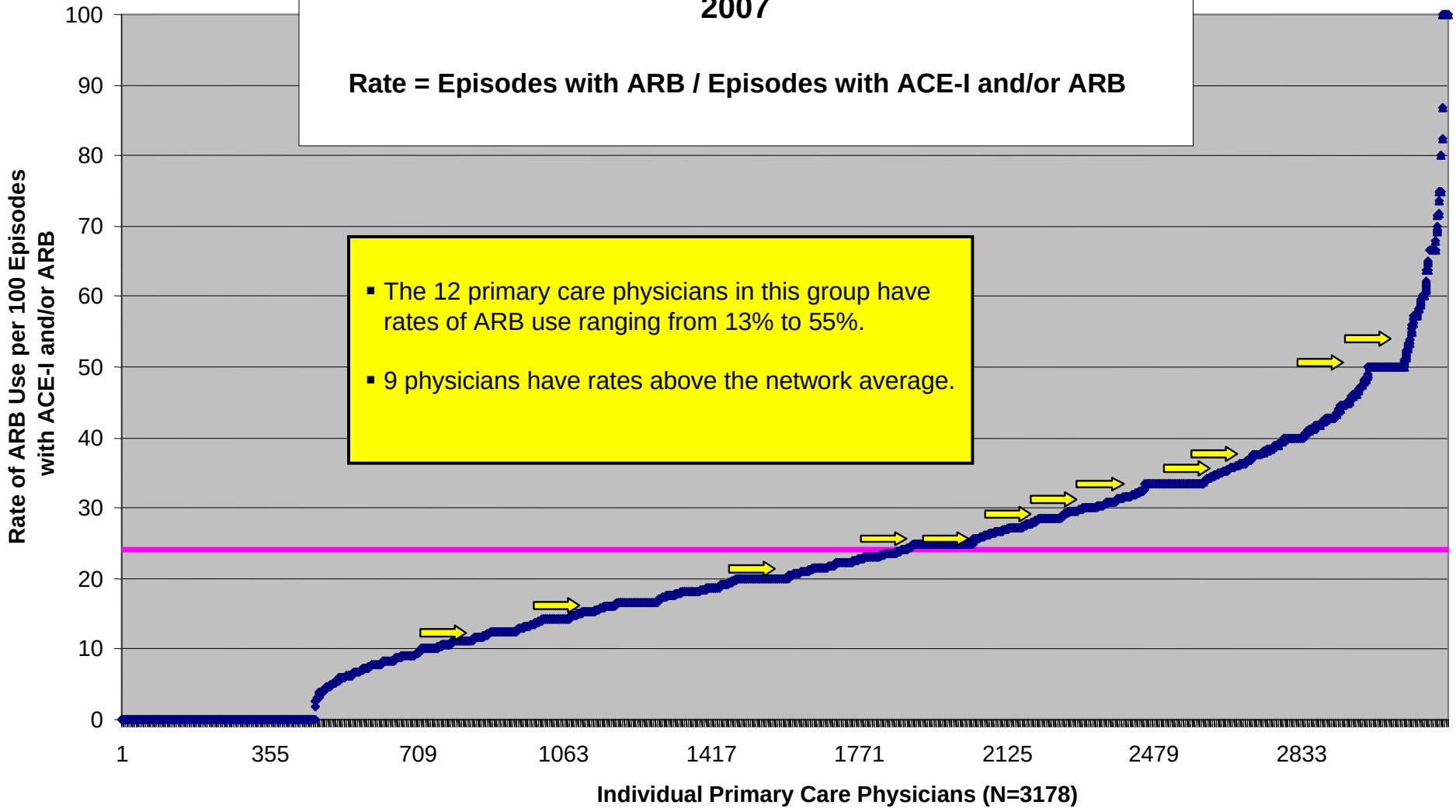


- 1304 Primary Care Physicians (41%) have rates for ARB use that are above the network average. (N=3178)
- The average count of 'Benign Hypertension, with and without comorbidity' episodes per physician in this analysis is 41.
- Physicians with rates above network average have an average episode load of 44.


