Efficiently Measuring Efficiency: Is Judgment the Correct Path

Howard Beckman, MD
Medical Director
RIPA
Rochester, NY

RIPA

Cost Efficiency: Competition and Judgment

- Urgent need for Cost Efficiency
- Current in vogue models involve public reporting, tiering, limiting panels
- Inherent in these models are competition and judgment

RIPA

Cost Efficiency: Competition and Judgment

The core measurement for cost efficiency is the efficiency index – a comparison of one practitioner's case-mix adjusted costs to peers

Based on responsible or total costs

Can be age and sex adjusted

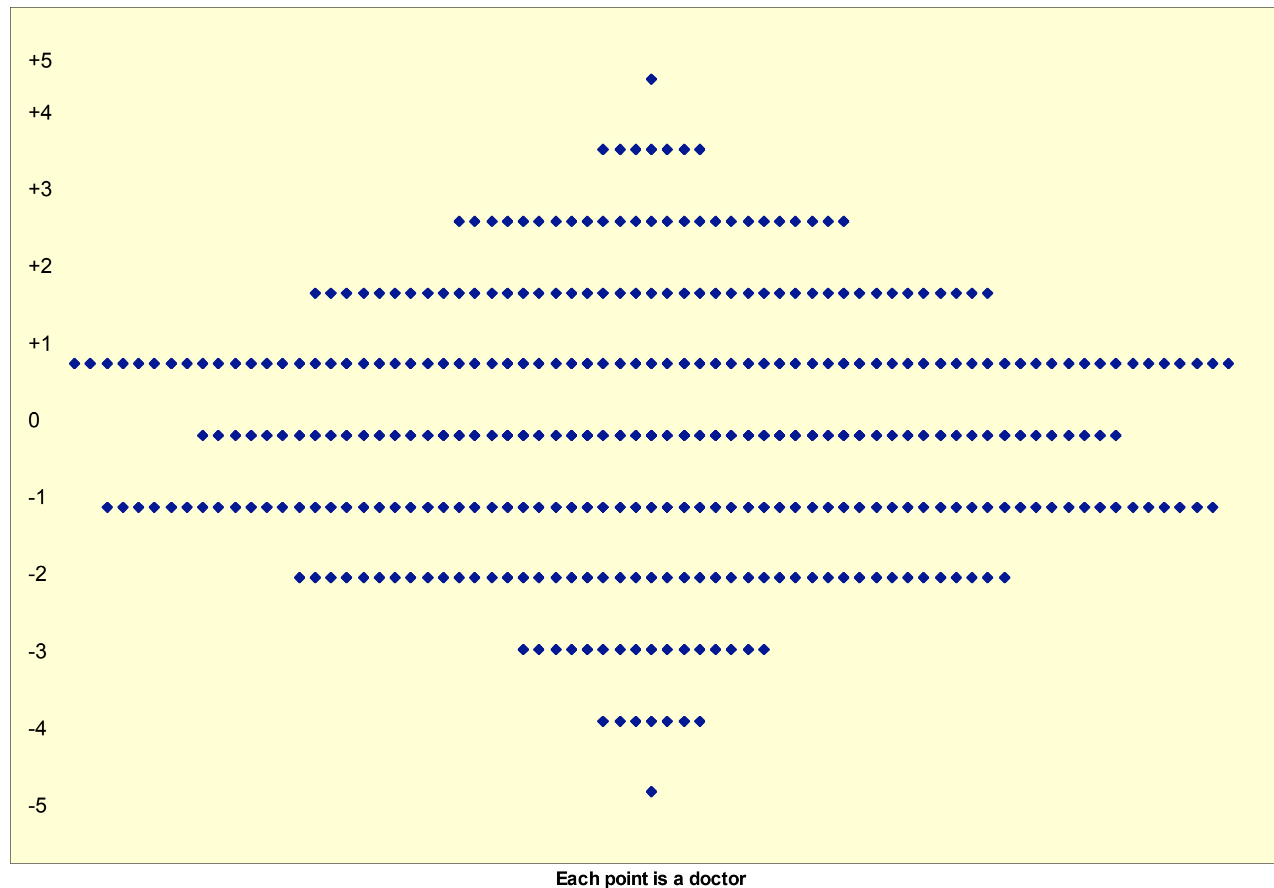
Cost variables such as facility or pharmacy costs can be flattened to focus attention on what can be changed

RIPA

Efficiency Indexes – Pros and Cons

- \+ Based on comparisons with peers or benchmarked group
- \+ Comparisons encourage a response
- \+ Case mix adjusted through episode grouping software
- – Judgmental - evaluates doctor, not behaviors
- – Reductionistic – assumes generally + or -
- – Limited actionability – costly to get to action
- \- Not adequately severity adjusted

Internal Medicine and Family Practice
Number of Measures
A Doctor is 25% Above or 25% Below Peers In Specialty



ripa reported Feb 2006

RIPA

Methodological Problems with Efficiency Indexes

- Practitioners are generally efficient at some things but not others (82% in the middle)
- Few distinctly better (11%) and worse (8%) overall physicians
- Focusing on the practitioner creates defensiveness, humiliation and the creation of committed enemies

