

# Infrastructure for Quality Improvement

Gene Lindsey, MD

President and CEO

Atrius Health and Harvard Vanguard Medical Associates

ACO Summit



# Atrius Health

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- 100% on EMR combined with corporate data warehouse, used for managing quality and cost. Patient portal.
- Long history with global payments, currently managing 50% of our patients with global payments across commercial, Medicare and Medicaid populations.
- Strong infrastructure to manage risk
- One of first to sign BCBSMA Alternative Quality Contract (AQC)
- One of 32 Medicare Pioneer ACOs nationally



# The concept of an Accountable Care Organization is not new

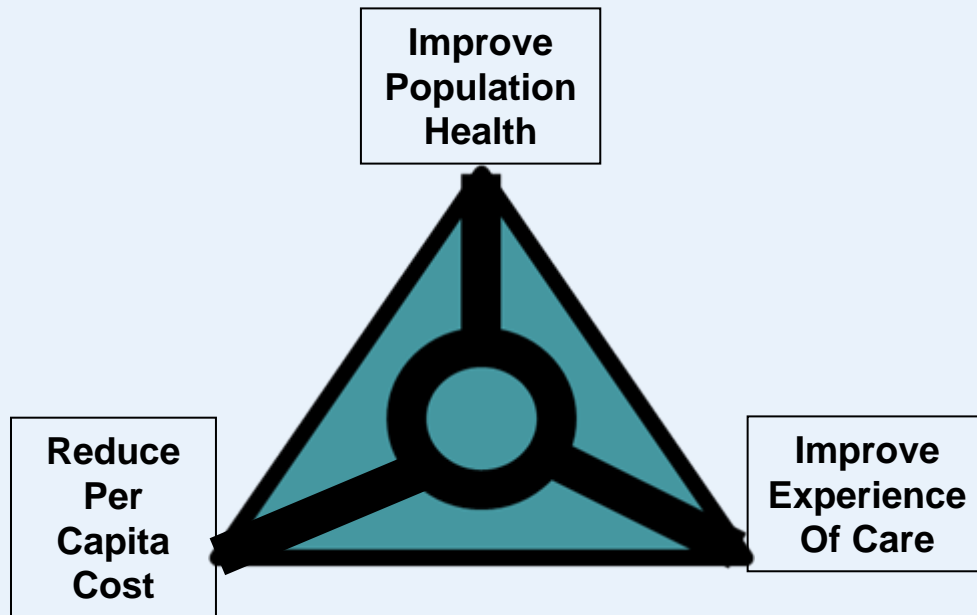
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“The existing deficiencies in health care cannot be corrected simply by supplying more personnel, more facilities and more money. These problems can only be solved by organizing the personnel, facilities and financing into a conceptual framework and operating system that will provide optimally for the health needs of the population.”

Dr. Robert Ebert, Founder,  
Harvard Community Health Plan, 1967

# Our Focus is on Achieving Quality

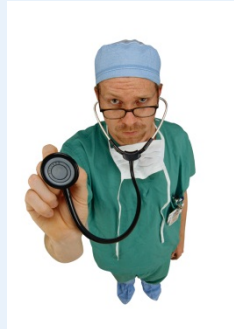
## The Triple Aim



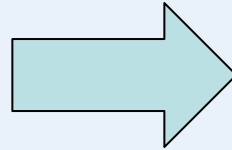
## IOM Definition

- Patient-centered
- Safe
- Effective
- Efficient
- Equitable
- Timely
  
- And sustainable

# Our Challenge is to Move



**From  
Physician-  
centered  
system**



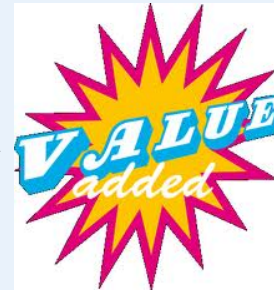
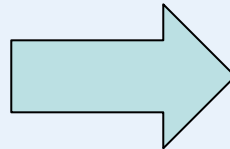
**To**



