

Agenda

1. The impetus behind volume to value
2. The critical importance of quality theory & practice
3. Planning as the foundation for successful change
 - Thorough understanding
 - Three phases, multiple sub-phases
 - A budget for every phase
4. Getting data and turning it into information
5. Change management
6. Questions and discussion



About MediSync

- Manage (don't own) multiple medical groups
 - Assist them to achieve “breakthrough” performance financially and clinically
- Use Six Sigma and Lean to innovate medical group performance and operations
- Innovated management processes to 120+ medical groups nationwide



About PriMed Physicians

- Community based, physician owned and governed
- Greater Dayton, OH
- PCP Based Multi-specialty Medical Group
 - Family Practice, Internal Medicine, Pediatrics
 - + Cardiology, Electrophysiology, Neurology & Endo
- 55 physicians; ~100,000 patients
- Started prepping for value agreements in 2004
- Nov 1, 2012 almost all value contracts



PriMed's Situation

- Independent group = no subsidy or deep pocket
 - MediSync did help to bear some costs
- Our doctors expect to earn top 10% regionally, above average nationally
- Physician buy-in essential
 - Physician owned medical group
 - There is no “boss” who could mandate changes



Disclaimer:

We are speaking about “average”

Seattle vs Miami



MediSync

The World We Grew Up In

- Most patients have health benefits (until recently)
- Explosion of new technologies since 1965
 - Pharmaceutical
 - Diagnostic
 - Interventional (i.e. surgical, etc.)
- More money every year for healthcare
 - Increased our revenue opportunities
- 75+ years of compensation “by the piece”



In Today's Fee Based World:

- Volume is essential to financial success
- Perverse incentives:
 - Improving quality decreases profit
 - “Why spend money measuring outcomes or improving outcomes?”
- Result: Most systems/groups didn't invest (much) in improvement
 - Dollars “saved” go to the doctors



What Does Your Group Track Today?

Volume Related

- Tracking RVUs
- Tracking encounters
- Track average charge/visit
- Tracking and encouraging referrals
- Physician compensation based upon code revenues
- Tracking costs per RVU
- Frequency of financial reports

Quality Related

- Track outcomes for chronic diseases?
 - How many conditions? How often? Process or outcome?
- Track Wellness/Prevention outcomes?
- Track ER visits, admissions and re-admissions?
- Track generic utilization?
- Money spent on quality improvements?

Is There A Spear Point In Our Back?

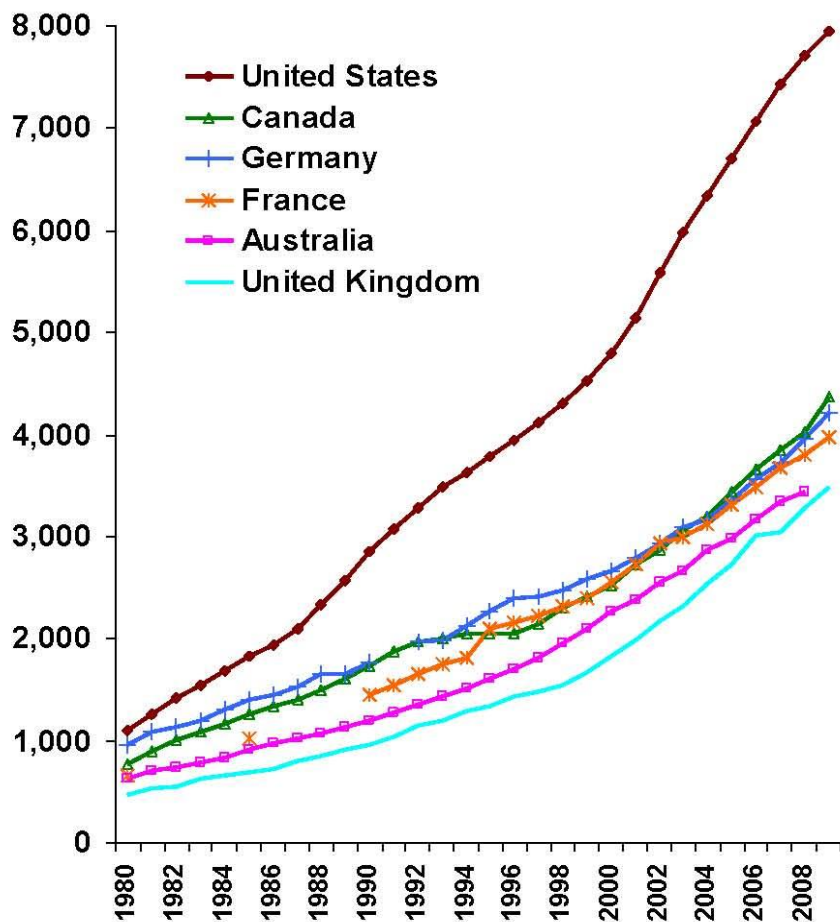
Snapshot: US Healthcare



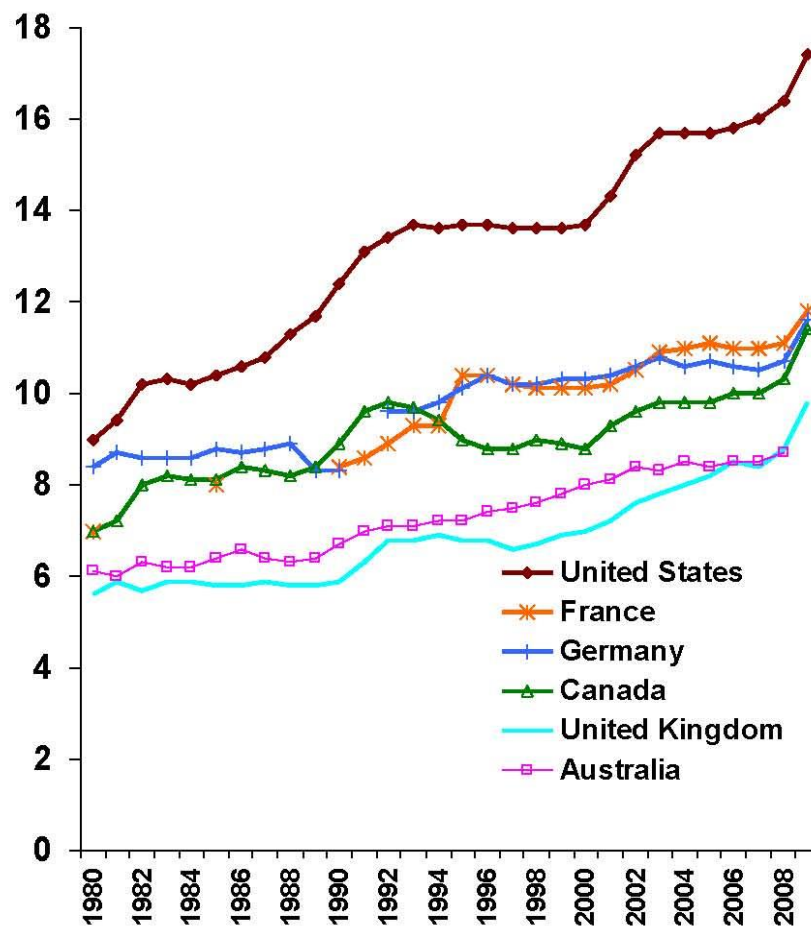
MediSync

International Comparison of Spending on Health, 1980–2009

Average spending on health per capita (\$US PPP*)



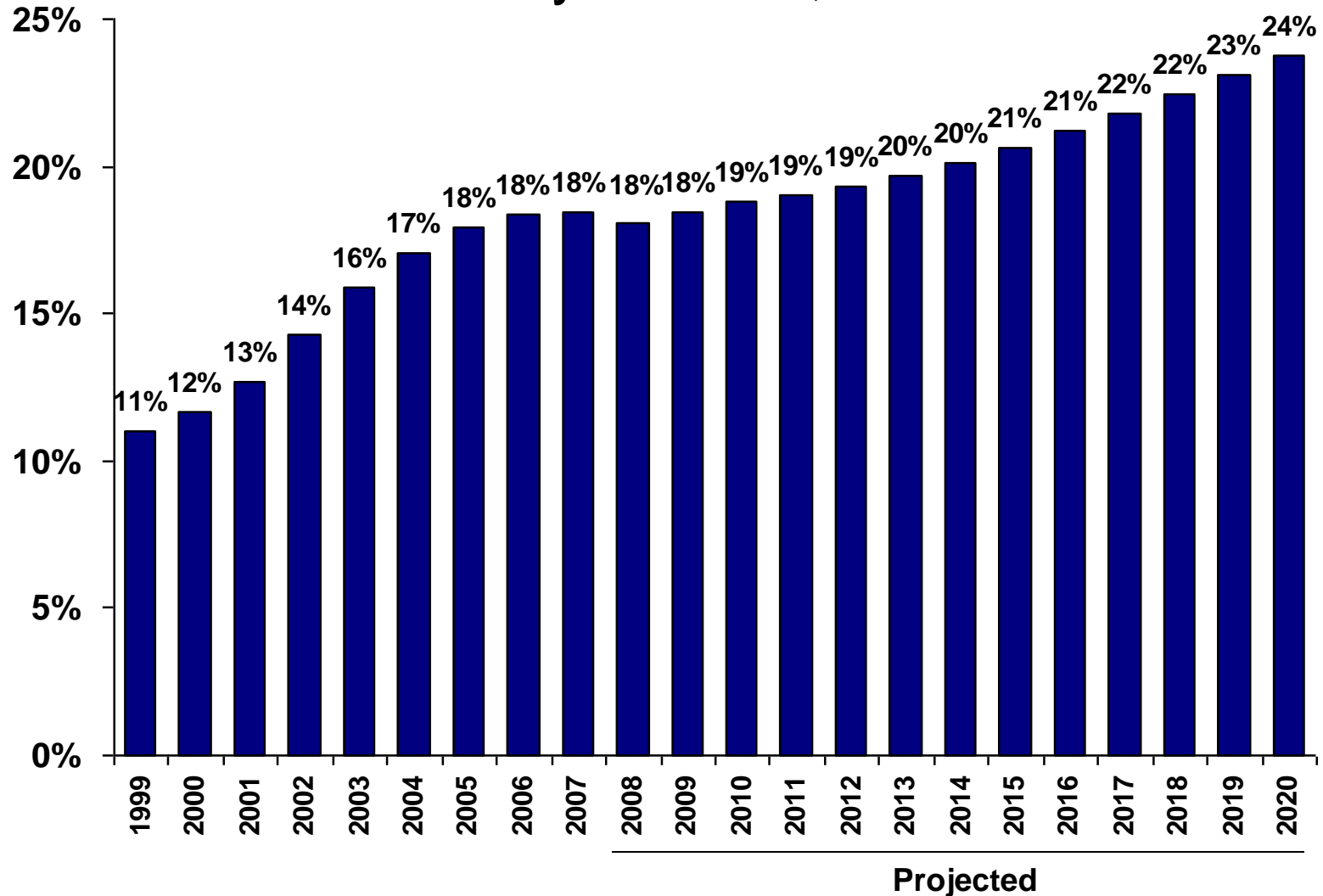
Total expenditures on health as percent of GDP



* PPP=Purchasing Power Parity.

Data: OECD Health Data 2011 (database), version 6/2011.

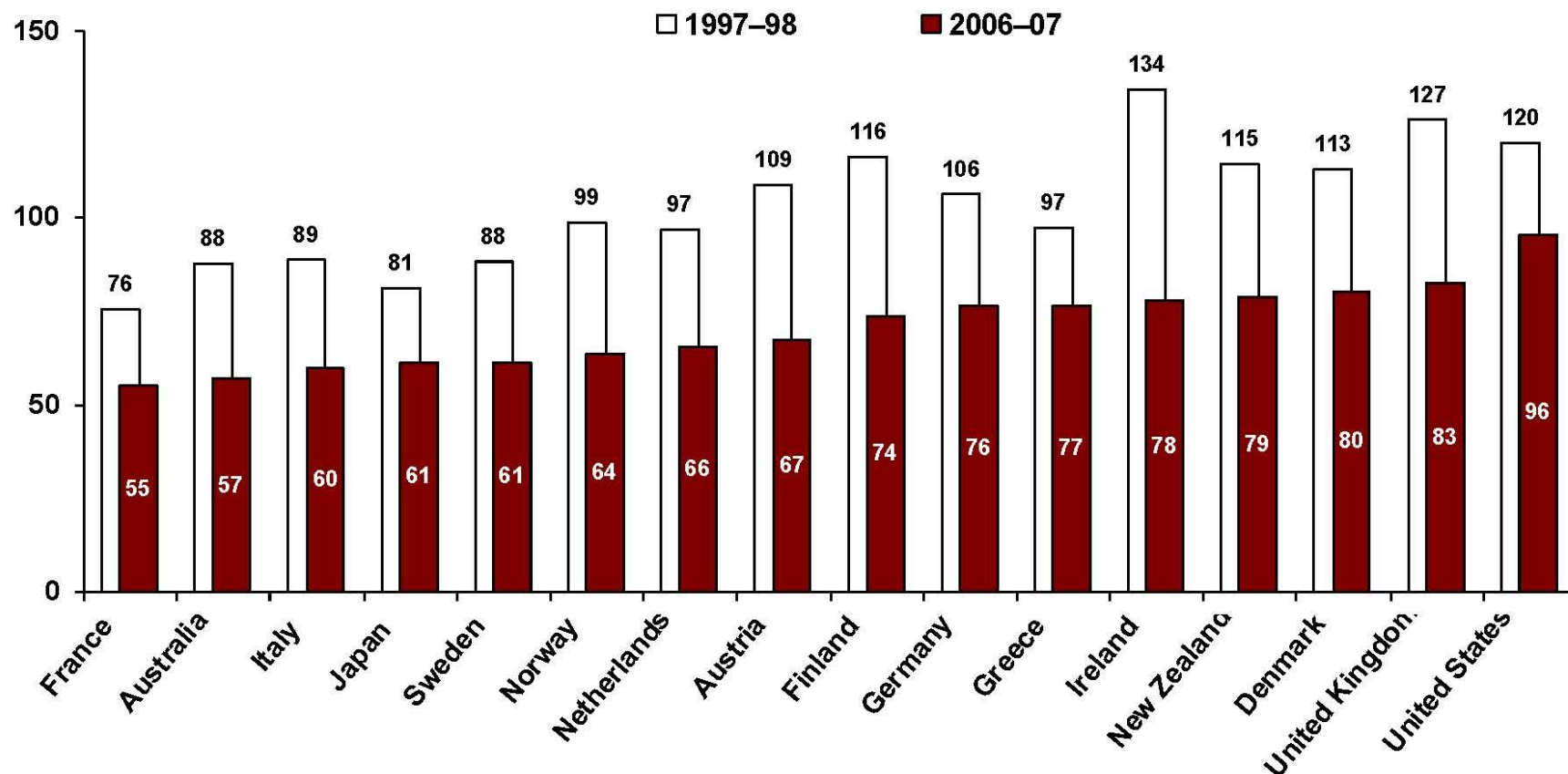
Average Family Premium as a Percentage of Median Family Income, 1999–2020



Source: Commonwealth Fund calculations based on Kaiser/HRET, 1999–2008; 2008 MEPS-IC; U.S. Census Bureau, Current Population Survey; Congressional Budget Office.