Methodological Problems with Efficiency Indexes

- Setting targets incents selecting most easily treated patients/discharging recalcitrant ones
- Hitting target may involve incremental treatment that causes more harm than good
- Those who do the best were doing the best BEFORE incentives put in place

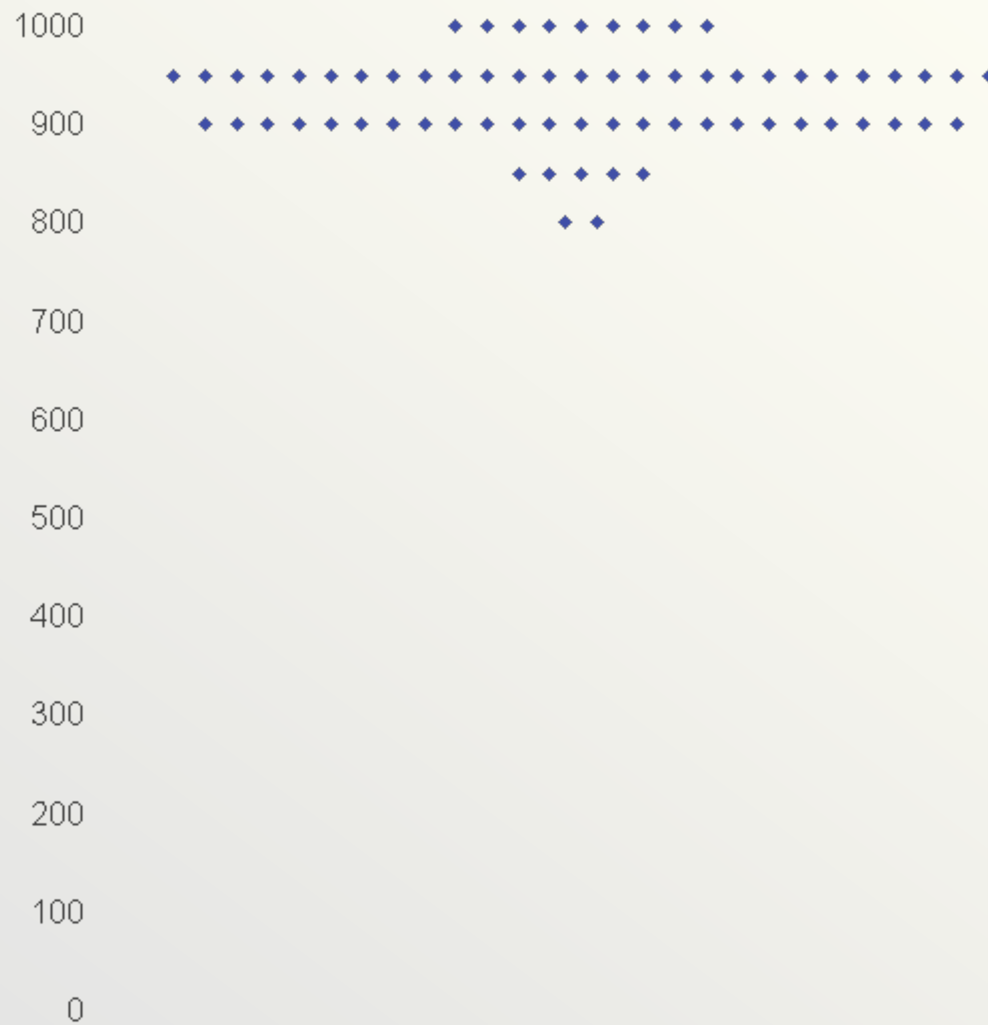
RIPA

Conclusions

- For cost efficiency, the physician is not the most effective unit of analysis
- Efficiency indexes are too indirect and personal to be actionable
- Fear as the motivational tool does not promote collaboration
- Focusing on appropriately selected behaviors is a more logical strategy

The Next Generation: Adding Overuse and Underuse Measures to the Quality Paradigm