Benign Hypertension, With and Without Comorbidity
Primary Care Physicians by Group
Rate of ARB Use per 100 Episodes with ACE-I and/or ARB
2007
Rate = Episodes with ARB / Episodes with ACE-I and/or ARB
The highlighted group utilizes ARB in 29% of their episodes where ACE-I and/or ARB is prescribed.
The total episode load of this group is 469.
There are 12 primary care physicians in the group for this analysis.
Rate of ARB Use per 100 Episodes with ACE-I and/or ARB
0
10
20
30
40
50
60
70
1
13
25
37
49
61
73
85
97
109
121
Primary Care Physician Groups (N=145)

Benign Hypertension, With and Without Comorbidity
Individual Primary Care Physicians
Rate of ARB Use per 100 Episodes with ACE-I and/or ARB 2007

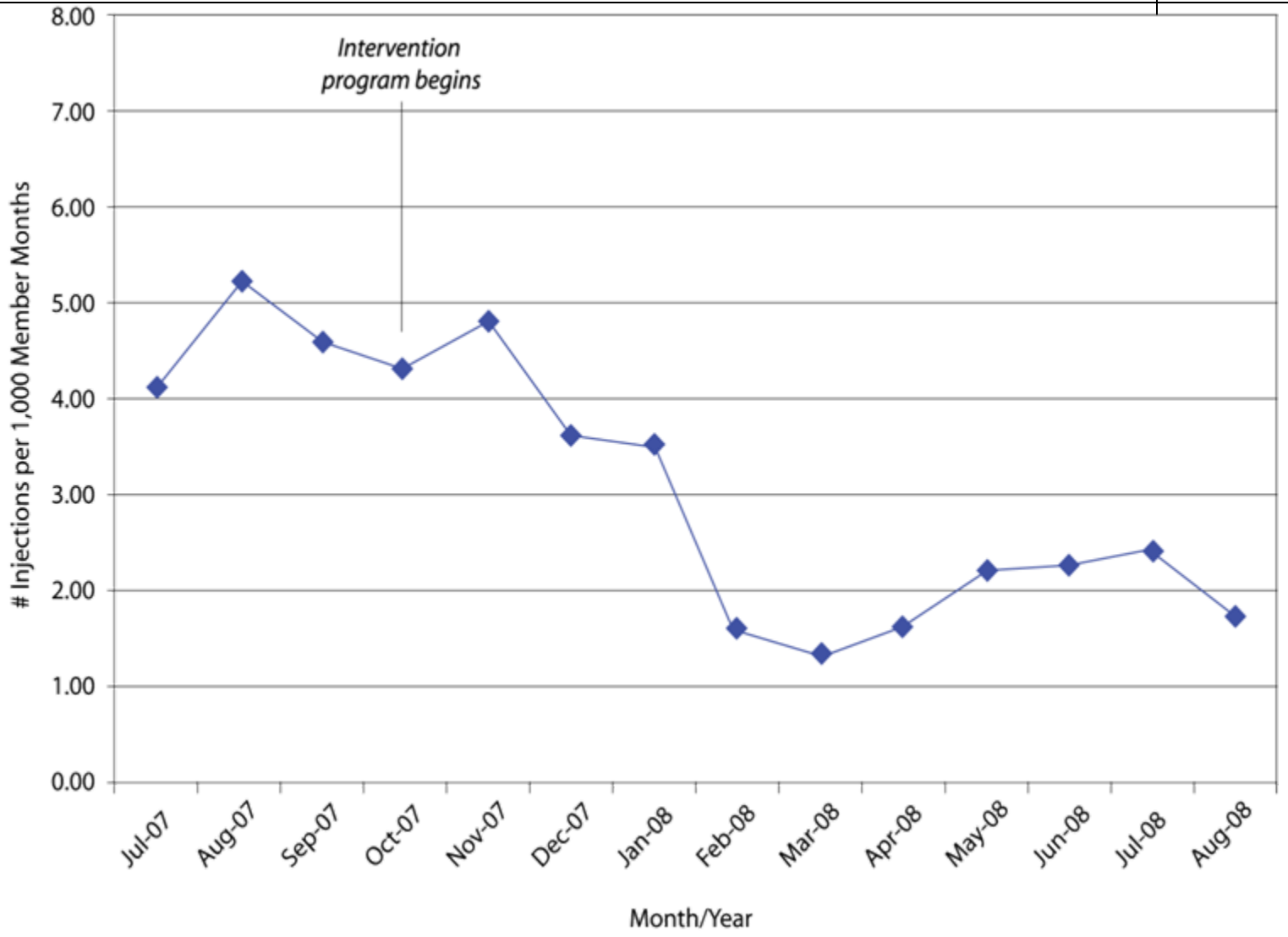
Rate = Episodes with ARB / Episodes with ACE-I and/or ARB



- The 12 primary care physicians in this group have rates of ARB use ranging from 13% to 55%.
- 9 physicians have rates above the network average.