Mortality Amenable to Health Care

Deaths per 100,000 population*



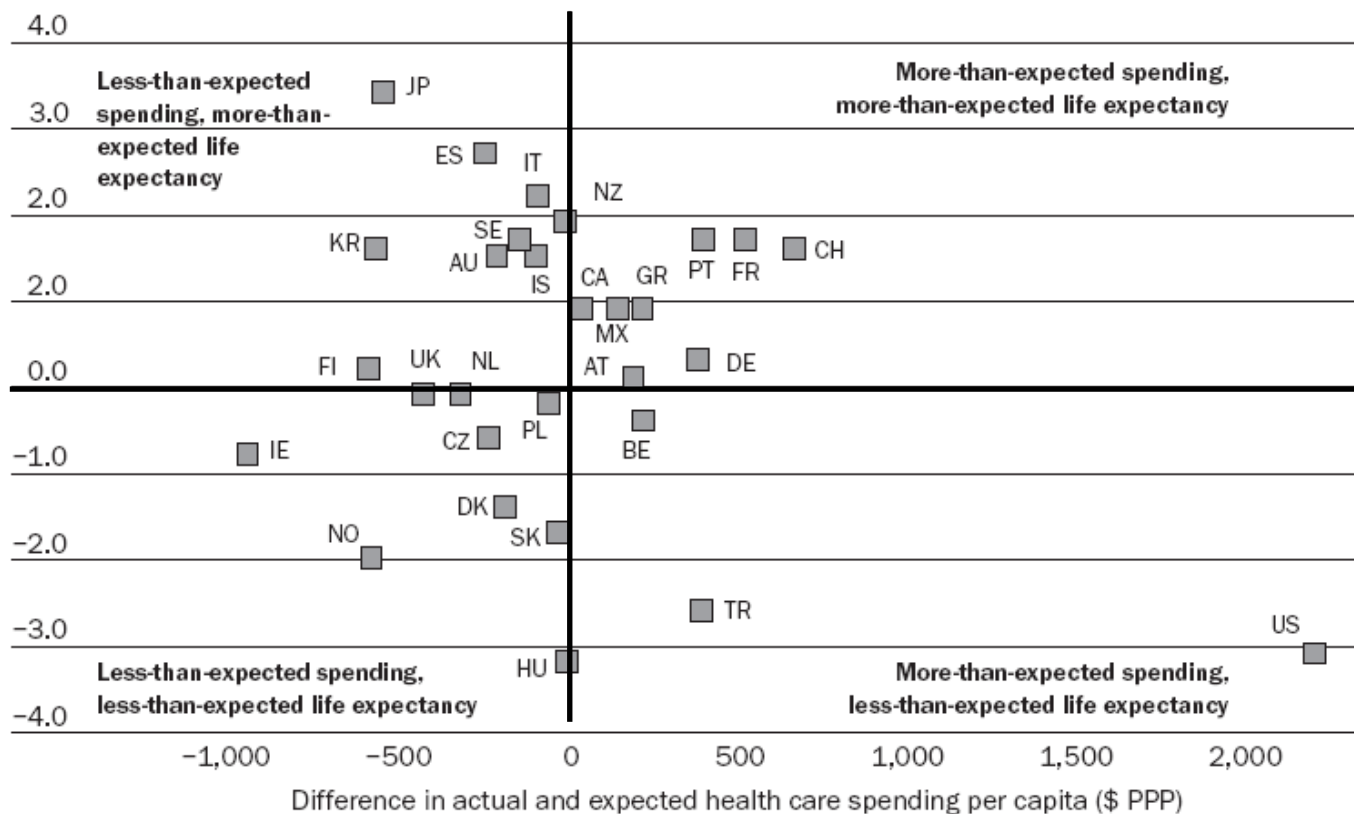
* Countries' age-standardized death rates before age 75; including ischemic heart disease, diabetes, stroke, and bacterial infections. See Appendix B for list of all conditions considered amenable to health care in the analysis.

Data: E. Nolte, RAND Europe, and M. McKee, London School of Hygiene and Tropical Medicine analysis of World Health Organization mortality files and CDC mortality data for U.S. (Nolte and McKee, 2011).

EXHIBIT 3

Difference Between Actual And Expected Health Care Spending Per Capita And Actual And Expected Life Expectancy In Organization For Economic Cooperation And Development (OECD) Countries, 2005

Difference in actual and expected life expectancy (years)



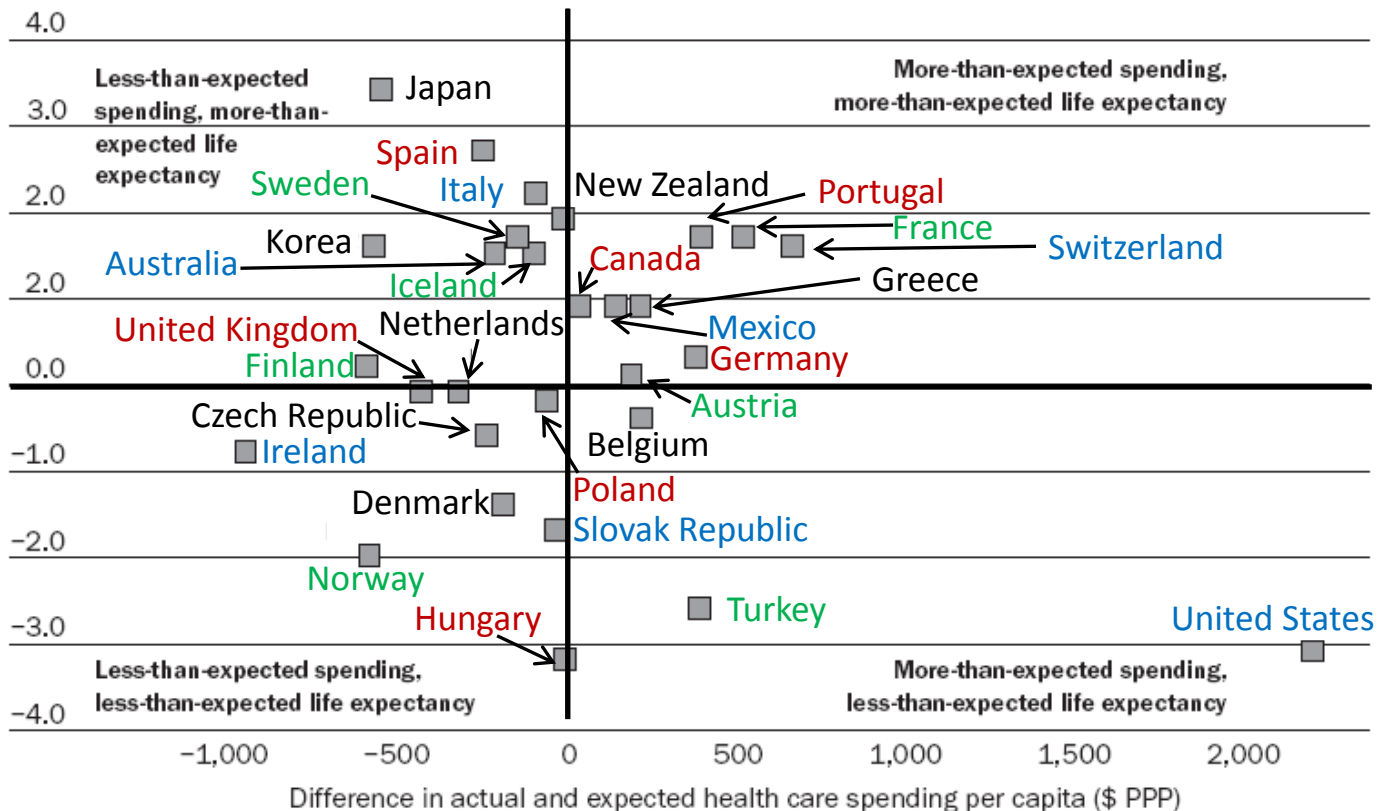
SOURCE: Organization for Economic Cooperation and Development, *OECD Health Data, 2007* (Paris: OECD, 2007).

NOTES: Regression equation for expected health spending is $y = 0.1174x - 706.35$ with $R^2 = 0.79$, where y is health care spending per capita (\$ purchasing power parity, or PPP) in 2005 and x is gross domestic product (GDP) per capita (\$ PPP) in 2005. Regression equation for expected life expectancy is $y = 0.0002x - 72.503$ with $R^2 = 0.57$, where y is life expectancy in years in 2005 and x is GDP per capita (\$ PPP) in 2005. For details, see Notes 15, 16, and 18 in text. For Australia, Hungary, Japan, and the Netherlands, health spending data for 2004 are used. For Canada and the United States, life expectancy data for 2004 are used. Country abbreviations are spelled out in Exhibit 2. Luxembourg (LX) is omitted from this analysis.

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Cribbing Economists

What Mayo & Kaiser Permanente's
Experts Are Saying

Economics 101

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$



The Shift to Pay For Value

- A radical departure from speed and volume to performance:

- ✓ Quality matters

- ✓ Cost matters

- Total cost of care

- Cost of providing care

- This changes everything



Agenda

1. The impetus behind volume to value
2. The critical importance of quality theory & practice



One Important Chapter From PriMed's Story

Using Quality Theory,
Especially Process



Cost of Chronic Disease

“Seventy-five percent of the (monies) spent on health care in the U.S. is for treatment of the chronically ill.”

- The Commonwealth Fund

“Big” Chronic Diseases

HTN

Diabetes

Lipids (CAD & Vascular Diseases)

Asthma

Heart Failure

COPD

Depression

Osteoporosis



The Costs of Poor Quality



The NEW ENGLAND
JOURNAL of MEDICINE

Volume 348(26) 26 June 2003 pp 2635-2645

The Quality of Health Care Delivered To Adults In the United States

McGlynn, Elizabeth A.: Asch, Steven M.: Adams, John: Jeesey, Joan: Hicks, Jennifer:
DeCristofaro, Alison: Kerr, Eve A.

BACKGROUND

We have little systematic information about the extent to which standard processes involved in healthcare—a key element of quality—are delivered in the United States.

METHODS

We telephoned a random sample of adults living in 12 metropolitan areas in the United States and...received written consent to copy their medical records...to evaluate performance on 439 indicators of quality of care for 30 acute and chronic conditions as well as preventative care...

RESULTS

Participants received 54.9 percent of recommended care.

CONCLUSIONS

The deficits we have identified in adherence to recommended processes for basic care pose serious threats to the health of the American public. Strategies to reduce these deficits are warranted.

McGlynn et al's Findings

<u>Disease State Practices*</u>	<u>% Best</u>
Arial Fibrillation	25%
Diabetes	45%
Congestive Heart Failure	63%
Hypertension	65%
Coronary Artery Disease	<u>68%</u>
Average	55%

* These are PROCESS not OUTCOME measures

Average Outcomes Weak:

- HTN: <40% at JNC-7 BP goal
- Diabetes ~ 12% meet “Triple Outcome Goal”
 - BP of $\leq 129/79$;
 - Lipids of 70 or 100;
 - A1c of <7 or <8
- Osteo Screening: 1:8 women per EBS
- Asthma: 1:14 on correct drugs per EBS
- **Difference between outcome versus process goals is critical**



“Normal” Quality/Cost Improvement In Virtually All Medical Groups

1. Remind physicians about evidence based standards, goals, pathways, etc.
 - Put quality “pop ups” in EHR
 - Generate a registry with lists of patients
2. Generate metrics and publish – (un)blinded
3. Hire additional staff to support the effort, remind the patients, remind the doctors (i.e. PCMH)
4. Link outcomes to pay

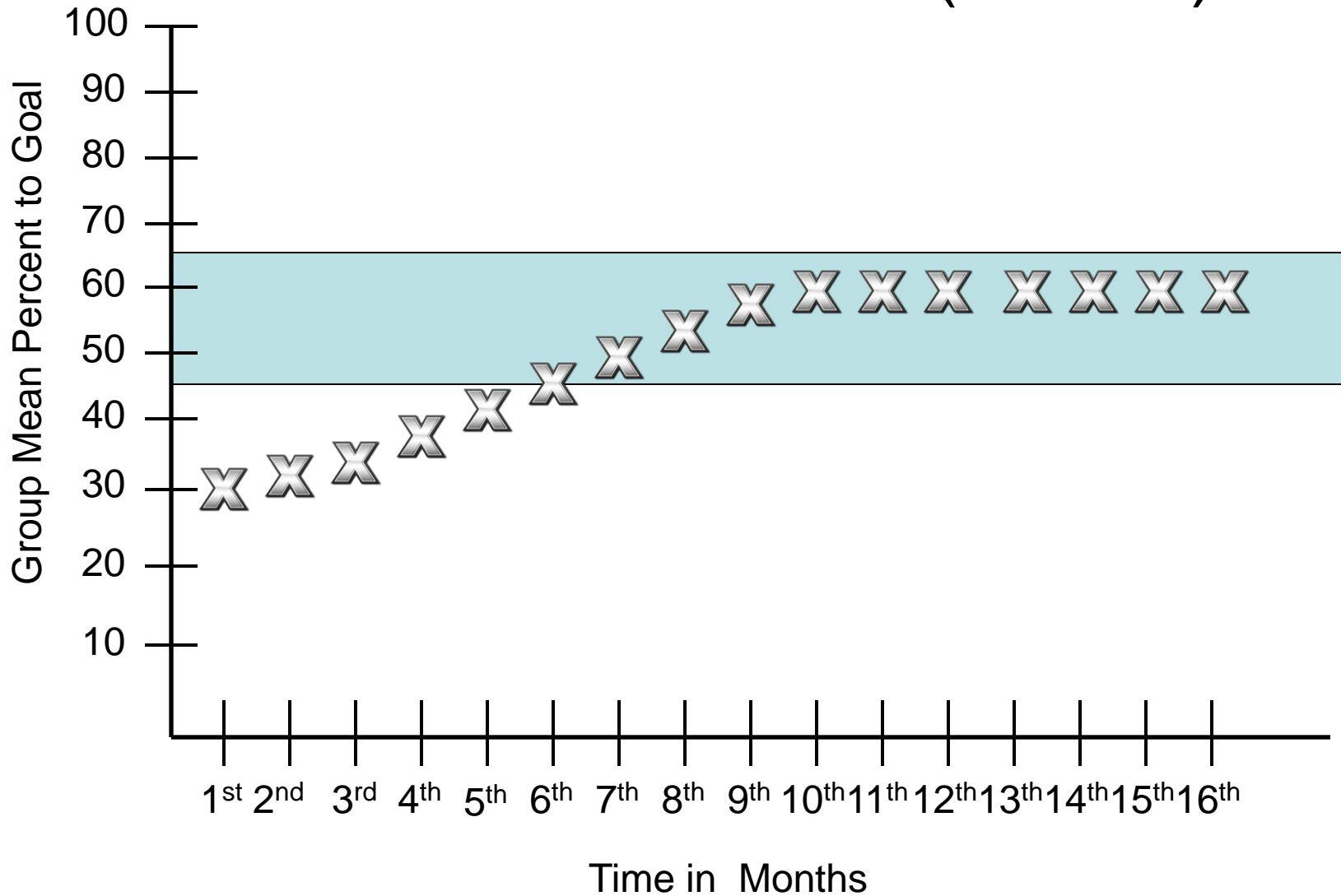


WHAT DO THE NORMAL METHODS
GAIN IN IMPROVEMENT?