RIPA

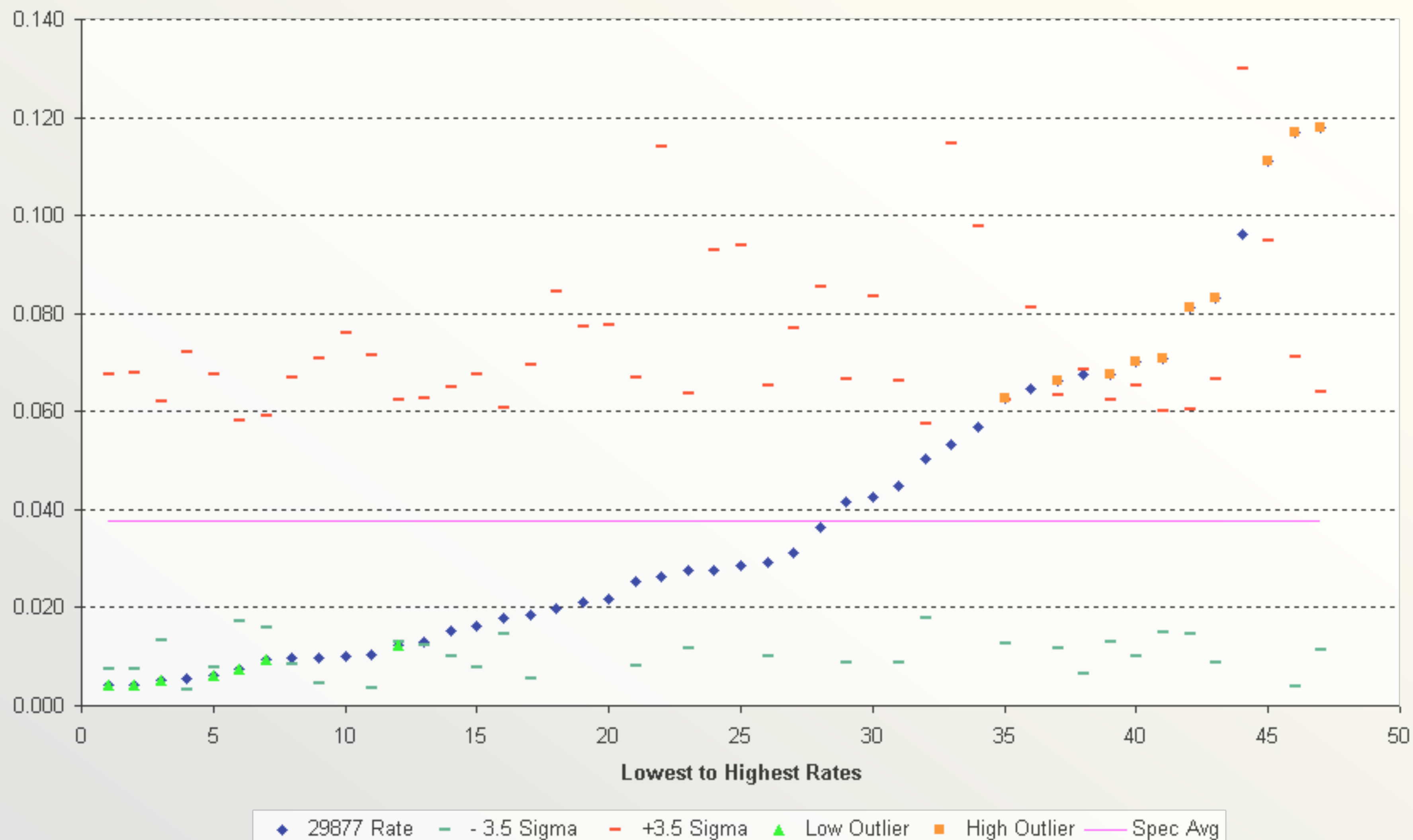


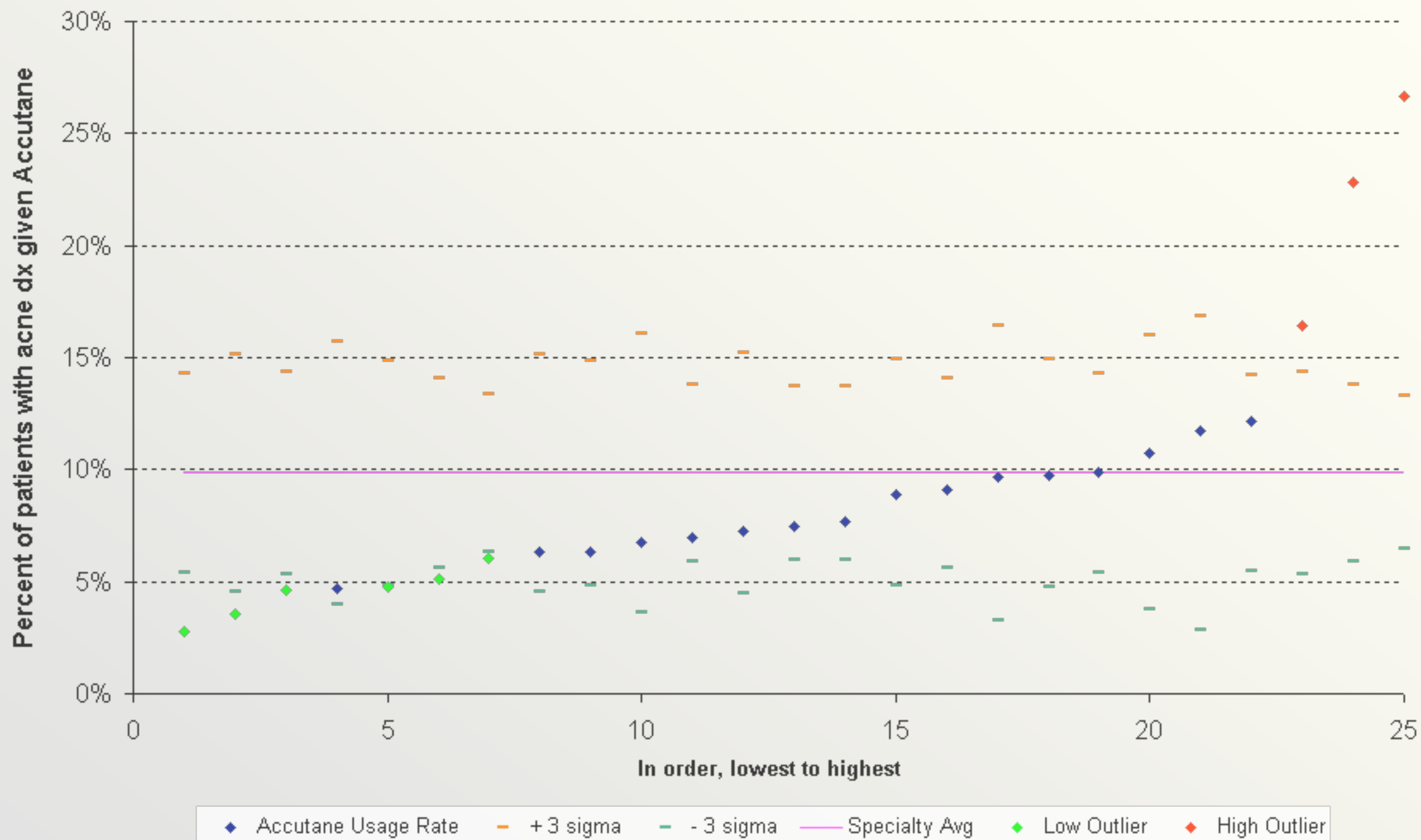
RIPA
Childhood Immunization Rates 2003
Among pediatricians with at least 20 eligible
1000
900
800
700
600
500
400
300
200
100
0