**Patient  
Centered  
system**



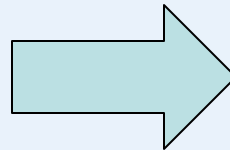
**Volume-based  
reimbursement**



**Value-based  
reimbursement**



**Price  
focus**



TYPE OF SERVICE	TOTAL BILLED
Medical Visit	
Testing / X-ray / Lab	
Surgery	
<b>TOTAL THIS CLAIM</b>	

**Total  
Medical  
Expense**

# Atrius Health ACO Strategies

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- Foster culture of quality and service to patient
- Strengthen our distributed physician leadership at all levels in the organization
- Continue our LEAN journey to improve quality, patient safety, patient experience, and reduce costs
- Implement & spread Patient Centered Medical Home, including management of high risk populations
- Create compact with staff at every level to clarify roles at top of license
- Strengthen collaboration across specialists, hospitals, and post-acute care to be successful Accountable Care Organization without hospital ownership

# Two Kinds of Change:

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## Technical

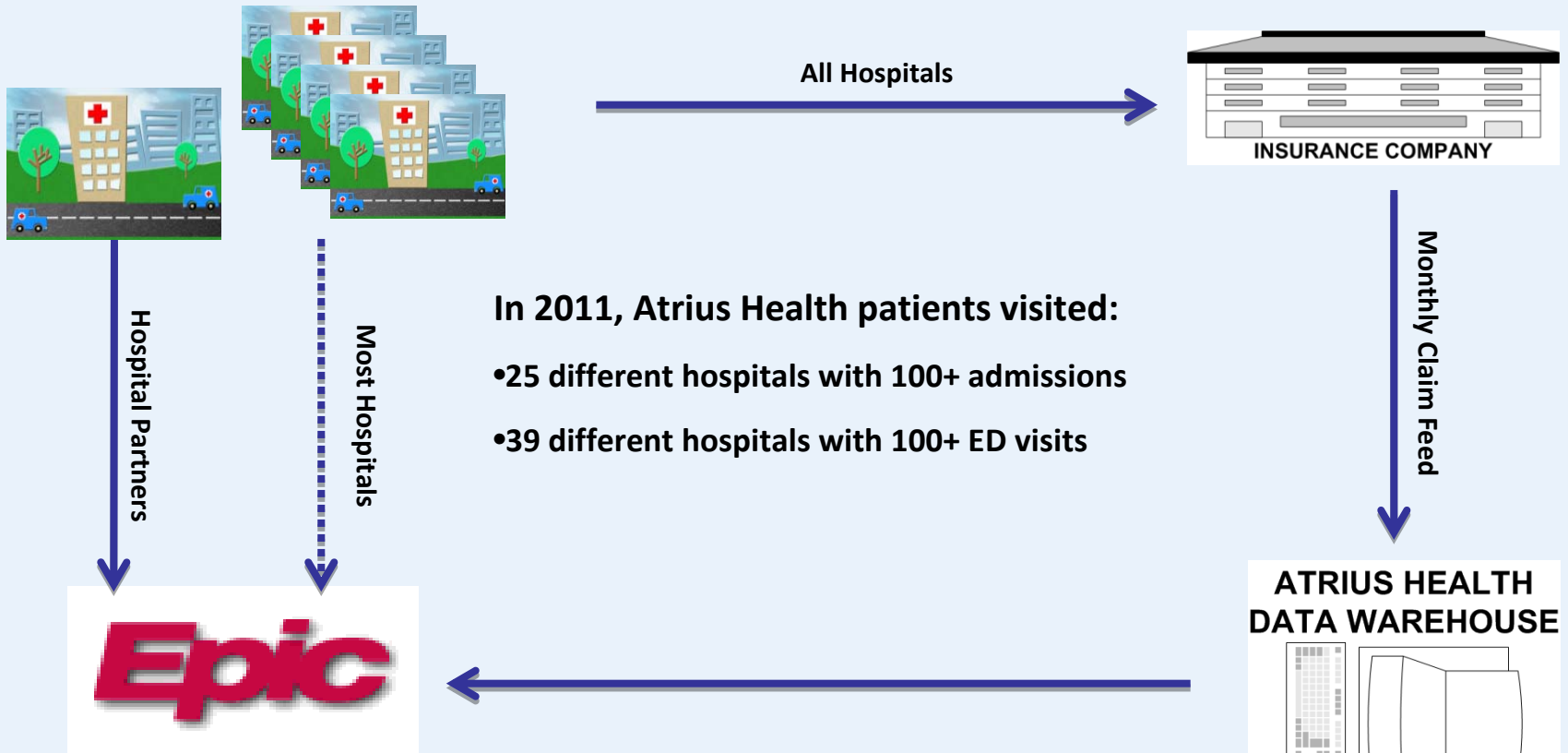
- Problem is well-defined
- Solution is known, can be found
- Implementation is clear