MediSync

Medical Quality Goal: Move One Variable (i.e. BP)



The IHI and “All or None” Goals

Wisconsin Diabetes

1. BP \leq 129/79
2. A1c $<$ 7
3. LDL $<$ 100

Minnesota D5

1. BP \leq 139/89
2. A1c $<$ 7
3. LDL $<$ 100
4. On Aspirin or Anti-thrombotic Tx
5. Non-smoker

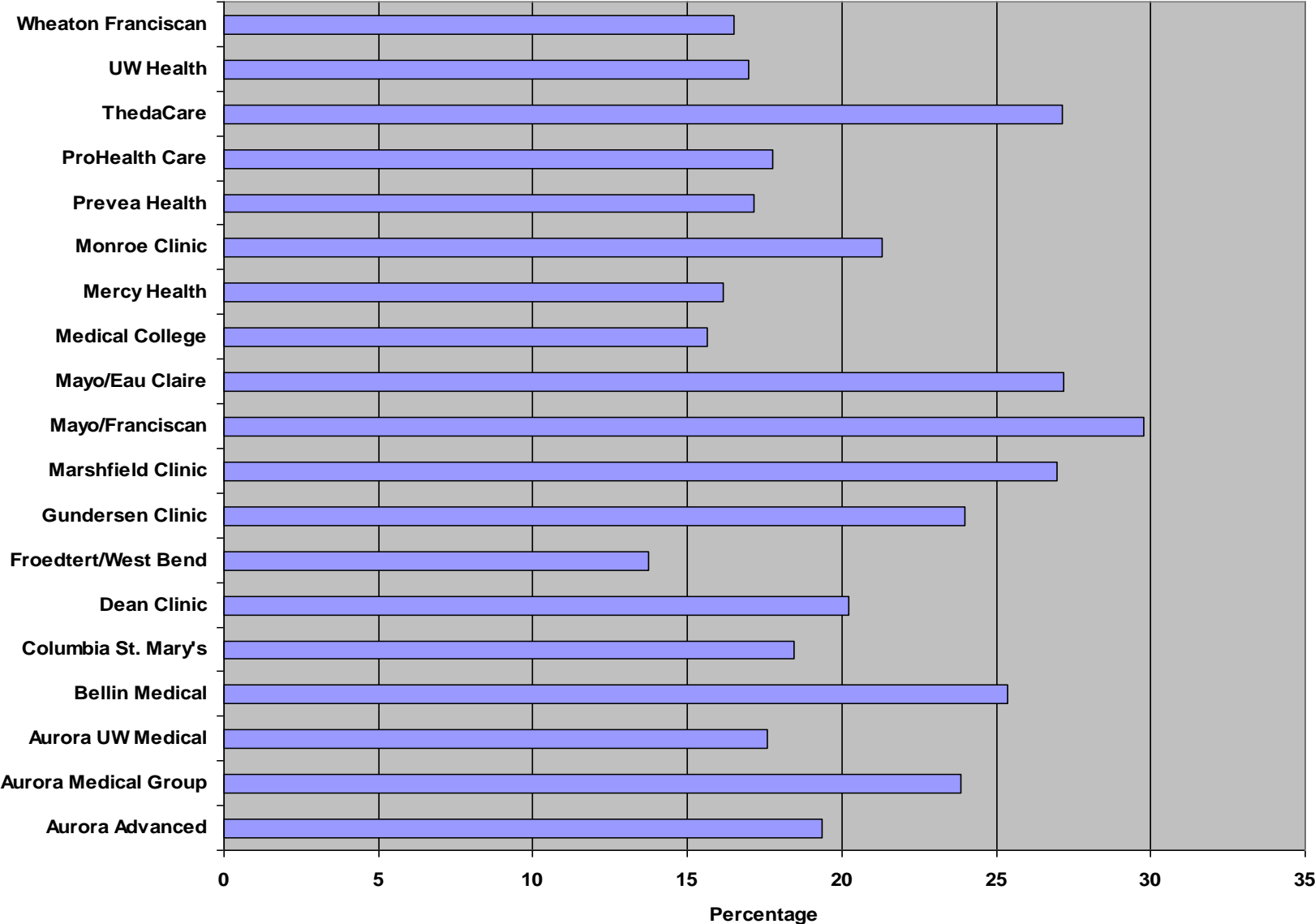


Three Goals @ 60% Each

»1 st Goal	60%
»2 nd Goal	36%
»3 rd Goal	21.6%



2010 Diabetes Outcomes (Using Wisconsin Measures)



The “All or None” Hurdle

1 goal @ 90% / 60% each	90%	60%
2 goals @ 90% / 60% each	81%	36%
3 goals @ 90% / 60% each	72.9%	21%
4 goals @ 90% / 60% each	65.6%	12%
5 goals @ 90% / 60% each	59%	7.5%

“Normal” Quality/Cost Improvement In Virtually All Medical Groups

1. Remind physicians about evidence based standards, goals, pathways, etc.
 - Put quality “pop ups” in EHR
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About Quality Theory & Tools

- Used in virtually all other economic sectors
- Sophisticated ways to help make quality improvements and cut costs
- Examples from every day life
- Examples: Six Sigma, Lean, TQI, etc.



What Six Sigma & Lean Taught Us

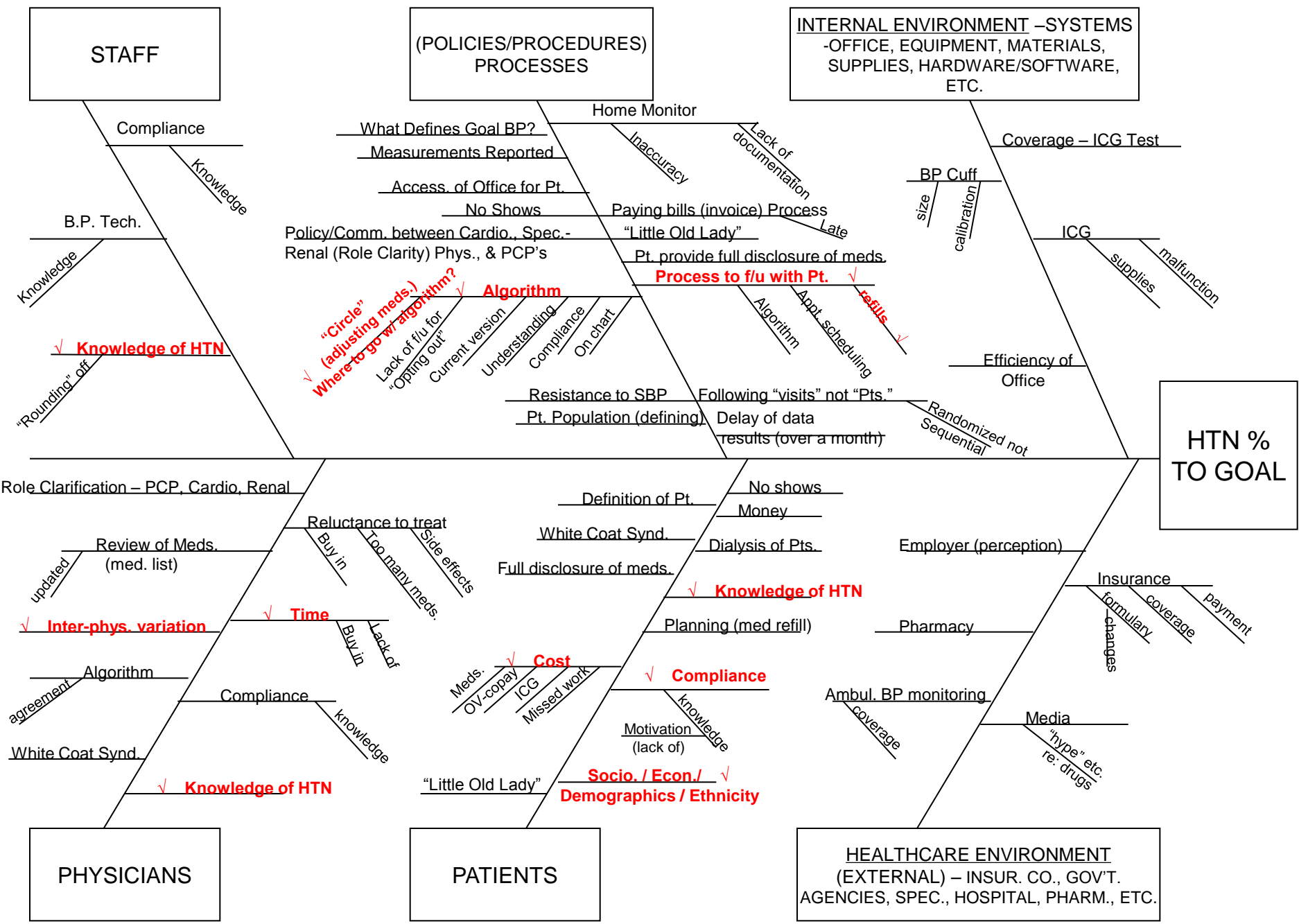
1. Process, process, process
2. If you can't measure it, you can't improve it
3. Process, process, process

NB -- A process is a defined set of steps designed to achieve a very specific goal

First Medical Quality Project: Create HTN Process

1. Use Six Sigma
2. Establish baseline performance – 42%
3. Start with an “Ishikawa” or “Fishbone”





Creating the HTN Process - 1

1. Use Six Sigma
2. Establish baseline performance
3. Start with an “Ishikawa” or “Fishbone”
4. Create a true process that
 - Addresses every HTN patient, every visit
 - Includes Impedance Cardiography
 - Guides drug selection and dosing

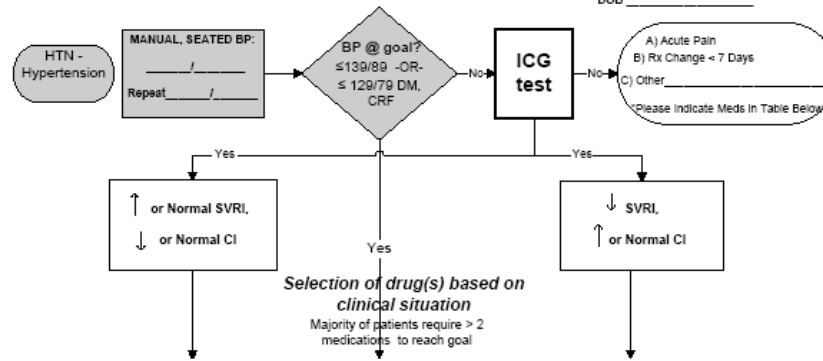


HTN - Clinical Process Flow

DATE _____

NAME _____

DOB _____



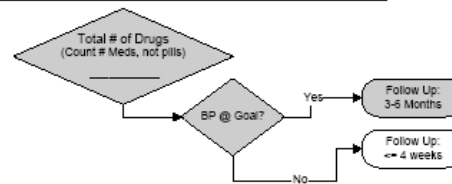
Med Adjustment			Current Meds	Med Adjustment		
Add New Rx	D/C	Change Dose	** JNC 7 guidelines recommends all Pts w/out a contraindication be on a Thiazide Diuretic	Change Dose	D/C	Add New Rx
		↑	<input type="checkbox"/> Thiazide Diuretic** <i>HF, CVD risk, DM, Recurrent stroke prevention</i>	↑		
		↑	<input type="checkbox"/> ACEI <i>HF, Post MI, CVD risk, DM, Chronic kidney disease, Recurrent stroke prevention</i>	↓		
		↑	<input type="checkbox"/> ARB <i>HF, DM, Chronic kidney disease</i>	↓		
		↓	<input type="checkbox"/> B Blocker <i>HF, Post MI, CVD risk, DM</i>	↑		
		↑	<input type="checkbox"/> Non-Selective B Blocker with (alpha) blocking activity <i>HF, Post MI</i>	↓		
		↑	<input type="checkbox"/> CCB <i>CVD risk, DM</i>	↓		
		↑	<input type="checkbox"/> Vasodilator	↓		
		↑	<input type="checkbox"/> Central/Alpha Agonist	↓		
		↑	<input type="checkbox"/> Diuretic (Non Thiazide)	↓ ↑		
			<input type="checkbox"/> Other:			

Lifestyle Modifications counseled? Y / N

Sleep Hx obtained? Y / N

Annual Test/Secondary Cause?

- U/A Y / N
- Renal/K+ Y / N
- ECG Y / N
- FSG Y / N



Physician's clinical judgment supersedes this form

REV: 01/10/06

Creating the HTN Process

1. Use Six Sigma
2. Establish baseline performance
3. Start with an “Ishikawa” or “Fishbone”
4. Create a true process that
 - Addresses every HTN patient, every visit
 - Includes Impedance Cardiography
 - Guides drug selection and dosing
5. Solve controversy with statistics



Hemodynamic Status Report

Name:
ID:

Age: 60
Sex: Female

Height: 5 ft 6 in
Weight: 175 lb
BSA: 1.89 m²

30 Beat Average

Page 1 of 1

Parameter	Description	Value	Low	Normal	High
HR	Heart Rate	80	58		86
SBP	Systolic Blood Pressure	166	100		140
DBP	Diastolic Blood Pressure	81	60		90
MAP	Mean Arterial Pressure	111	84		100
CI	Cardiac Index	2.4	2.5		4.2
CO	Cardiac Output	4.4	4.7		7.9
SI	Stroke Index	29	35		65
SV	Stroke Volume	55	66		123
SVRI	Systemic Vascular Res. Index	3563	1337		2483
SVR	Systemic Vascular Resistance	1895	742		1378
TFC	Thoracic Fluid Content	27.1	21.0		37.0
LCWI	Left Cardiac Work Index	3.4	3.0		5.5
LCW	Left Cardiac Work	6.4	5.4		10.0

Inside Expert's DOE Analysis

Usefulness of ICG

C
C
C

Y-hat Model		BP@Goal			Active
Factor	Name	Coeff	P(2 Tail)	Tol	
Const		0.47645	0.0000		
A	StatusCoded	-0.00136	0.7305	0.8938	X
B	AlgFollow edCoded	-0.00487	0.1671	0.9781	X
C	ICG_RightCoded	0.47597	0.0000	0.8767	X
R ²		0.8710			
Adj R ²		0.8709			
Std Error		0.1742			
F		6205.1690			
Sig F		0.0000			
F _{LOF}		2.5130			
Sig F _{LOF}		0.0398			
Source		SS	df	MS	
Regression		564.8	3	188.3	
Error		83.7	2757	0.0	
Error _{Pure}		83.4	2753	0.0	
Error _{LOF}		0.3	4	0.1	
Total		648.5	2760		