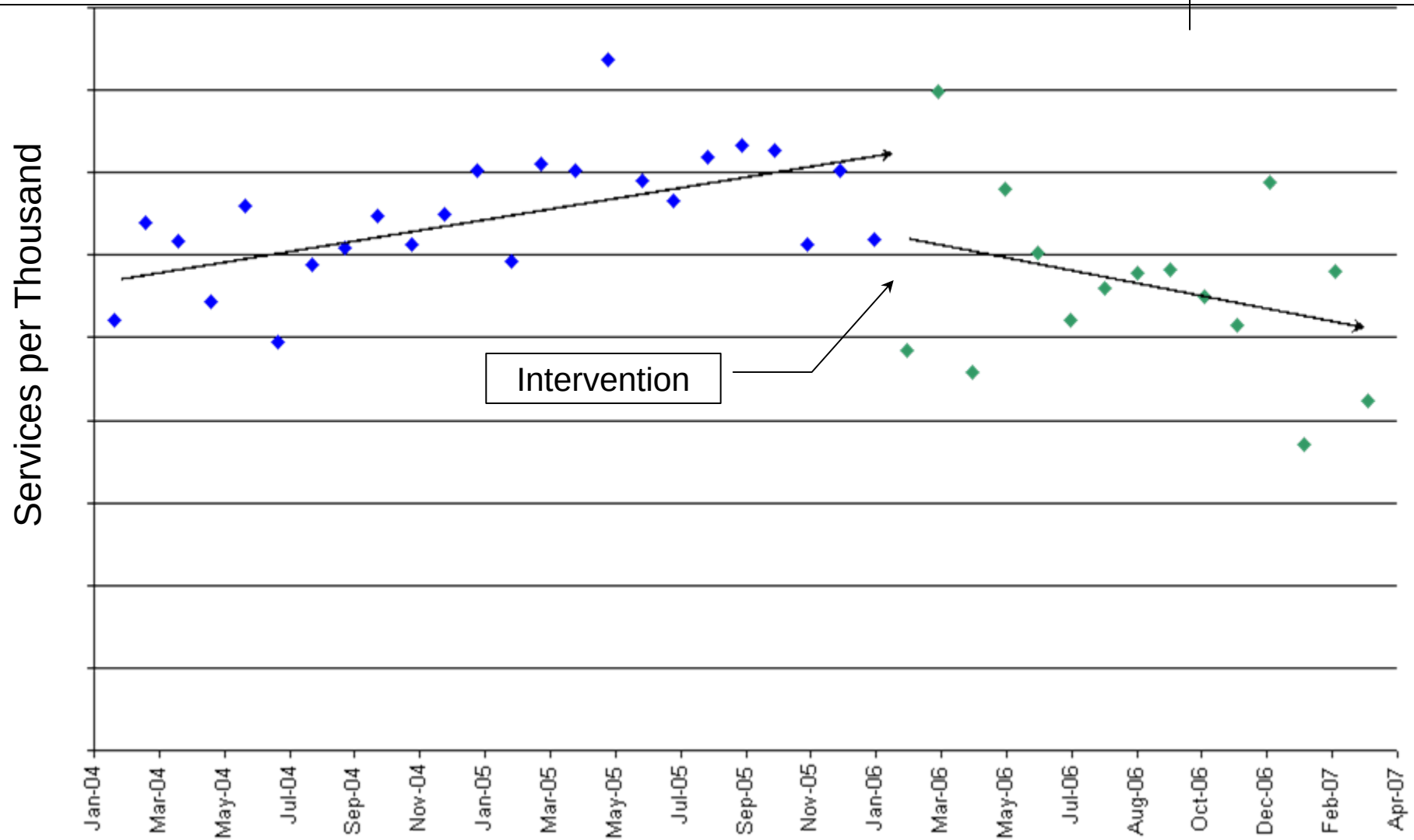
Select Results of PPVA Implementation in Other Markets: Focused Medical Analytics (FMA)