Internists HTN Rx Costs per Episode

1/1/2002-12/31/2003 data load

Advisory Committee members show in red.


RIPA
Arthroscopic Debridement 29877 Rates
Among all patients, 2002-2003, Selected Orthopedists
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
0
5
10
15
20
25
30
35
40
45
50
Lowest to Highest Rates
29877 Rate
- 3.5 Sigma
+3.5 Sigma
Low Outlier
High Outlier
Spec Avg



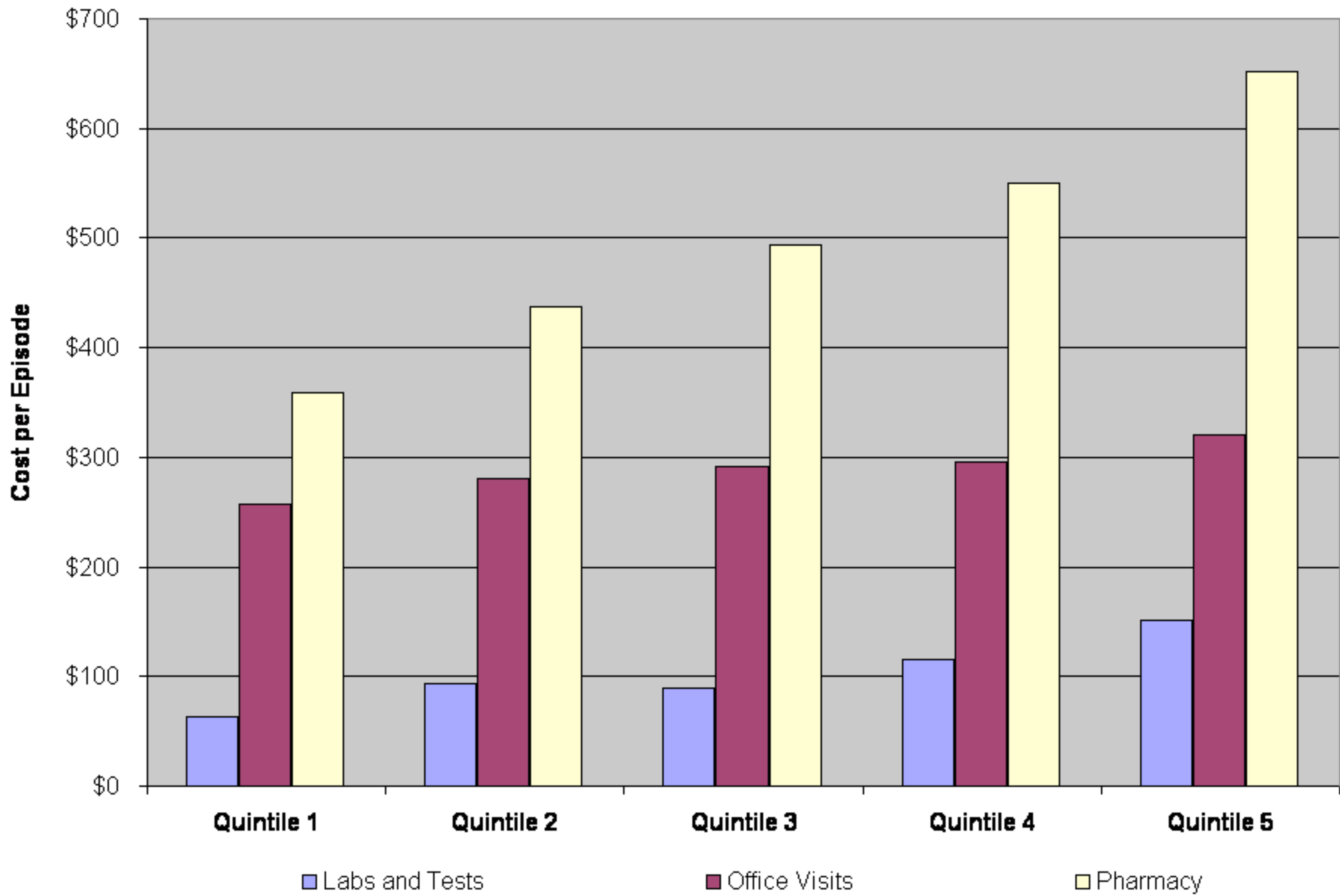
RIPA
Accutane Usage Rate
Among Dermatologists with 10 or more patients on Accutane, 2002-2003
Percent of patients with acne dx given Accutane
30%
25%
20%
15%
10%
5%
0%
0
5
10
15
20
25
In order, lowest to highest
Accutane Usage Rate
+3 sigma
- 3 sigma
Specialty Avg
Low Outlier
High Outlier