## Adaptive

- Challenge is complex
- To solve requires transforming long-standing habits and deeply held assumptions and values
- Involves feelings of loss, sacrifice (sometimes betrayal to values)
- Solutions requires learning and a new way of thinking, new relationships



# Atrius Health: Challenge of Hospital and ED Information

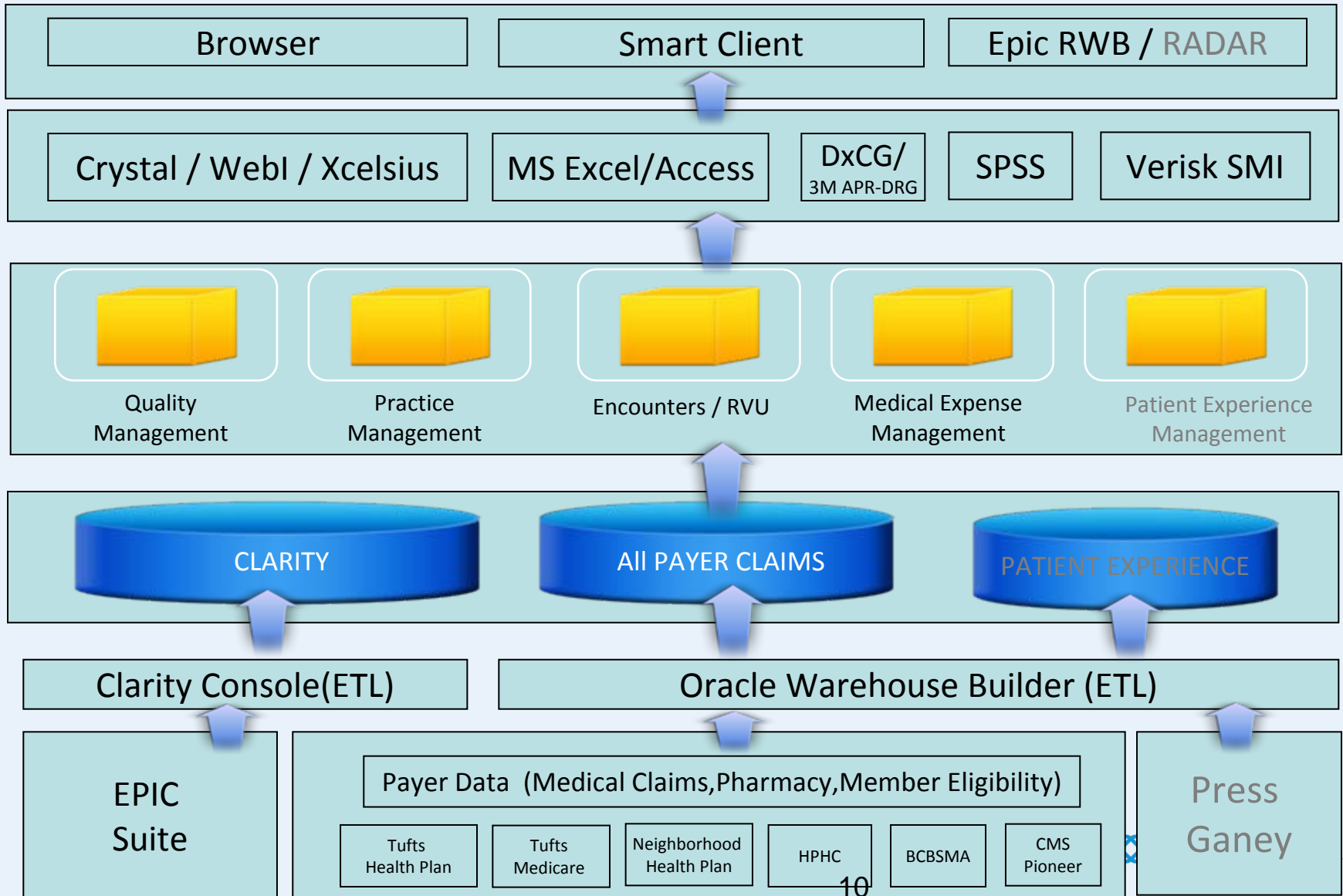


**In 2011, Atrius Health patients visited:**

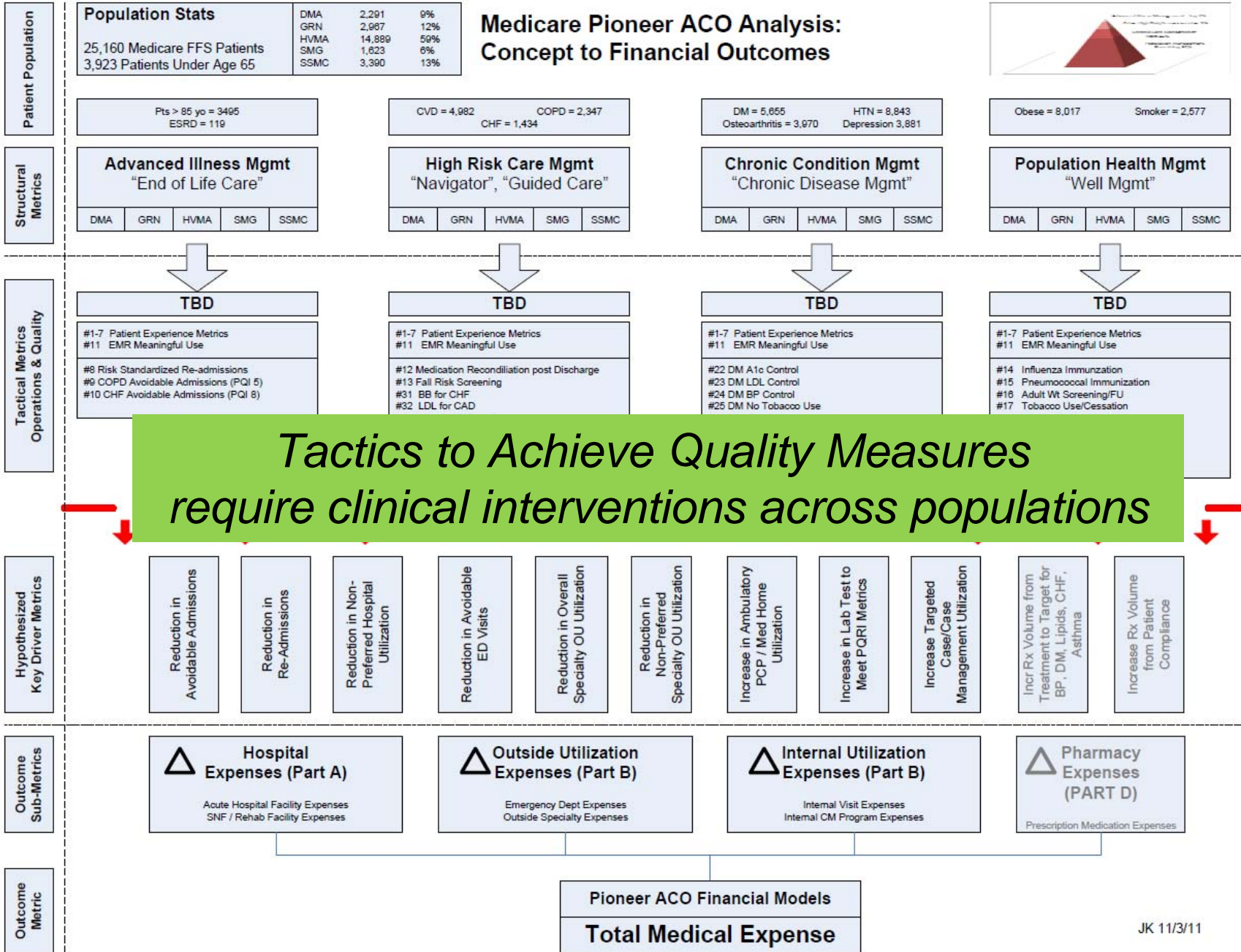
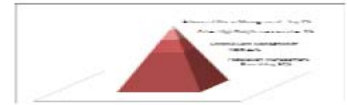
- 25 different hospitals with 100+ admissions
- 39 different hospitals with 100+ ED visits