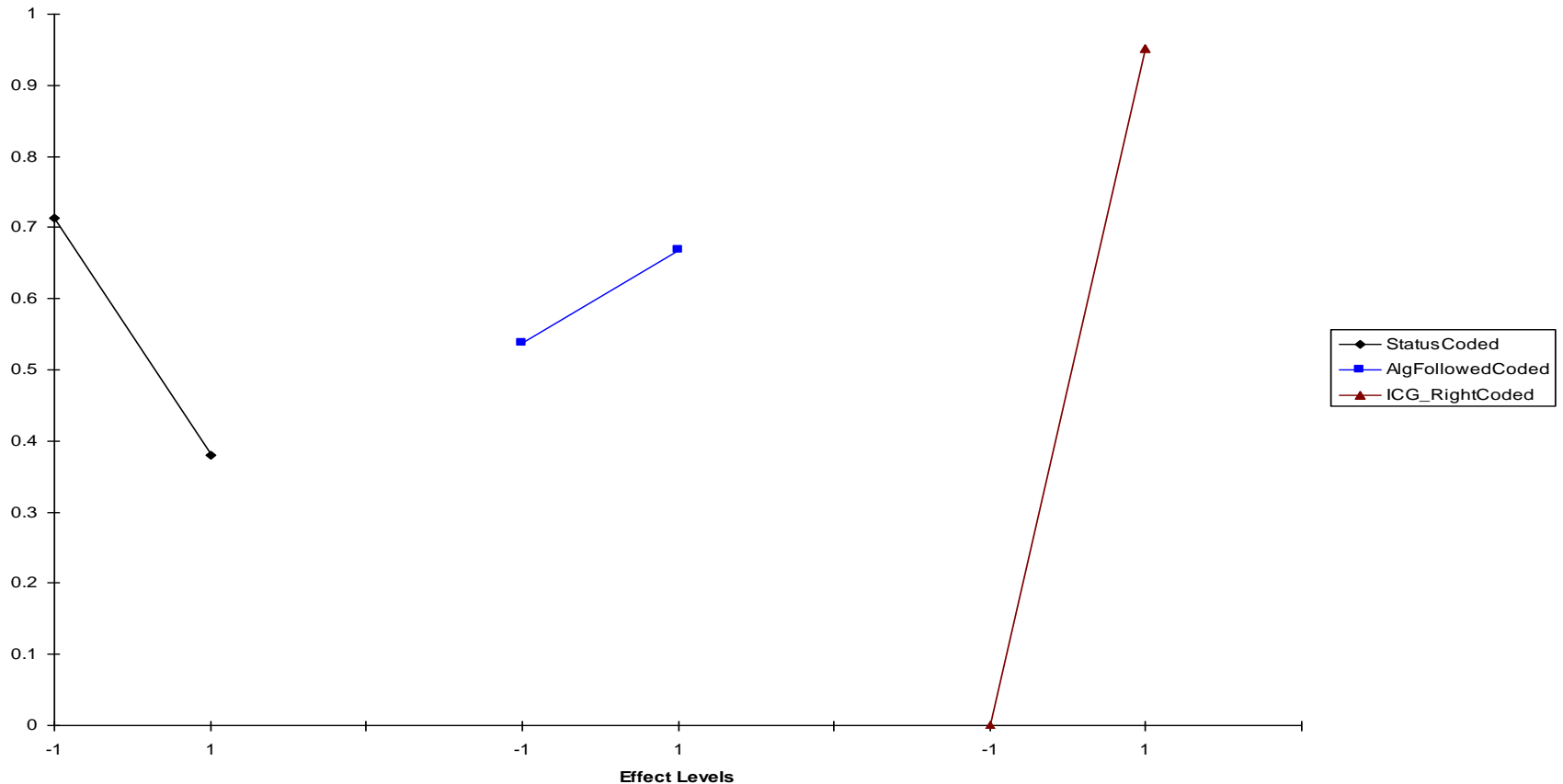
Factor	Name	Low	High	Exper
A	StatusCoded	-1	1	0
B	AlgFollow edCoded	-1	1	0
C	ICG_RightCoded	-1	1	0

Multiple Response Prediction				
	Y-hat	S-hat	99% Confidence Interval	
			Lower Bound	Upper Bound
BP@Goal	0.4765	0.1742	-0.046	0.999

Inside Expert's DOE Analysis

Usefulness of ICG

PriMed
Y bar Marginal Means
SBP & DBP Combined at BP Goal
Dec 05

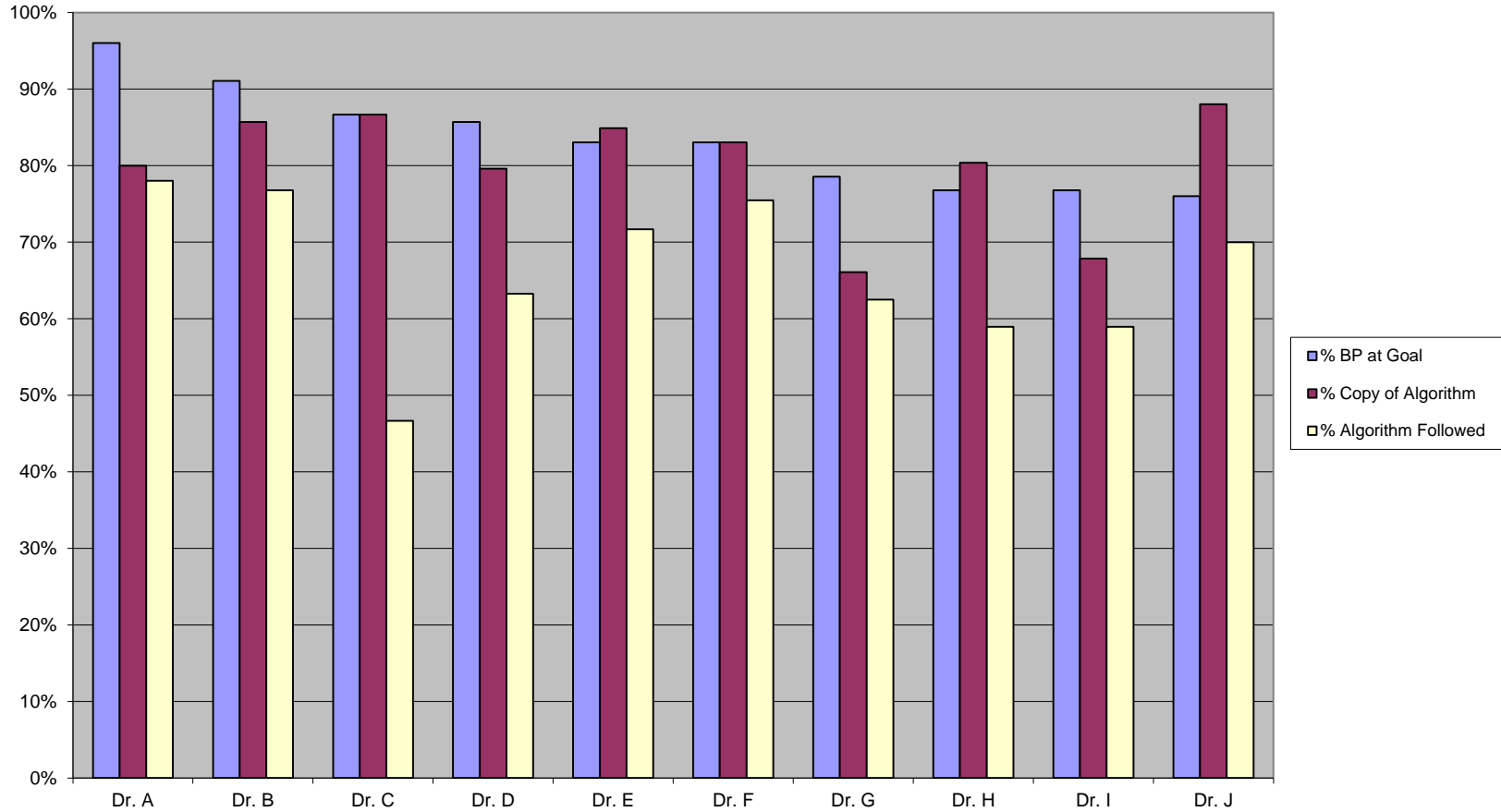


Creating the HTN Process

5. Measure use of HTN Process and outcomes
6. Unblinded publication of data
 - What do you do with docs who do not use HTN Process?

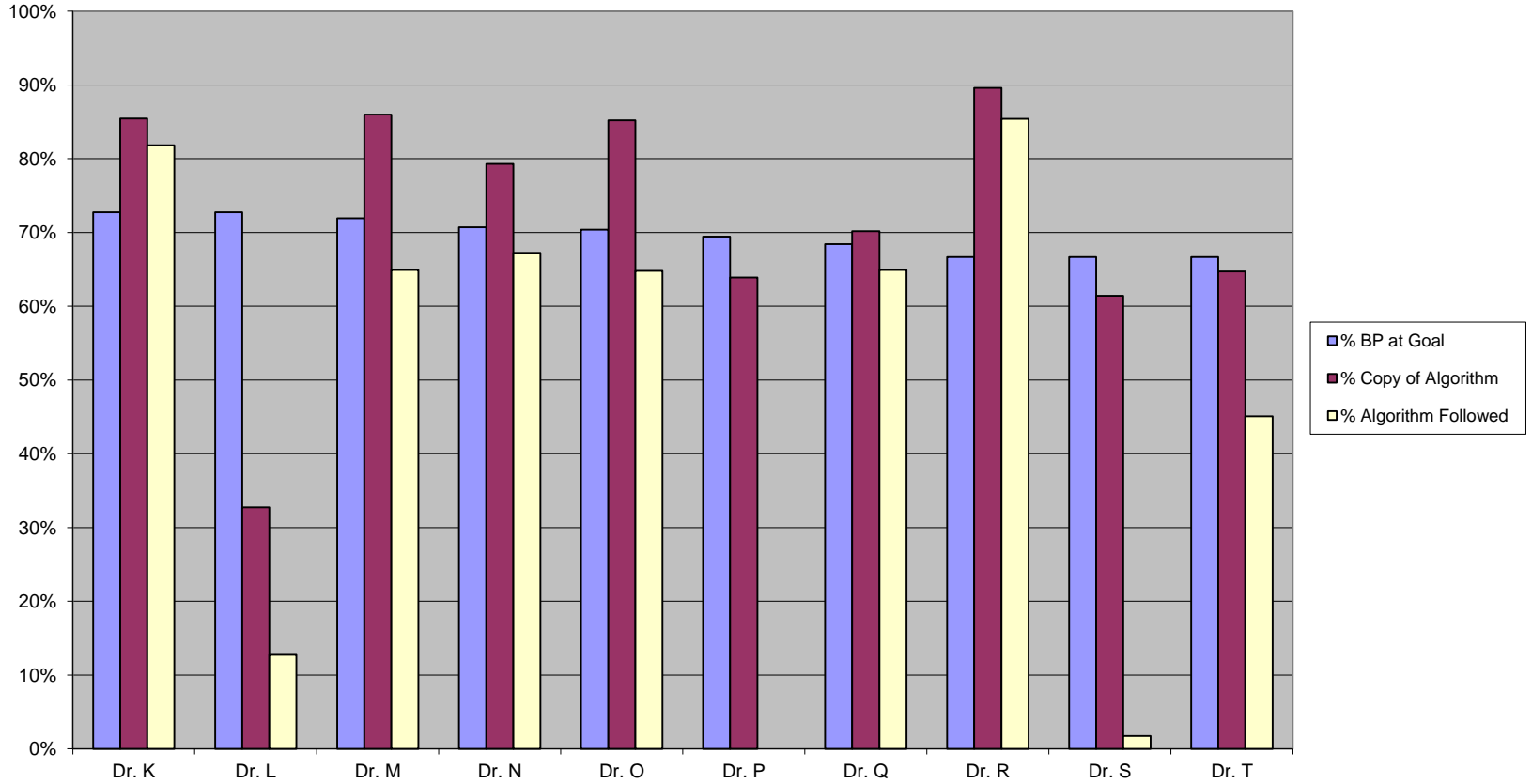
PriMed
% HTN to Goal vs. % Copy of Algorithm vs. % Algorithm Followed
August 2005

Average:
% HTN to Goal = 83%
% Algorithm Followed = 66%



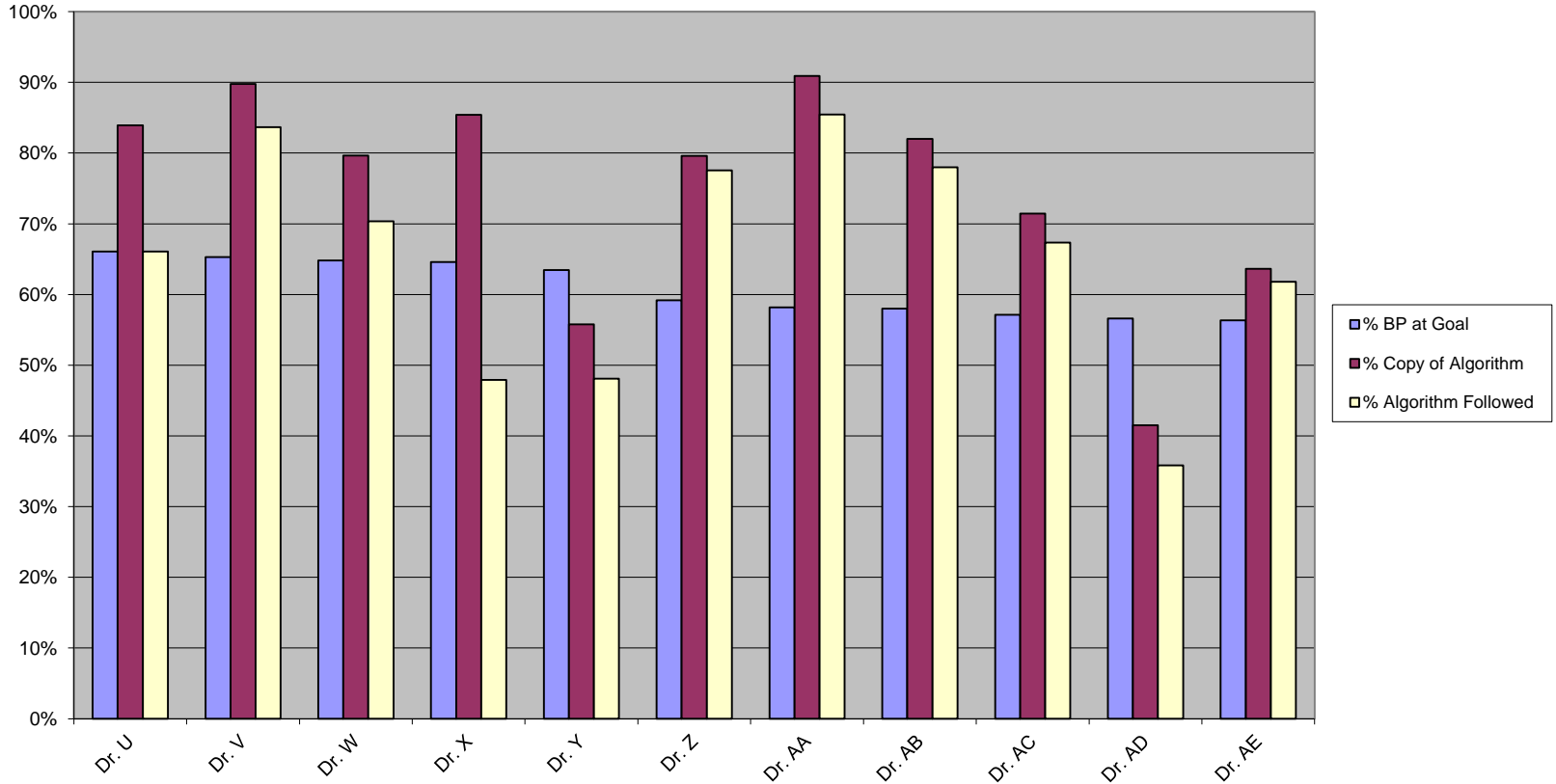
PriMed
% HTN to Goal vs. % Copy of Algorithm vs. % Algorithm Followed
August 2005