What Is Needed

- By condition, find the **local-regional** variation in specific services
- Understand if the variation represents overuse or misuse – have the quality conversation
- Find overuse-misuse reduction opportunities for a whole specialty = find best practices
- Create a series of measures based on reducing overuse or underuse offering interventions based on best practices
- Reduce costs while improving quality – not by chance, but by DESIGN

MPPT™ Analysis of Hypertension*

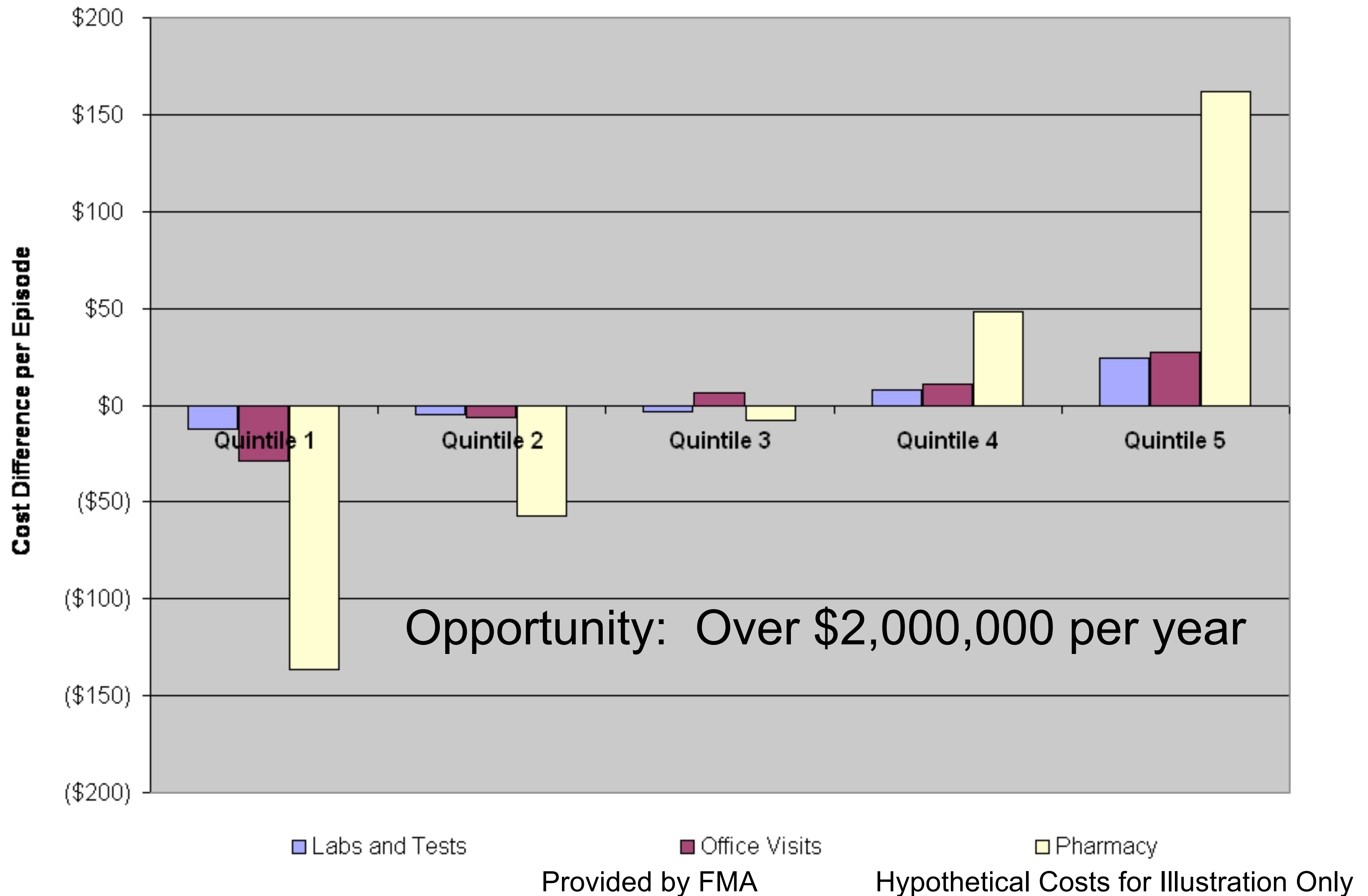
(ETG 0281, Benign HTN w/o comorbidity, among 260 internists)