Encounters						
Labs Meds Imaging Procedures EKG Other Orders Referrals Episodes Letters Misc Reports Notes/Trans Snapshot						
10 records match filters, all records loaded						Clear All
<input checked="" type="checkbox"/> Hide Add'l Visits						
Filtered: Hide Add'l Visits						
A	Q	Date	Type	Department	Provider	Description
		02/13/2012	Hospital	FAUCASEM	Lopez, Richard, MD	Asthma With Acute Exacerbat...
		08/11/2011	Office Visit	BIDMCIM	Lee, Marianne Pharmd	

# Robust Data Management Infrastructure is critical



# Medicare Pioneer ACO Analysis: Concept to Financial Outcomes



# Lean Methodology provides Focus on Adding Value and Use of Common Approach

## The A3 Problem Solving Method

A3		DESCRIPTION:	VALUE STREAM:	SITE/LOCATION:	EVENT NUMBER:	REVISION:	PICTURE																																					
		SPONSOR:	PROCESS OWNER:	FACILITATOR:	SENSEI:																																							
Event Date:	Team Leader:	<b>1 Reason for Action</b> Describe in a few sentences the business challenge or problem that needs to be solved. You may also take a proactive approach and identify a future opportunity. How does this affect our patients? Why is this important to do now? What are the benefits?  Include the following: <b>In Scope:</b> What are the boundaries for this A3? Are you focused on a department or population? <b>Out of Scope:</b> State what areas you will not focus on. <b>Trigger:</b> What starts the process being addressed? <b>Done:</b> What is the final step of the process?		<b>4 Gap Analysis</b> This is where your team brainstorms on all the root causes, gaps or barriers that prevent you from moving from the Initial State to the Target State. The Fishbone tool is often used here. Group the ideas from your brainstorm exercise into common categories which are the "bones" of the fish (e.g., the "Man", "Method", "Machine", "Materials" bones shown on the right). Determine which bones would have the greatest impact towards achieving the Target State, and then focus on those in Boxes 5 and 6. <div style="text-align: center;"> </div>		<b>7 Completion Plan</b> What activities were you not able to complete from your Rapid Experiments? Who is responsible for ensuring those are done to achieve your Target State? Aim for completing action items within 30 days of starting the A3 to maintain momentum and ensure success. <table border="1"> <thead> <tr> <th>WHAT</th> <th>WHO</th> <th>WHEN</th> <th>STATUS</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				WHAT	WHO	WHEN	STATUS																															
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Team Members:	<b>2 Initial State</b> Explain what is happening now using data, the voice of the customer or environment and other insights that support your Reason for Action. Offer data to represent relevant "True North Metrics": People (P), Quality and Safety (Q&S), Service (S), Cost (C), and Growth (G). <i>Tip: Have the team draw a picture on a flip chart of how the current state looks or feels to them and to the customer. This is a creative way to depict the Initial State and should be inserted into Box 2.</i>		<b>5 Solution Approach</b> Identify the solutions that could close the gaps or remove the barriers identified in Box 4 using the structure "If we did this... THEN we would expect these results or achieve this..." Record your hypotheses of potential solutions, 5 to 10 if possible, in the 2-column format. <table border="1"> <thead> <tr> <th>IF WE DID THIS...</th> <th>THEN WE EXPECT THESE RESULTS...</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		IF WE DID THIS...	THEN WE EXPECT THESE RESULTS...													<b>8 Confirmed State</b> Using the same True North Metrics in the Target State (Box 3), track the progress against those metrics. When Box 8 = Box 3, congratulations! You have reached your Target State and your A3 can be closed. <table border="1"> <thead> <tr> <th>METRIC</th> <th>INITIAL STATUS</th> <th>TARGET STATE</th> <th>CONFIRMED STATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				METRIC	INITIAL STATUS	TARGET STATE	CONFIRMED STATE																		
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METRIC	INITIAL STATUS	TARGET STATE	CONFIRMED STATE																																									
1	<b>3 Target State</b> What can be achieved once improvements have been made? What does "good" look like through the eyes of the customer? Use the same True North metrics from Box 2 here, but show what your target goal is for each one. <i>Tip: Have the team draw a picture on a flip chart of how the target state looks or feels to them and to the customer, and insert this picture into Box 3.</i>		<b>6 Rapid Experiments</b> Identify rapid experiments you can do in the next week to test your IF/THEN statements. Go and do the experiments, and refine those as needed if new information is discovered. To list out the steps and to create a training tool for those who will be doing the work, use the "Standard Work template" on SharePoint. <table border="1"> <thead> <tr> <th>PLAN</th> <th>EXPECTED RESULTS</th> <th>ACTUAL RESULTS</th> <th>FOLLOW UP</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		PLAN	EXPECTED RESULTS	ACTUAL RESULTS	FOLLOW UP																									<b>9 Insights</b> As you work through completing the A3, frequently ask the four questions below and document the lessons learned, both positive and negative, in regard to the A3 problem solving method and the experiments you conducted. <table border="1"> <tr> <td>WHAT WENT WELL?</td> <td>WHAT COULD BE IMPROVED?</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td>WHAT HELPED?</td> <td>WHAT HINDERED?</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>				WHAT WENT WELL?	WHAT COULD BE IMPROVED?			WHAT HELPED?	WHAT HINDERED?		
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# Sustainable Primary Care Practice: The Patient-Centered Medical Home