Impact of Interventions on Back Injection Procedure Utilization

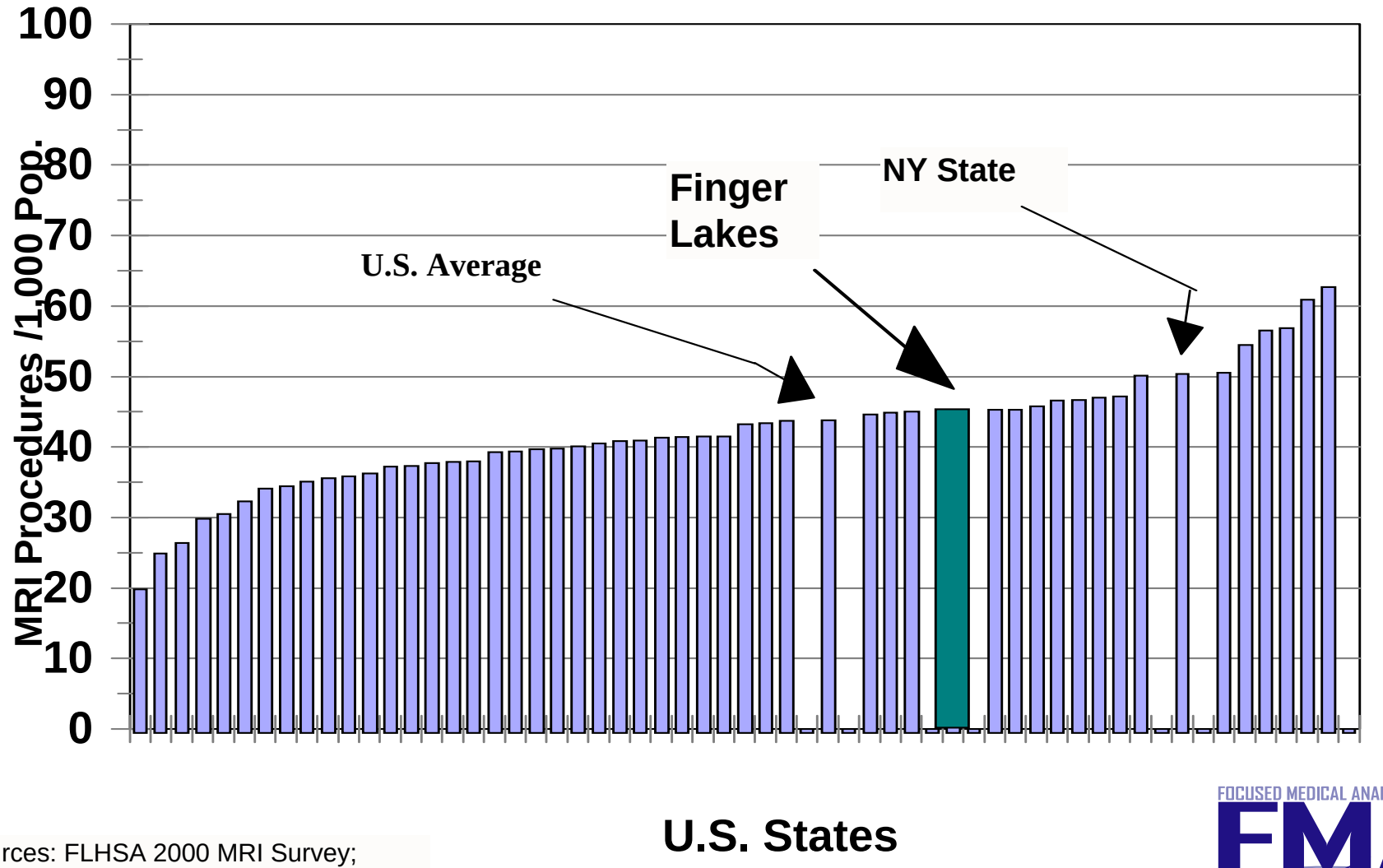


Chris Cammisa, MD, Gregory H. Partridge, IHA P4P Presentation, San Francisco, March 10, 2009