* Provided by FMA

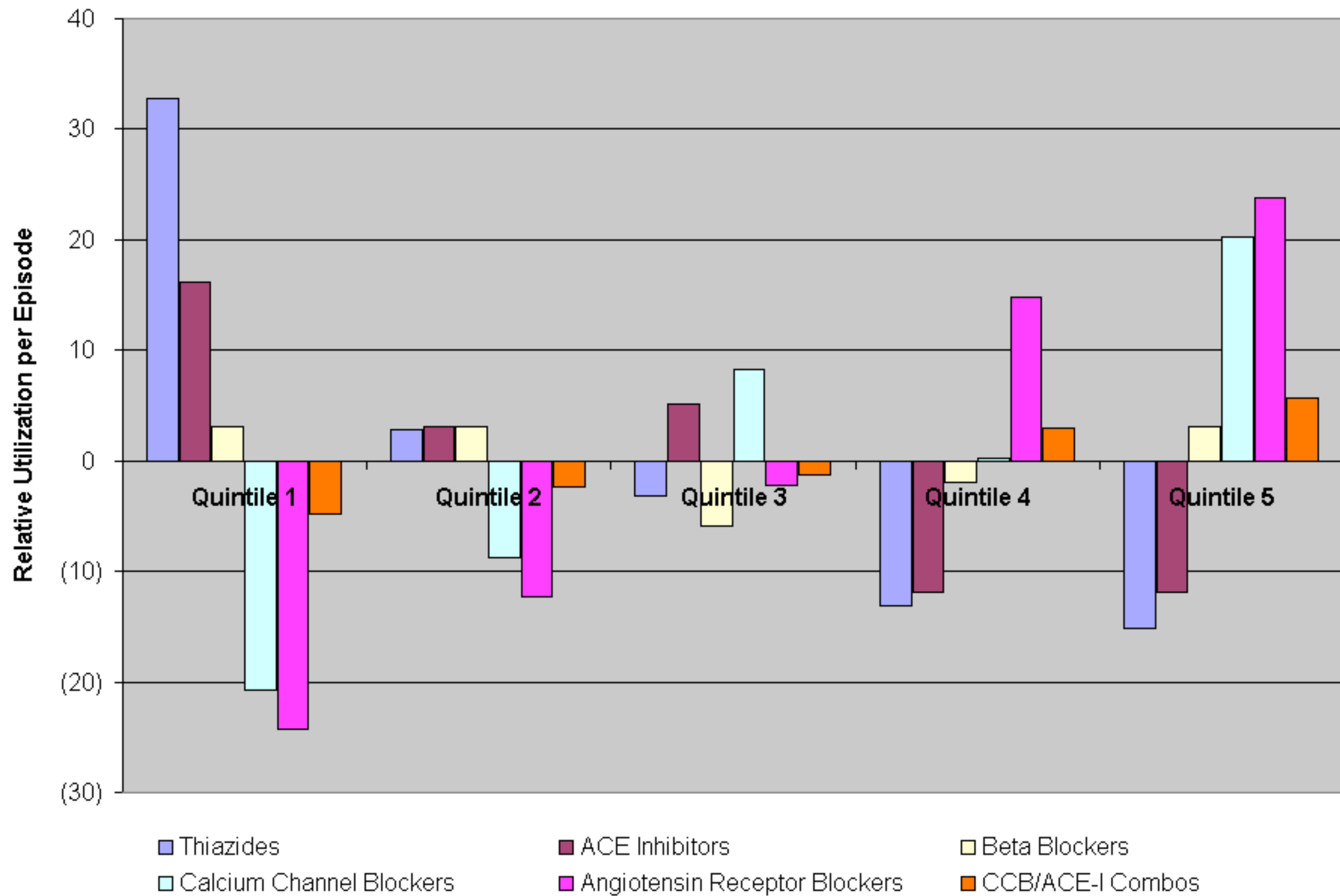
Hypothetical Costs for Illustration Only