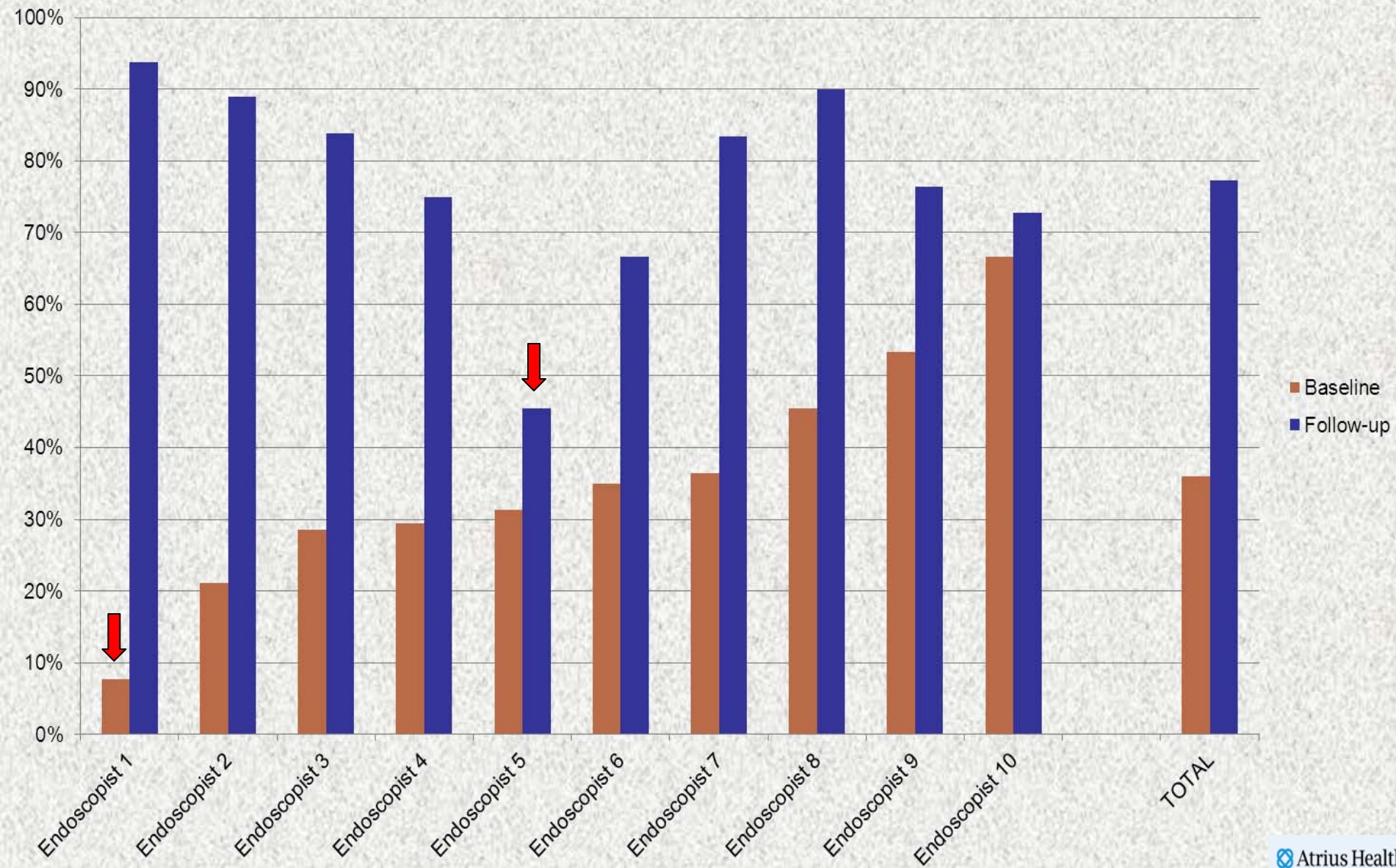
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The 'Medical Home' is not a place, but rather an approach to providing comprehensive, patient-centered primary health care. The Primary Care Physician (PCP) works in partnership with the patient and family to assure that his/her medical and health-related needs are met through accessible, coordinated, culturally-sensitive care delivered on a continuous basis and across all disciplines, settings and services in order to achieve optimum health outcomes and quality of life.

*The Medical Home. Pediatrics. 2002; 110; 184-186.*



## Guideline concordance (%): Recommended interval for repeat screening colonoscopy



# Adaptive Change: We will challenge “Simple rules”

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“I am accountable”

“We are accountable”



From Accountable Care Organizations, Marc Bard and Mike Nugent, 2011

# Problems must be solved by those who do the work





# Leadership-Physician Compact

## Our Mission

We care for patients compassionately and effectively, with the highest medical and ethical standards. We build a better future for our communities through teaching, leadership in health care innovation, and philanthropy.

## Our Shared Destination

As a group practice that delivers care through a team model, we strive to lead the nation in patient safety, quality of care, value and affordability... where all staff want to work and patients want to receive care for themselves and their families.

## Our Compact

We, the physicians and leadership of Harvard Vanguard, acknowledge that in order to achieve this shared destination and to respond to the changing healthcare environment, we need to work together with clear expectations of each other. Therefore we agree to fulfill the responsibilities in our compact and to hold ourselves accountable to live them daily.

## RESPONSIBILITIES

### Formal Leaders

Communicate effectively and openly; be visible, accessible and responsive to physicians.