Average:
% HTN to Goal = 70%
% Algorithm Followed = 49%



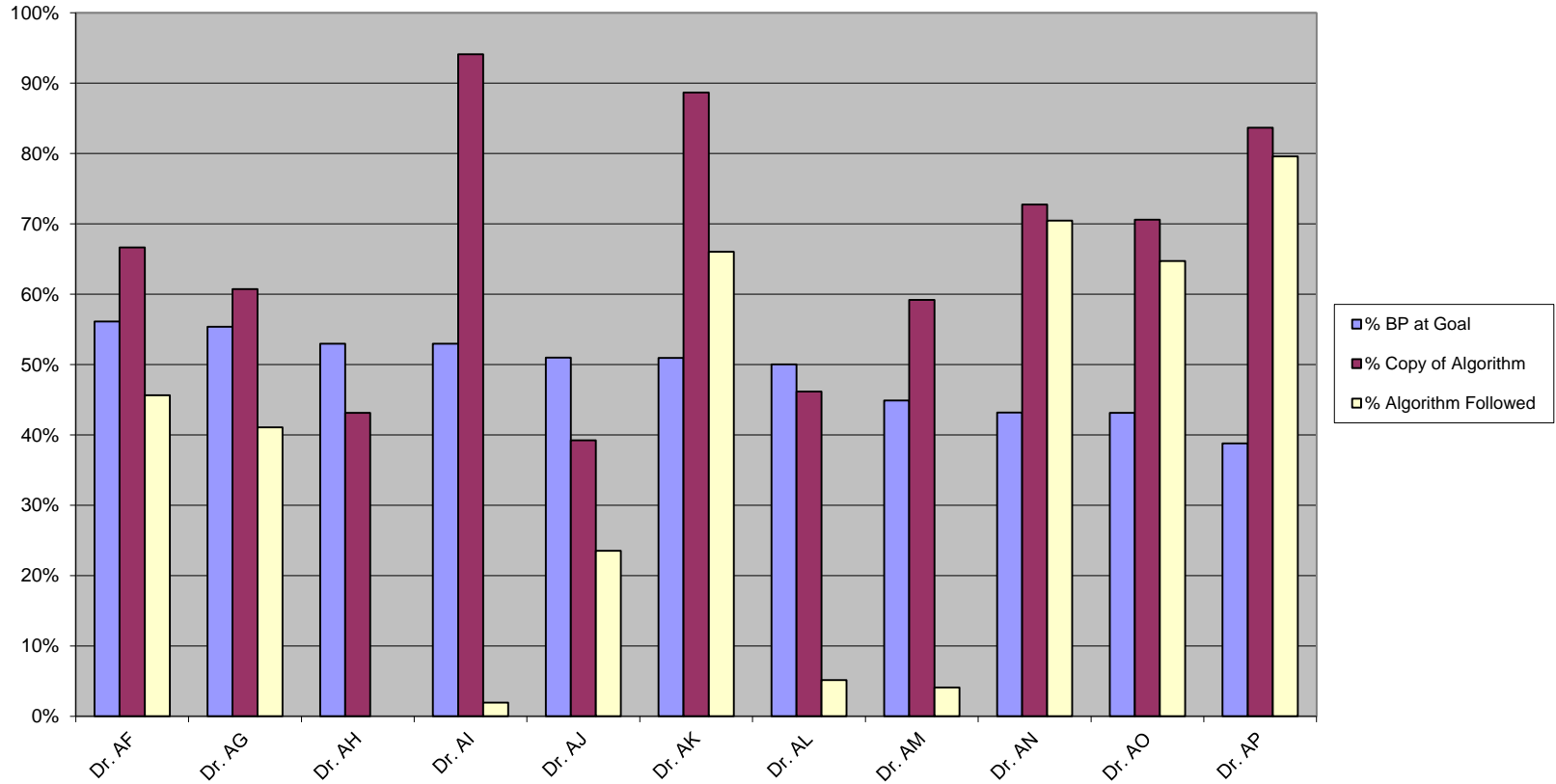
PriMed
% HTN to Goal vs. % Copy of Algorithm vs. % Algorithm Followed
August 2005

Average:
% HTN to Goal = 61%
% Algorithm Followed = 66%



PriMed
% HTN to Goal vs. % Copy of Algorithm vs. % Algorithm Followed
August 2005

Average:
% HTN to Goal=49%
% Algorithm Followed=37%



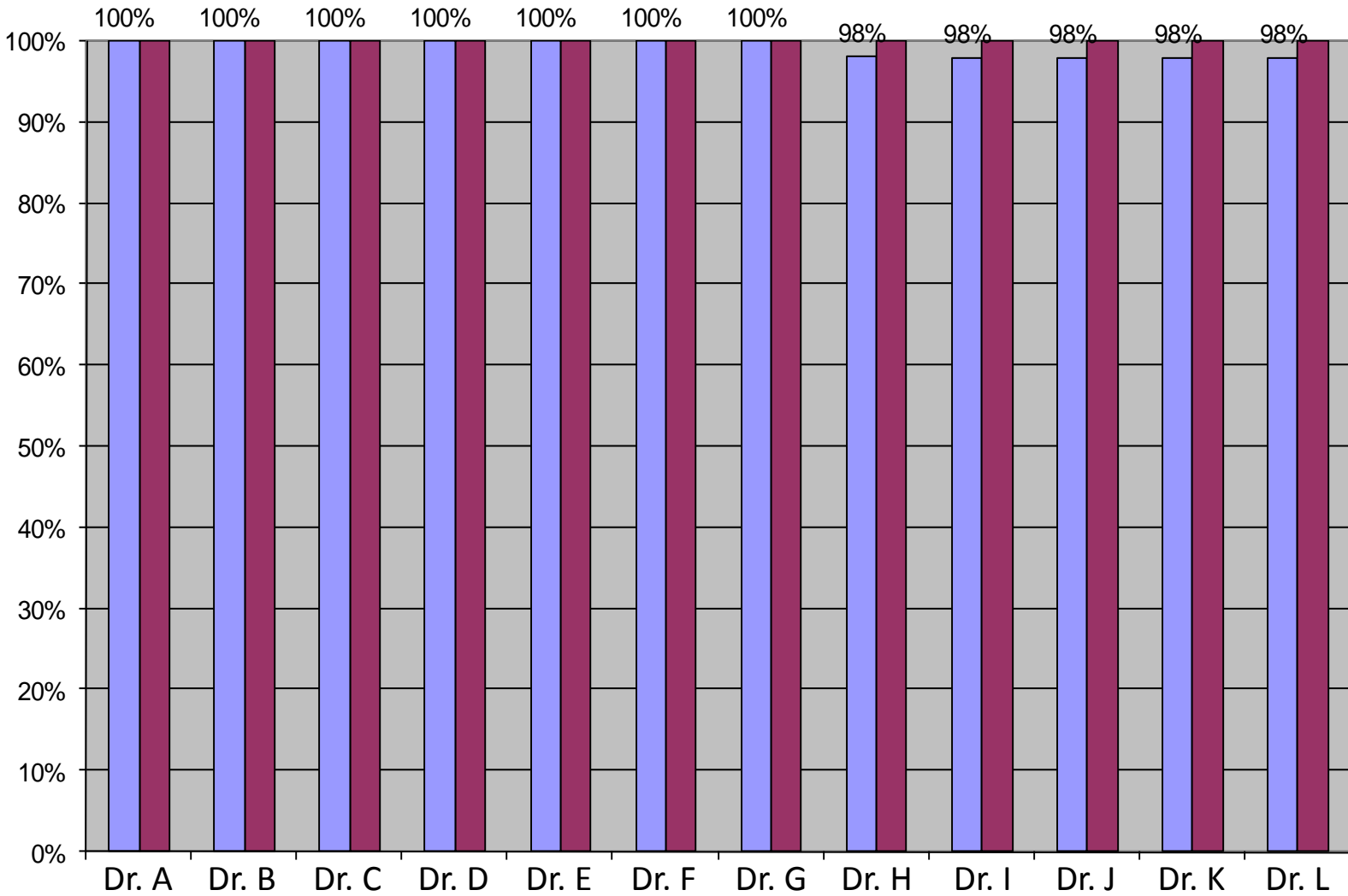
Creating the HTN Process

5. Measure: HTN Process use and outcomes
6. Publish results
 - What do you do with docs who do not use HTN Process?
7. Link HTN Process compliance to physician compensation
 - NOT based upon outcomes, based upon participation in the process
9. Constant work on “group culture”



**% BP@Goal
PriMed
Quartile 1
September 2009**

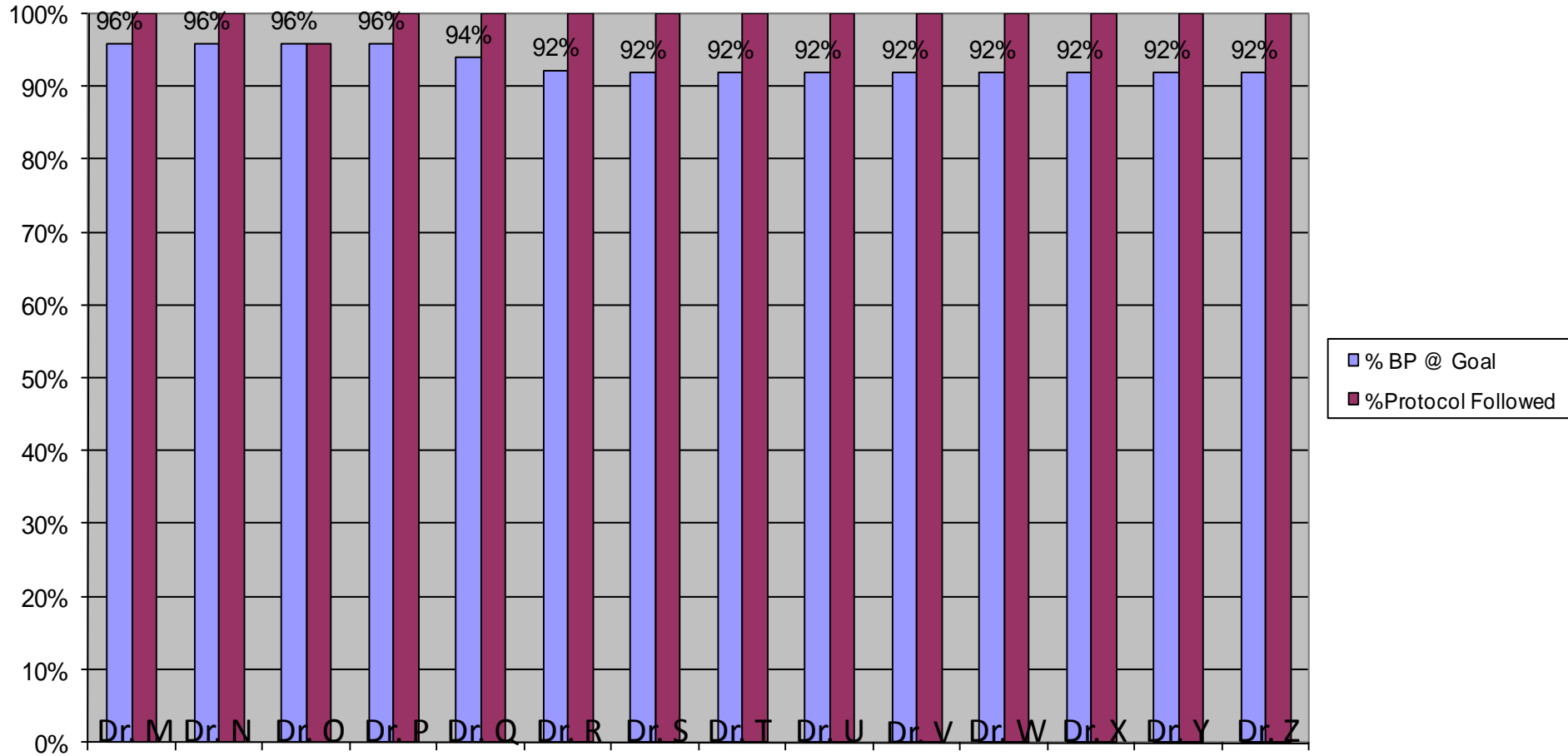
Averages:
% BP@Goal = 99%
% Protocol Followed = 100%



% BP @ Goal
% Protocol Followed

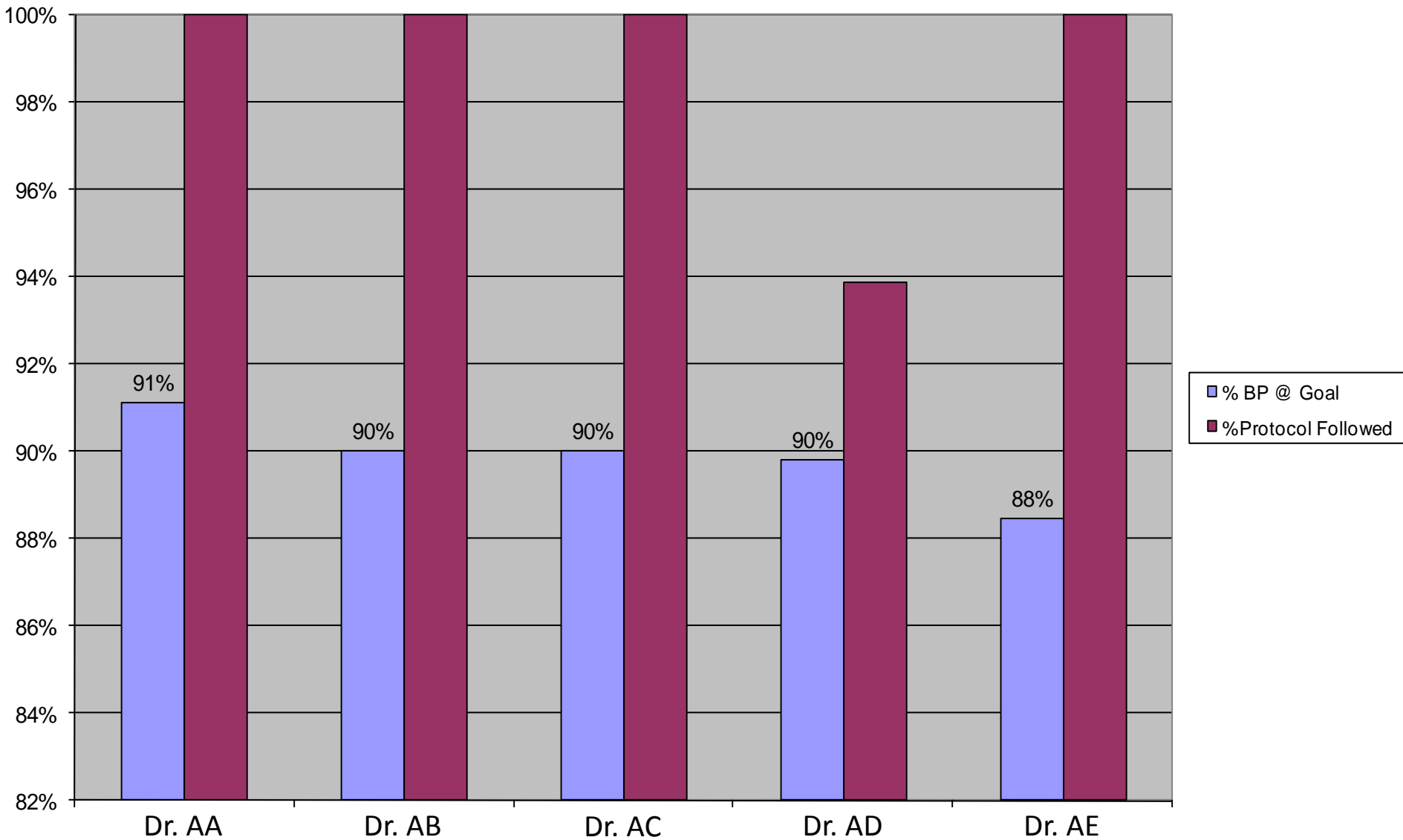
**% BP@Goal
PriMed
Quartile 2
September 2009**