Cost Variation – All in Pharmacy



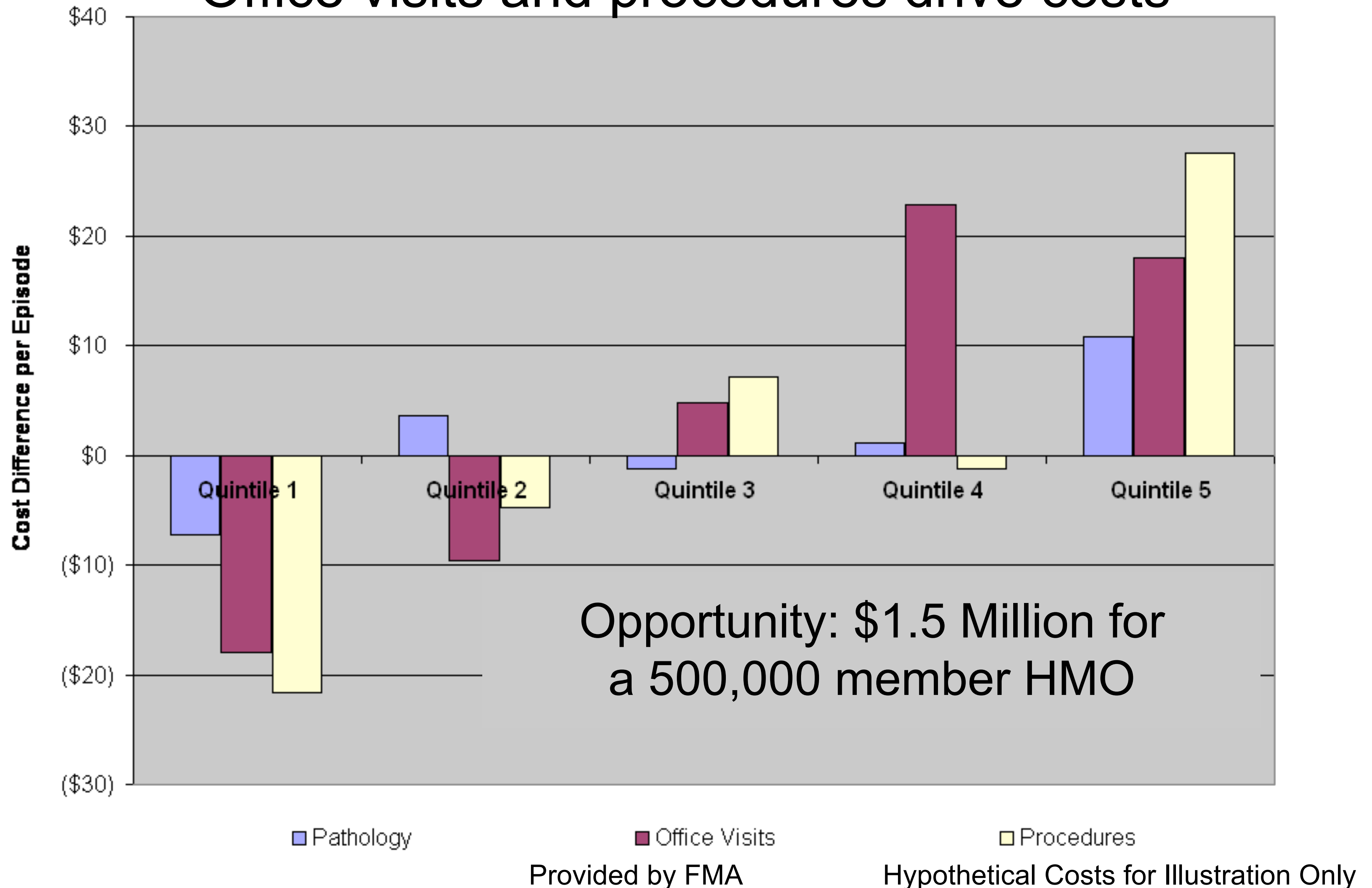
Provided by FMA Hypothetical Costs for Illustration Only