ENT Fiberoptic Laryngoscopy
Results through April 2007



1998-99 MRI Utilization
Finger Lakes and U.S. States

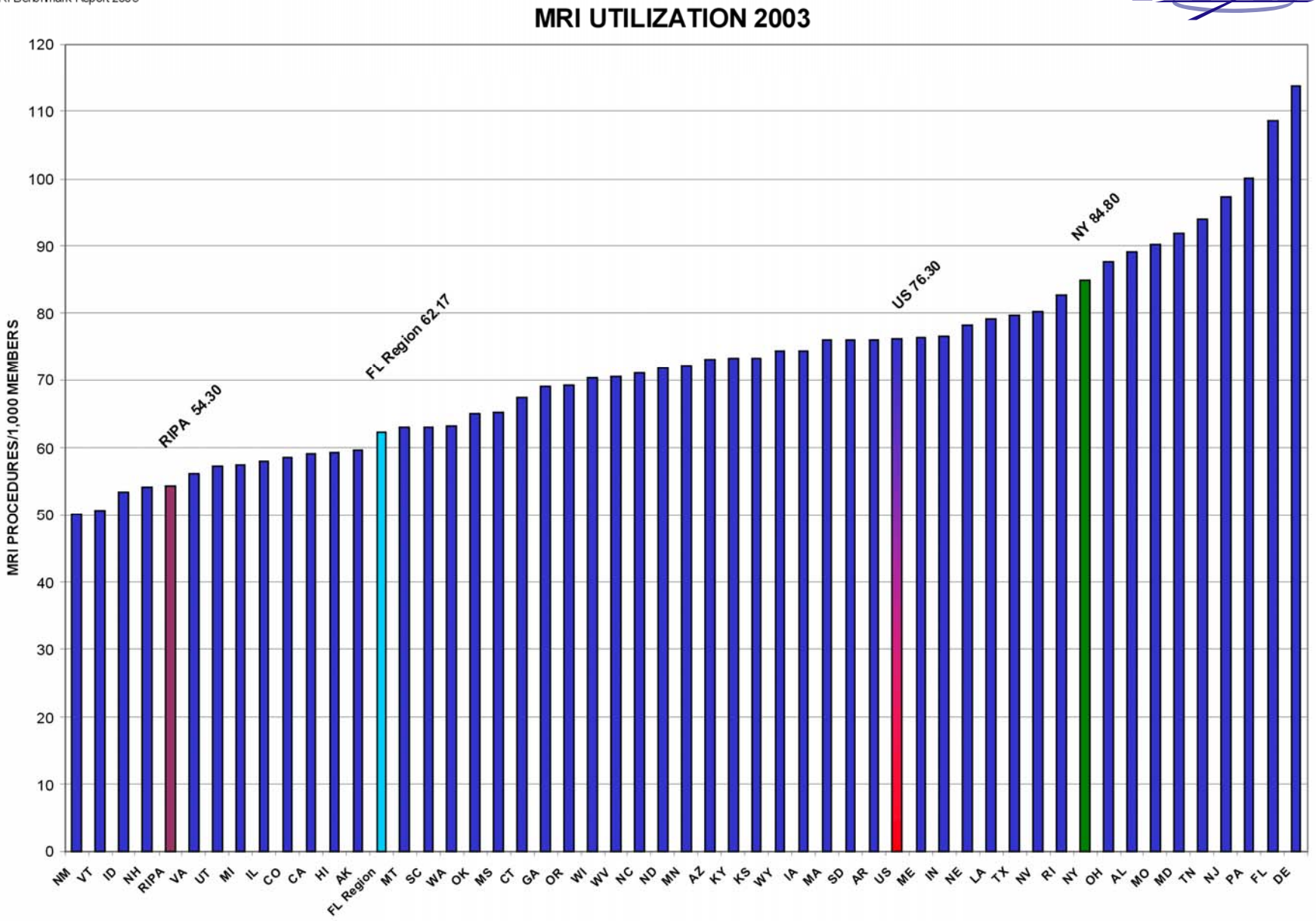


Data Sources: FLHSA 2000 MRI Survey;
1998-99 TMG National MRI Survey

FOCUSED MEDICAL ANALYTICS
FMA

DATA SOURCE: FINGER LAKES HEALTH SYSTEM AGENCY
IMV LIMITED, MEDICAL INFORMATION DIVISION,
MRI Benchmark Report 2003

FOCUSED MEDICAL ANALYTICS
FMA



Focused Medical Analytics/RIPA 2003

Summary

- Without measurement, we don't know where we are on the journey
- But imprecise measurement used in "high stakes" ways undermines our collective efforts
- Getting to "high stakes" implementation with reliable, valid measures does not have to take long
- Much is available and appropriate for high stakes uses already – but substantial and important gaps in our national measurement portfolio remain
- Early evidence of "improvability" is encouraging – even on measures that go beyond "process of care"
  - …but requires broad organizational engagement, leadership and sustained effort
- Getting to safe, effective, affordable, patient-centered care will require ongoing use of valid, reliable performance measures, employed in ways that engage and align the interests of clinicians, patients, and health care institutions.

For More Information

Doctor and the Doll by Norman Rockwell

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