Averages:
% BP@Goal = 93%
% Protocol Followed = 100%



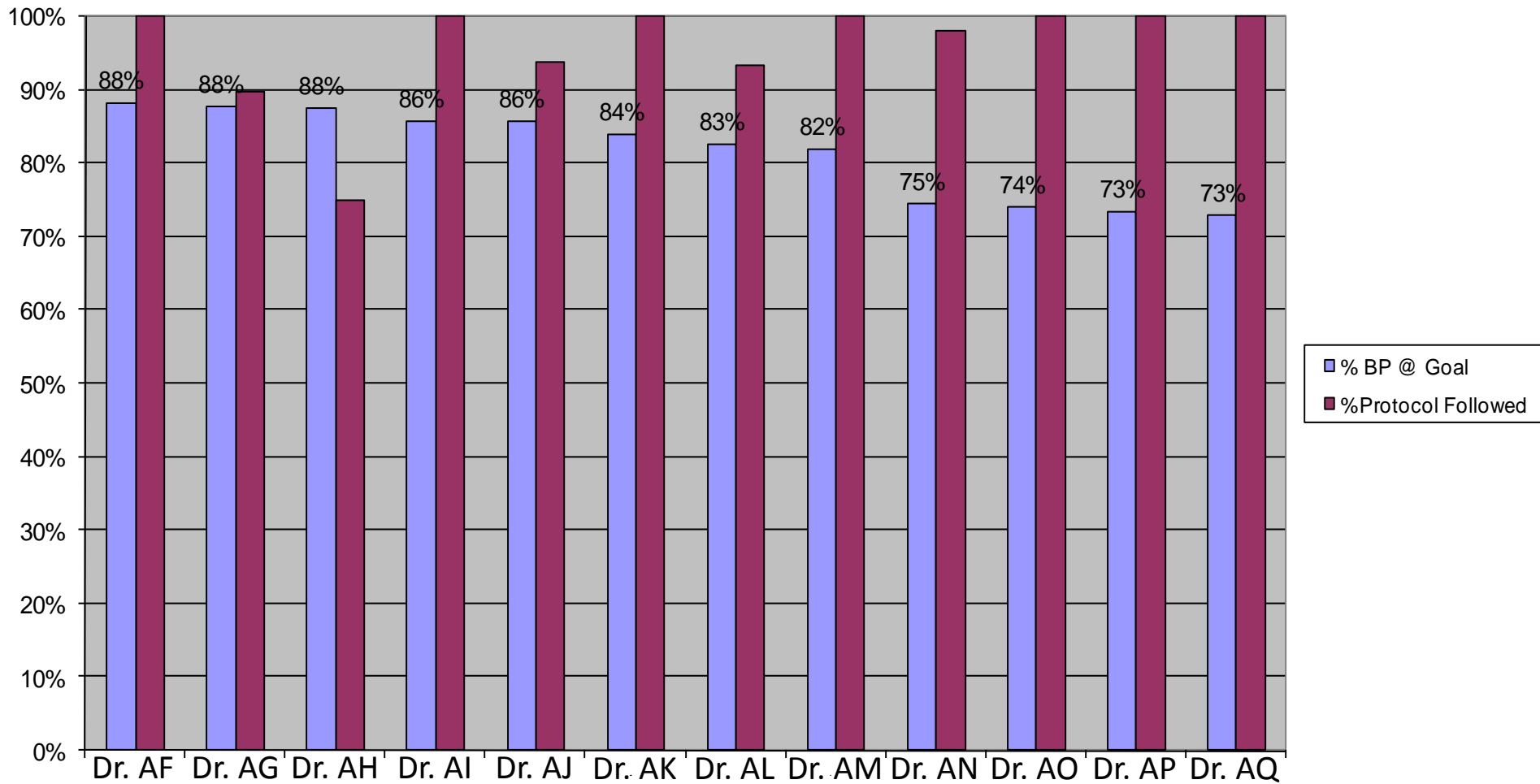
**% BP@Goal
PriMed
Quartile 3
September 2009**

Averages:
% BP@Goal = 90%
% Protocol Followed = 99%



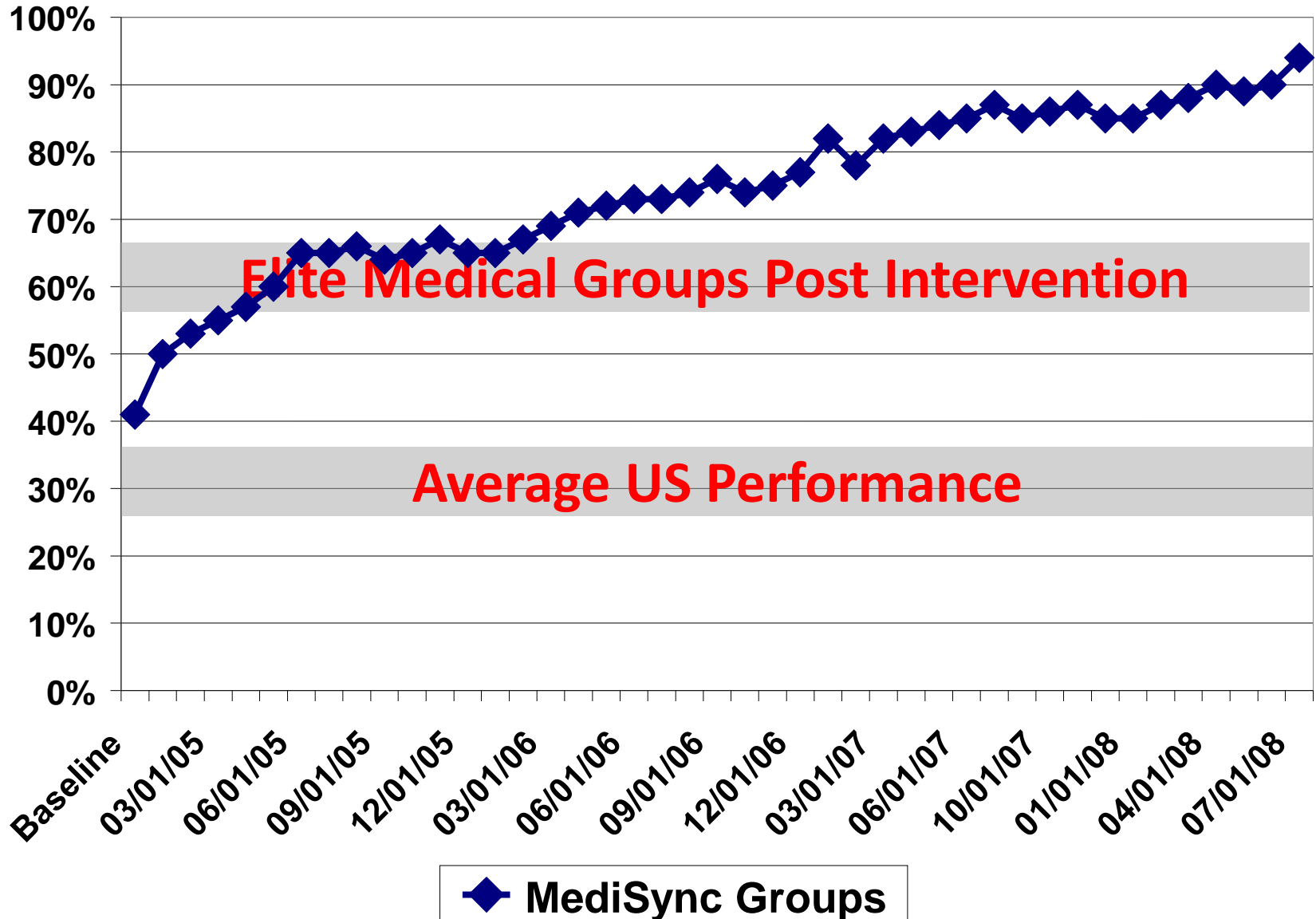
**% BP@Goal
PriMed
Quartile 4
September 2009**

Averages:
%BP@Goal = 82%
% Protocol Followed = 96%

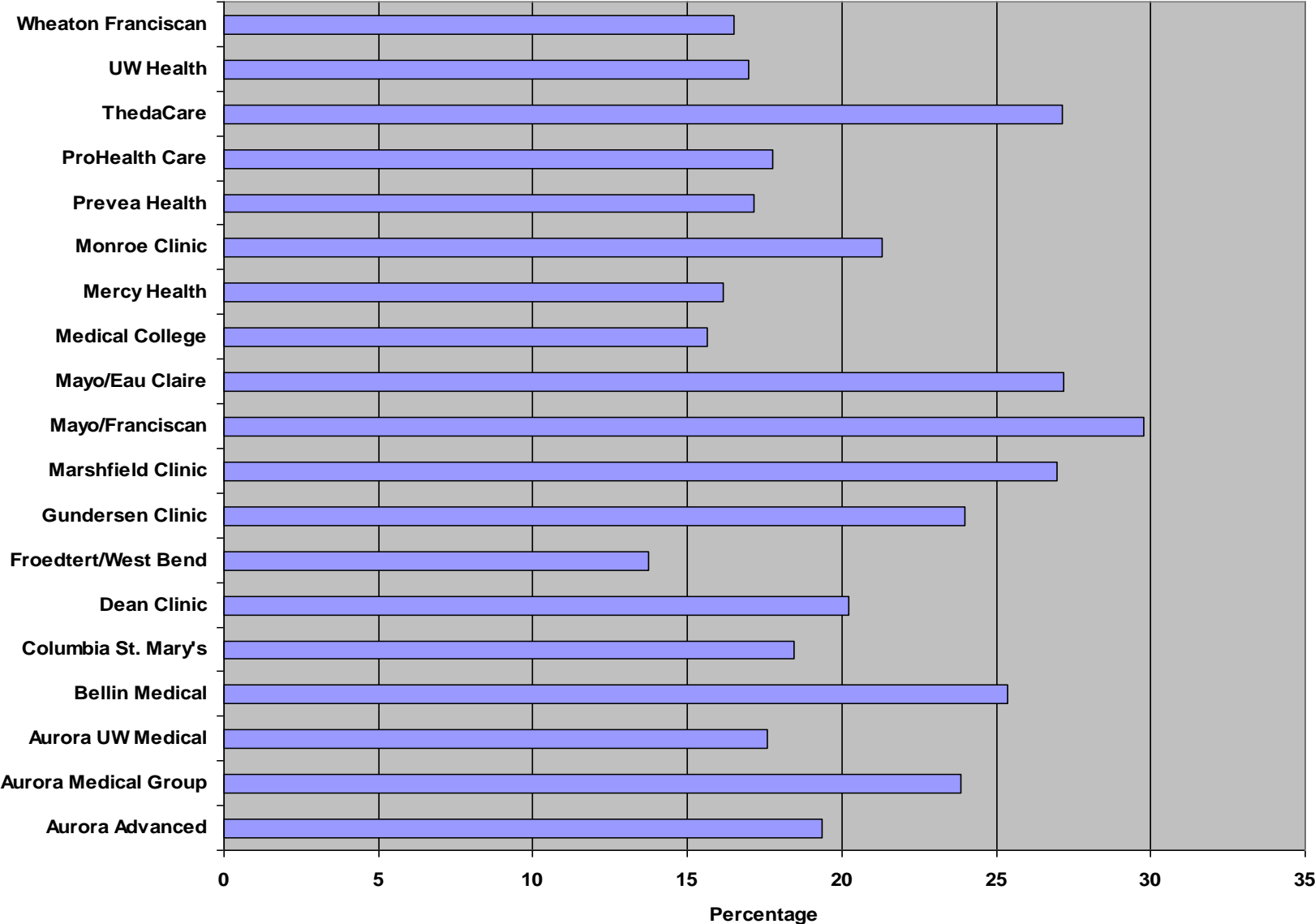


Percent of Patients Reaching JNC-7 BP Goal

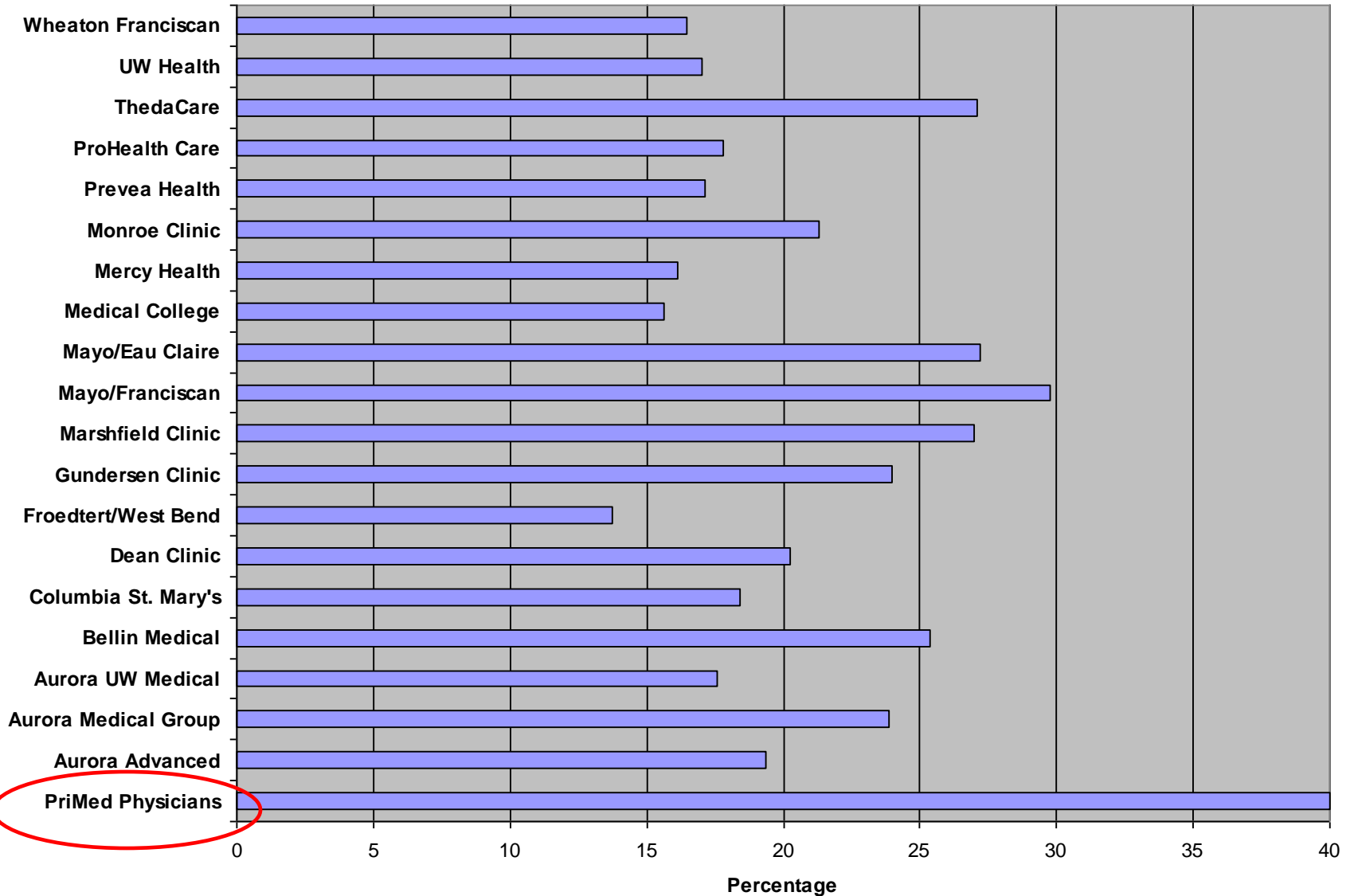
HTN Outcomes With or Without Co-Morbidities



2010 Diabetes Outcomes (Using Wisconsin Measures)



2010 Diabetes Outcomes (Using Wisconsin Measures)



What Makes PriMed Different?