Pharmacy Analysis: Best Practice is Quintile 1

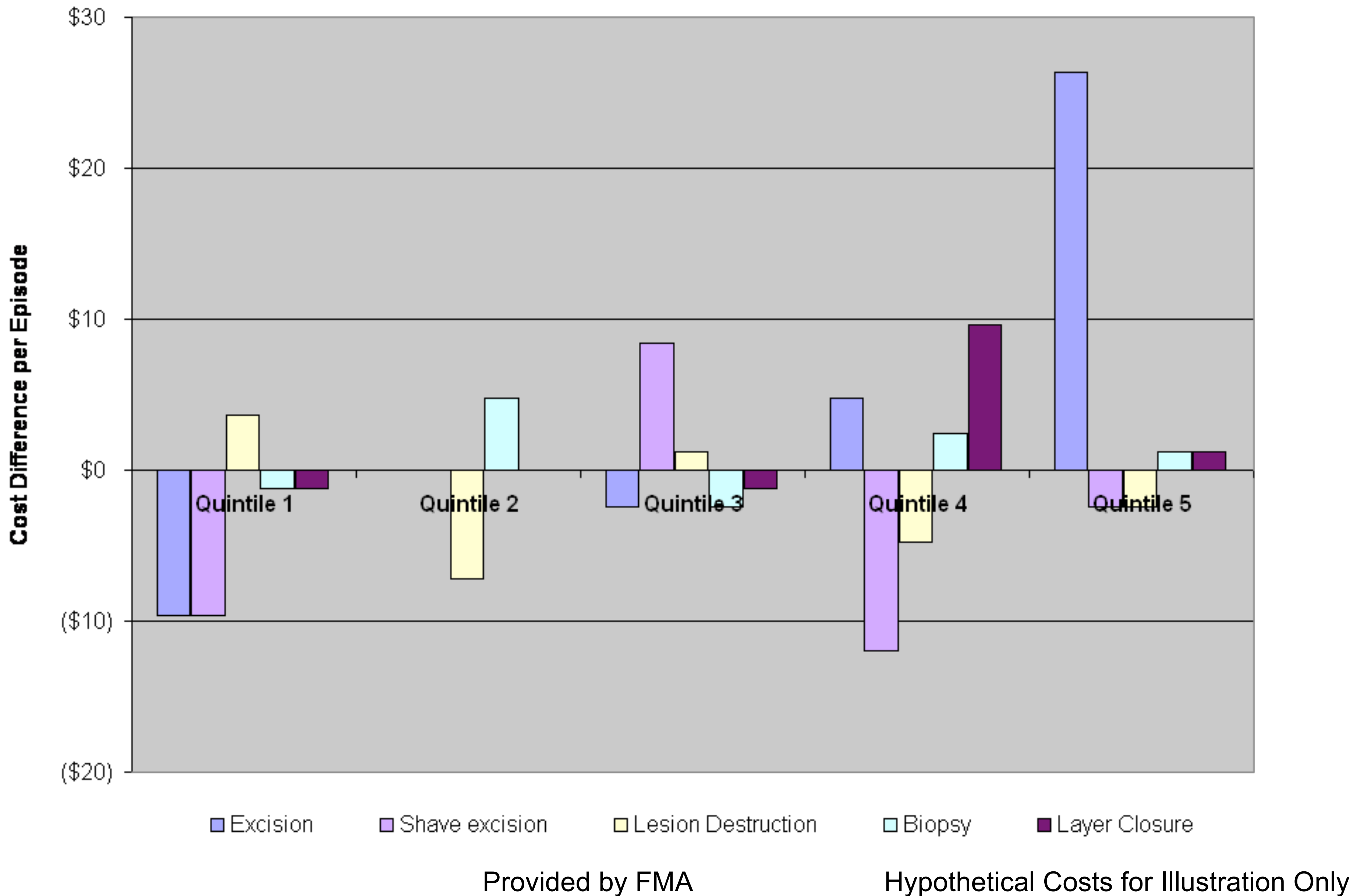


Removing Benign Skin Growths

Office visits and procedures drive costs



Drilling Down on Procedures



Provided by FMA

Hypothetical Costs for Illustration Only

Creating a Blueprint for Change

Provided by Focused Medical Analytics

Microsoft Excel - MCO Blueprint Example 2006-06-19

File Edit View Insert Format Tools Data Window Help | Type a question for help

A100 | fx

An MCO's Medical Management Blueprint — **Confidential**

Key:	Condition, ETG number		
	REI Costs	Rank	% Spec REI
	Findings		
	Strategy Ideas		
	Potential savings		
	% of specialty potential savings		

Data based on dates: 1/2003 - 5/2005

If all physicians practiced like lower stratum

Copyright 2006, Focused Medical Analytics, LLC. All rights reserved.
Patent pending.

Figures in red: incomplete estimates

Figures in black: completed estimates

Internal Medicine — Total $$ in top ETGs: ###### — Percent of REI $$: 32.5% — Total REI $$: #######

Condition, ETG number	REI Costs	Rank	% Spec REI
Benign hypertension, w/o comorbidity, 0281	#######	1	6.2%
Non-insulin dependent diabetes, with comorbidity, 0029	########	2	5.9%
Inflammation of the esophagus, w/o surgery, 0433	#######	3	3.8%
Insulin dependent diabetes, with comorbidity, 0027	#######	4	2.9%
Acute sinusitis, 0333	########	5	2.6%
Dermatitis [*]	#######	6	2.4%
Acute bronch… comorbidity, ag…	#######	7	

Findings (Benign hypertension, w/o comorbidity, 0281): Q1 consistent with best practice; Q5 Rxs CCB, ARB, combos

Potential savings: #######

Family Practice — Total $$ in top ETGs: ###### — Percent of REI $$: 30.8% — Total REI $$: #######

Condition, ETG number	REI Costs	Rank	% Spec REI
Non-insulin dependent diabetes, with comorbidity, 0029	#######	1	4.3%
Benign hypertension, w/o comorbidity, 0281	########	2	4.0%
Acute sinusitis, 0333	#######	3	3.5%
Inflammation of the esophagus, w/o surgery, 0433	#######	4	3.3%
Tonsillitis, adenoiditis or pharyngitis, w/o surgery, 0331	########	5	3.3%
Dermatitis [*]	#######	6	3.1%
Minor depress…	#######	7	

Findings (Dermatitis): topical steroid costs

Pediatrics — Total $$ in top ETGs: ###### — Percent of REI $$: 44.8% — Total REI $$: #######

Condition, ETG number	REI Costs	Rank	% Spec REI
Tonsillitis, adenoiditis or pharyngitis, w/o surgery, 0331	#######	1	11.9%
Otitis media, w/o surgery, 0329	########	2	9.0%
Uncomplicated neonatal management, 0780	#######	3	5.7%
Attention Deficit Disorder, 0101	#######	4	3.9%
Dermatitis [*]	########	5	3.4%
Other major neonatal disorders, perinatal origin, 0786	#######	6	3.3%
Acute sinusi…	#######	7	

Ear, Nose, and Throat — Total $$ in top ETGs: ###### — Percent of REI $$: 63.6% — Total REI $$: #######

Condition, ETG number	REI Costs	Rank	% Spec REI
Tonsillitis, adenoiditis or pharyngitis, with surgery, 0330	#######	1	18.2%
Chronic sinusitis, with surgery, 0334	########	2	9.7%
Otitis media, with minor surgery, 0328	#######	3	8.6%
Chronic sinusitis, w/o surgery, 0335	$854,013	4	6.6%
Otitis media, w/o surgery, 0329	$705,534	5	5.5%
Tonsillitis, adenoiditis or pharyngitis, w/o surgery, 0331	$571,198	6	4.4%
ENT congen… acquired anom… surgery, …	#######	7	

Blueprint

RIPA

Conclusions

- Focus on reducing overuse instead of relying on efficiency indexes
- Find specific action items to improve value
- Direct attention to meaningful action items to engage practitioners as partners
- Change physician behavior through incentives, avoid “punishing bad docs” as primary motivational strategy