- It is NOT that:
 - Dayton patients are more eager to make lifestyle change or adhere to Rx therapies
 - PriMed doctors are better educated



Six Sigma and Lean

- ***Better*** problem solving methods
- Emphasis on ***process for everyone***
- ***Statistics*** better than opinion
 - What is / is not working?



Agenda

1. The impetus behind volume to value
2. The critical importance of quality theory & practice
3. Planning as the foundation for successful change
 - Thorough understanding
 - Three phases, multiple sub-phases
 - A budget for every phase



Challenges

- Need meaningful informed consent
- Increase options
- Complete for all patients
- Successful outcomes
- Higher patient satisfaction
- Eliminate disparities
- Eliminate barriers
- Reduce costs
- Reduce errors
- Use only evidence-based practices
- Reduce duplication
- Coordinate care
- Engage patients
- Leverage community resources
- Use generics when appropriate
- Create a working system of care

Solutions

- Disease registries
- Prior authorization
- Chronic disease processes
- Care coordinators
- Team huddles

Team huddles

What Groups Need to Change (A Partial List)

1. Information systems (i.e. for population management)
2. Vastly improved chronic disease outcomes
3. Increased Wellness and Prevention outcomes
4. Case and care management
5. Alternative methods for providing care
6. More effective options for patient engagement
7. New payment models and other contractual changes
8. Internal quality improvement abilities

What We See Often:

- Very little planning
- Confusion about strategic vs tactical plans
- Every problem requires extra staff
 - Who is going to pay for that?
- Ineffective engagement of docs
 - Inadequate and/or poor physician leadership



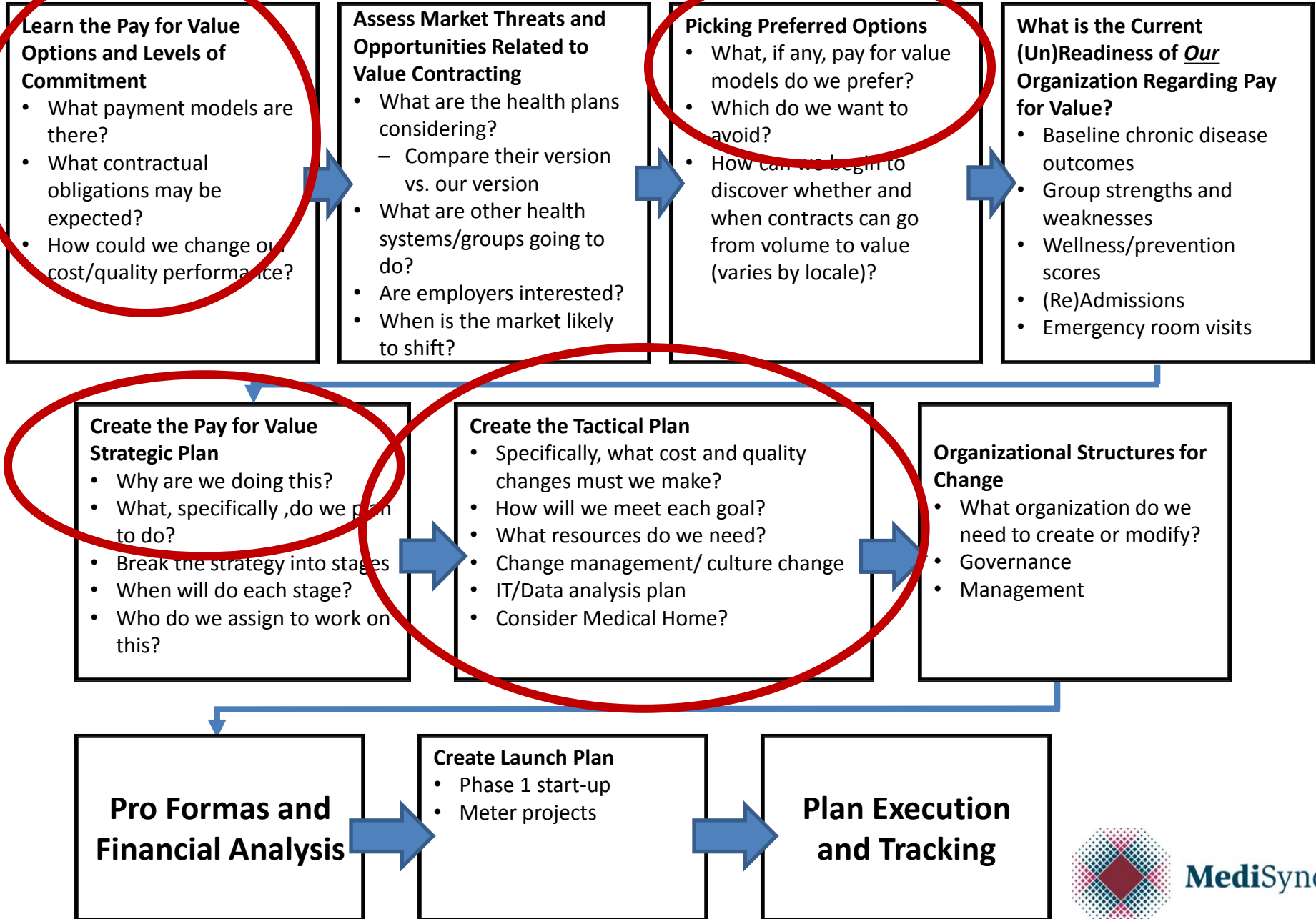
Hail Mary Passes

How to prepare for value based agreements:

1. Get data analytics and publish the results
 - Iffy docs will feel the competitive pressure to improve
 - Problem patients will be assigned to:
2. (Lots of) case/care managers



Volume → Value Road Map



Strategy vs. Tactics

Strategy

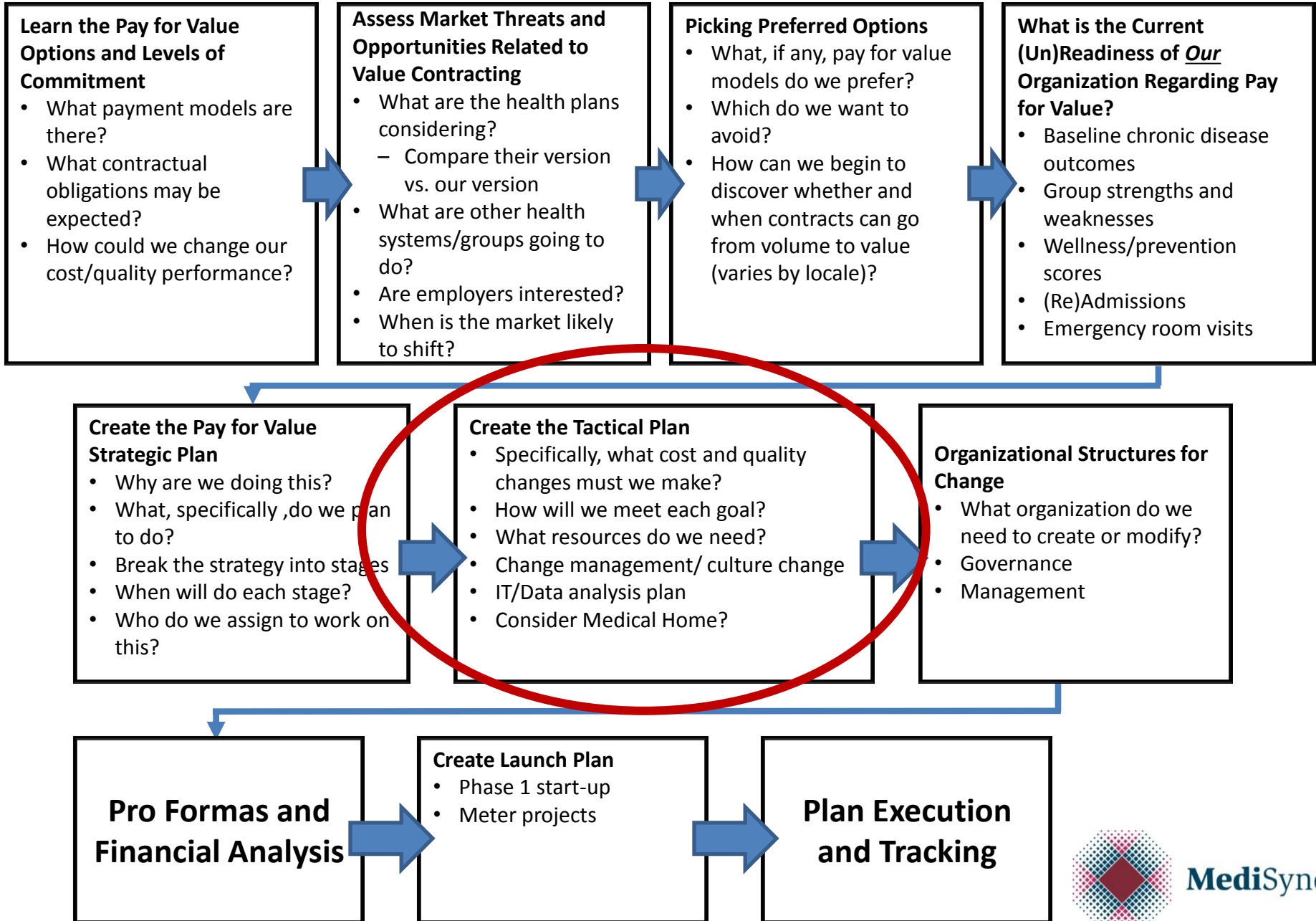
- What are the forces of change?
 - Which are for us?
 - Against us?
- What options are there?
- Which options can we pull off? Which not?
- Which give us the best shot at winning success?
- Where do we get the resources we need?

Tactics

- What is our specific plan to make our strategy happen?
- Who must work on what?
- In what order? When?
- How will all this fit together?
 - Timelines
 - End product
- How do we keep track of all this?



Volume → Value Road Map



Phases and sub-phases

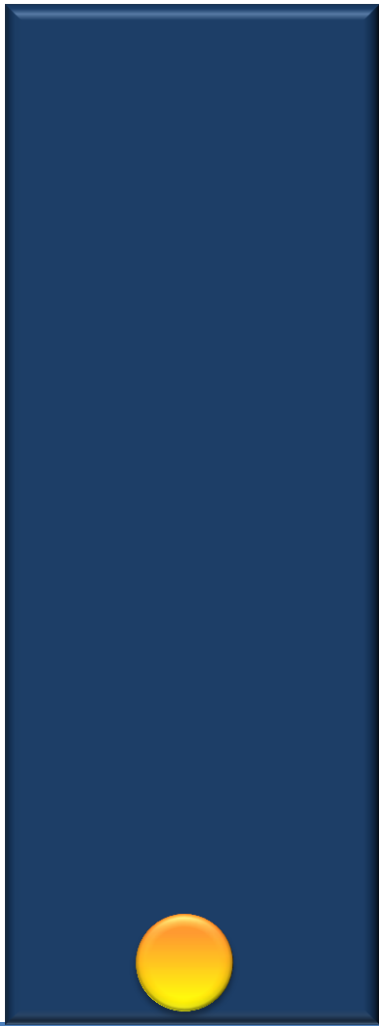


MediSync

High

Performance

Low



**Traditional
Medical Group
Operations**

**Volume → Value
Transition**

Pay for Value



High

Performance

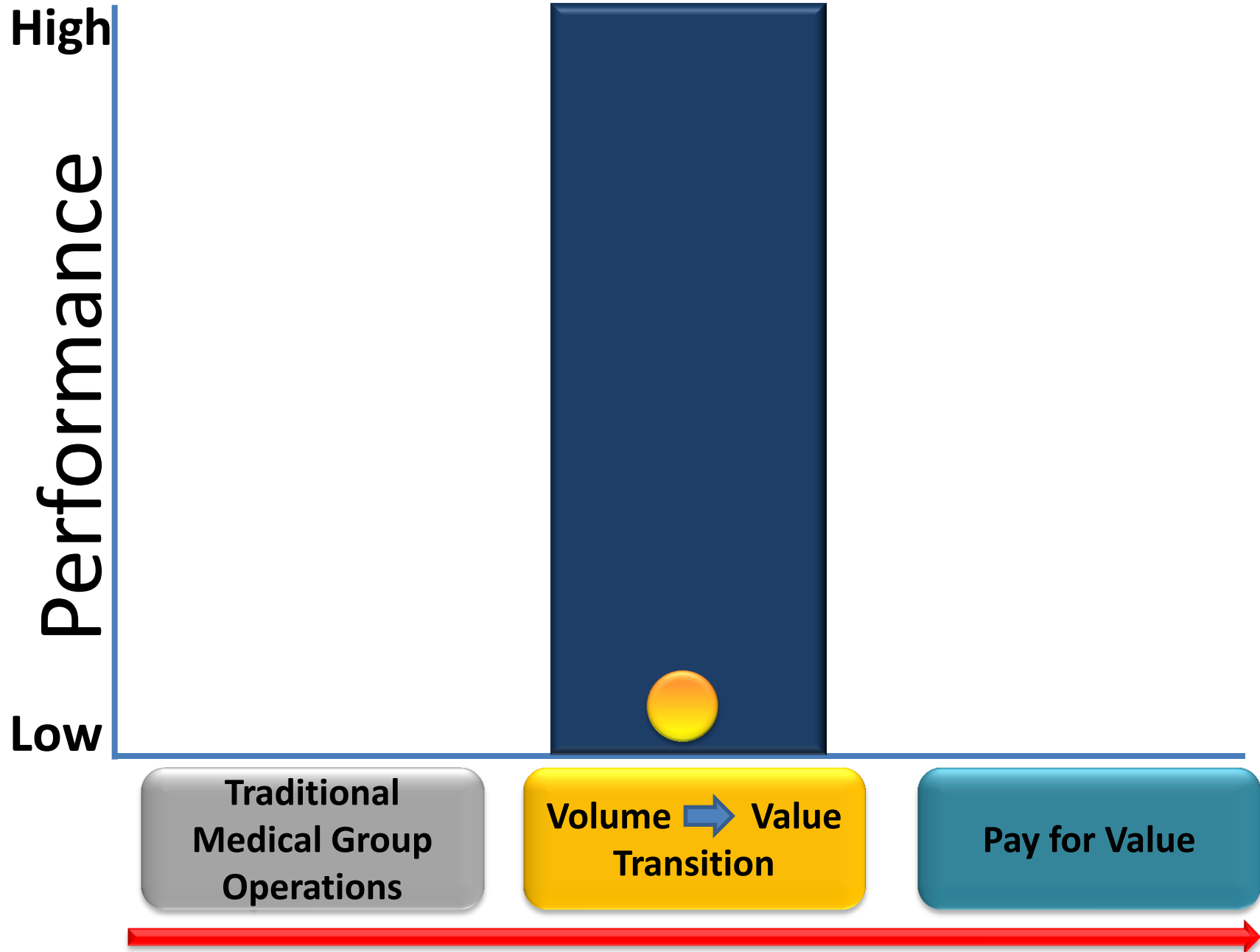
Low

Traditional
Medical Group
Operations

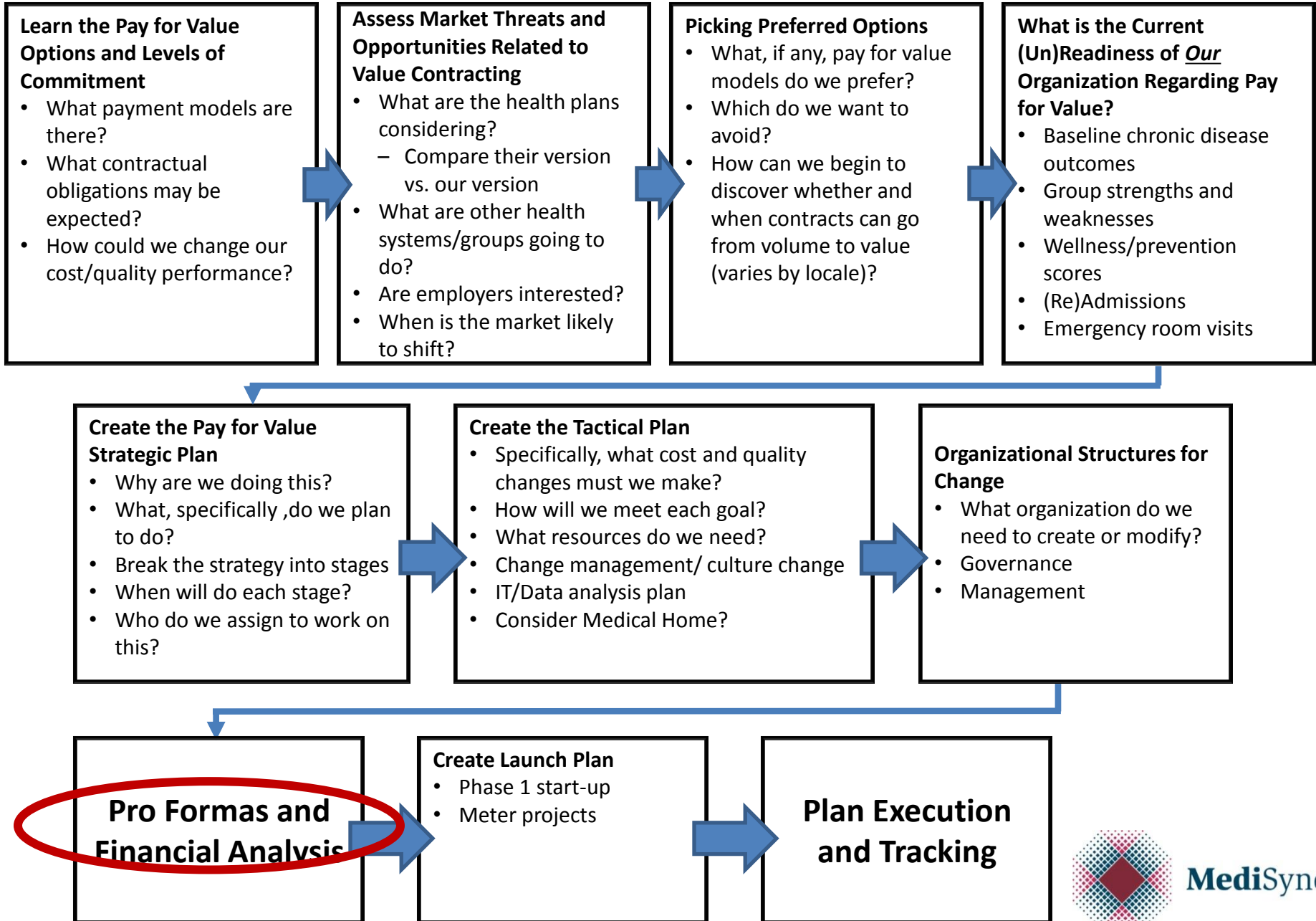
Volume → Value
Transition

Pay for Value





Volume → Value Road Map



Planning Conclusion

Planning & plan execution disciplines are *critical*



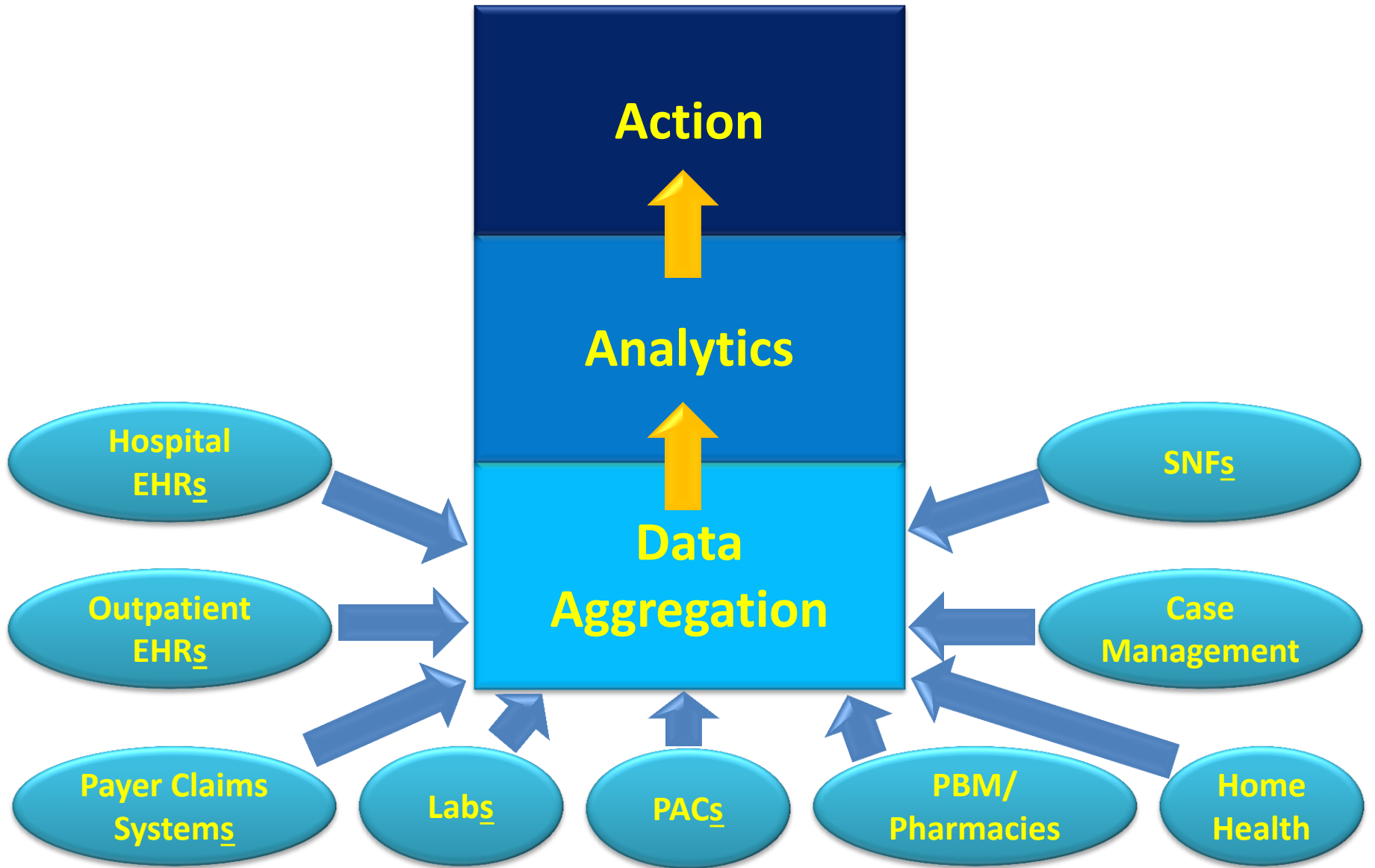
Agenda

1. The impetus behind volume to value
2. The critical importance of quality theory & practice
3. Planning as the foundation for successful change
 - Thorough understanding
 - Three phases, multiple sub-phases
 - A budget for every phase
4. Getting data and turning it into information

IT Analytics

- Obviously important
- Look at each patient, look at population
 - Who is sick (or well)?
 - What are problems?
 - Where is money going?
 - How to identify and address highest priorities
- Very important to select vendors carefully
 - Possible to spend lots and get little





Examples of Bad IT Aggregation/Analytic Solutions

1. Analytics that answer a few questions only (at high cost)
2. Cannot include all data (i.e. claims data)
3. Bad data aggregation
 - Patients misidentified 10+%
 - Bad data uncleansed
 - New data stored in bad formats
4. Data not truly searchable
5. Any of the above, analytics suffer



Features & Functions

- Private HIE capabilities?
- Ability to see individual patient and the population?
- Ability to configure presentation views?
- What method for cleaning up?
- New representation in relational database or in “new data” structures?
- What analytic power?



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5. Change management



Traditional Physician Culture

- I do it *my way*
- Team flexes around *me* and my way
- Clinical training based on *personal responsibility*, not process
- Ralph Waldo Emerson:
 - “Foolish consistency is the hobgoblin of little minds”



Medical Group Culture and Change Management

- Definitions:
 - Culture:
 - The way we **actually** do things in this organization
 - **Not** the way we **say** that we do them - the way that we **actually** do them
 - Change management
 - **Process** by which change is introduced and supported
 - Deals with both **intellectual** and, especially, the **emotional** sides of change



Denial

Ignorance

Anger

Confusion

Uncertainty

Surprise

Dislocation

Anxiety



Changing Group Culture

Tradition

vs.

Quality

- Key: doctor knowledge
 - Doctor judges what to do case-by-case
 - Improve → try harder
- Good process outperforms individual ability even if you are smart
 - Follow the process steps every time
 - Improve process → improve results



Developing Physician Leaders

- Leadership skill is *learned*, not genetically endowed
- Let the leadership *team* compensate for *individual* leader weaknesses
- Recognize the greatest *fear* of physician leaders:
 - “What will I/we do if they won’t follow?”

PriMed's Top Leadership Learnings

- OK if there is no one, highly gifted leader
- A team of leaders with various strengths works fine (maybe better)
- Learn leadership together
 - PriMed's leadership learning process
- Build the bench at all times
 - Informal leaders can be just as important

Change Management & Physician Leadership

Learnings from EHR implementation:

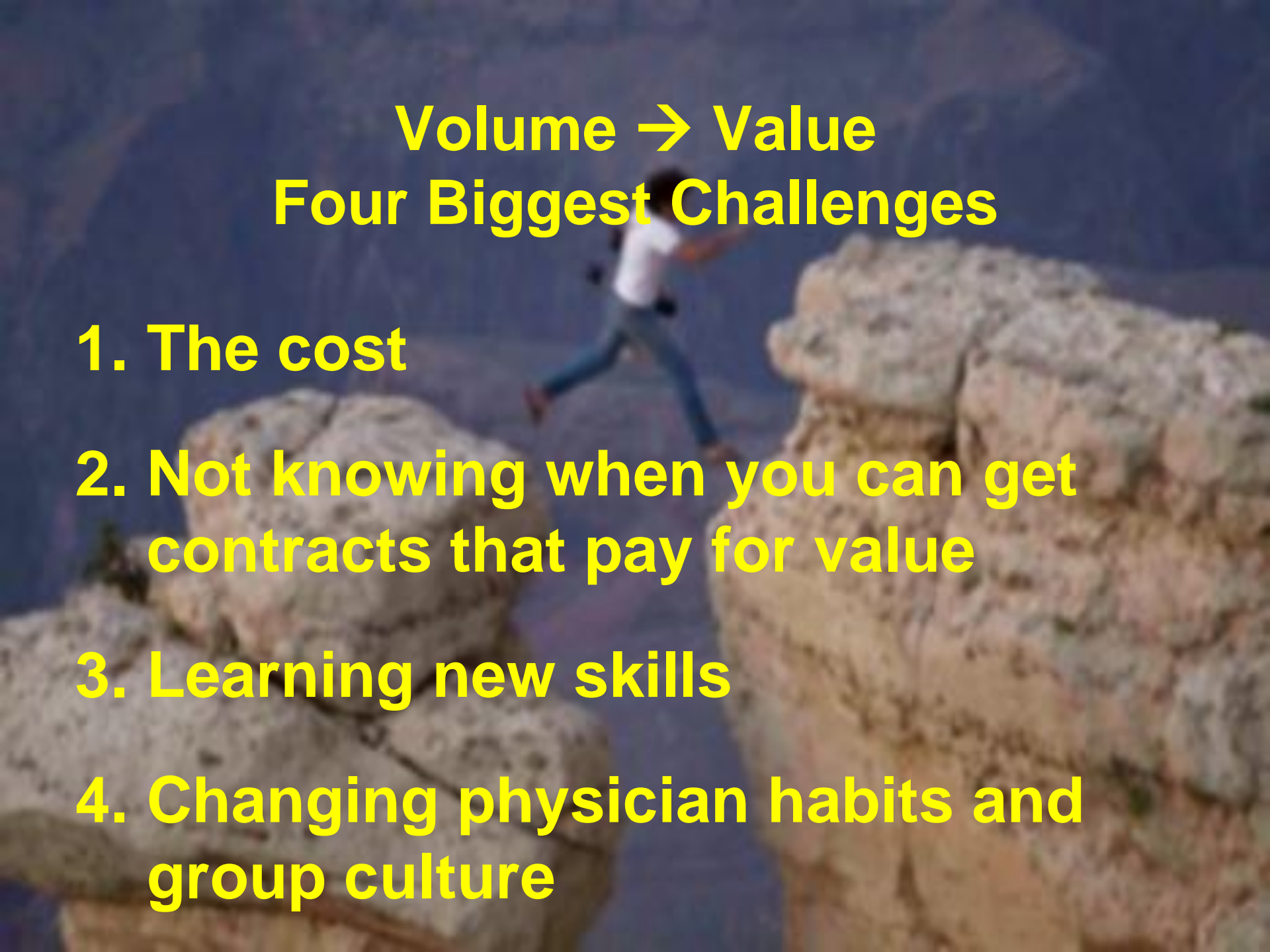
1. Doctor emotion is extremely important in change
 - You need to acknowledge and address doc's emotions
2. Lay out a detailed plan that works
 - AKA “processes”



What We Learned

- There cannot be enough communication
 - Copy the drug reps: 7 times, 7 ways
- Remember Kubler Ross:
 - Denial, Anger, Bargaining, Depression, Acceptance
- Predict the hard spots *and the emotions*
- Acknowledge the emotions
- New culture built out of new behaviors
 - If you don't change behavior, you don't change culture



A person in a white shirt and blue pants is captured mid-air, jumping between two large, light-colored rock formations. The background shows a vast, hazy landscape under a clear sky. The text is overlaid on the top half of the image.

Volume → Value

Four Biggest Challenges

1. The cost

2. Not knowing when you can get contracts that pay for value

3. Learning new skills

4. Changing physician habits and group culture

Volume To Value Summary

- **Current group infrastructure and attitudes shaped by fees**
- **Changing to value requires:**
 - **New infrastructures**
 - **New skills and competencies**
 - **A ton of change (over a long time)**

Questions & Discussion

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