Develop, document and use best practices in our work.

Set clear priorities and focus on them. Provide clear information that helps others make progress on the key priorities.

Optimize decision-making by soliciting physician input, utilizing shared decision-making whenever possible and manifesting transparency.

Provide infrastructure and support for work-life balance and career development.

### Shared

Provide/support excellent patient-centered care.

Foster trust and be trustworthy.

Treat everyone with respect.

Be responsible financial stewards of our group's resources.

Contribute to a professional, fair, high quality and productive work environment.

### Harvard Vanguard Physicians

Communicate effectively and openly; be visible, accessible and responsive to clinical and non-clinical colleagues.

Acknowledge our interdependence and collaborate to realize the power of our multispecialty group practice.

Develop and accept Harvard Vanguard standards for best practices in clinical care, and apply them to benefit our patients and mission.

Be informed and engaged citizens of Our practice, clinically and financially, Strategically and locally.

Demonstrate leadership of the clinical team and be a role model in the practice.

# Outstanding Clinician and Staff Experience

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- Respect as a basic principle
- Communication – weekly email from CEO
- Involve the front line in Lean
- Site Councils
- Leadership Academy
- Chief development
- Atrius Standard Model for Epic
- Governance structure
- Go to the Gemba



# ‘Federalist’ Model

***“In democratic countries, knowledge of how to combine is the mother of all other forms of knowledge; on its progress depends that of all the others.”***

Alexis de Tocqueville  
Democracy in America

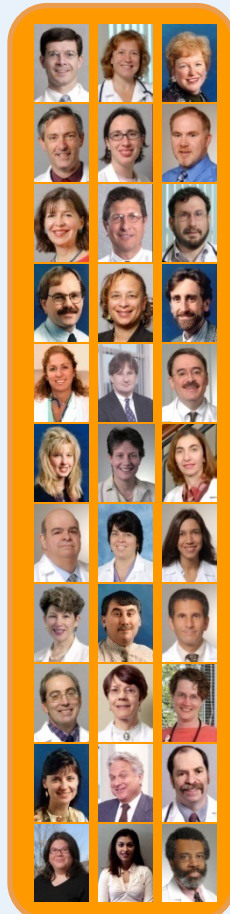


**Out of Many, One**

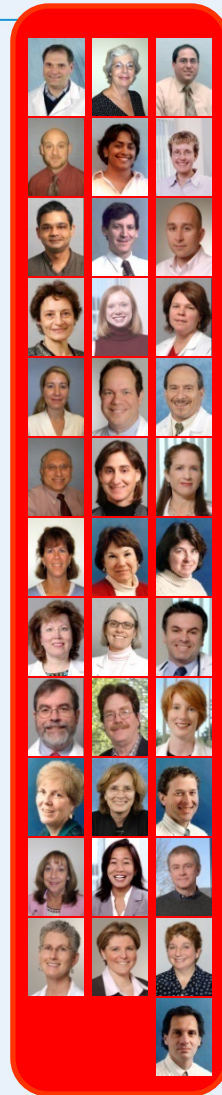




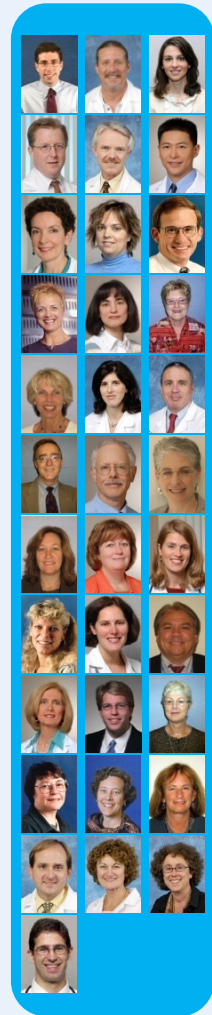
Leadership Academy  
January 2008  
(19 participants)



Leadership Academy  
September 2008  
(33 participants)



Leadership Academy II  
January 2009  
(37 participants)



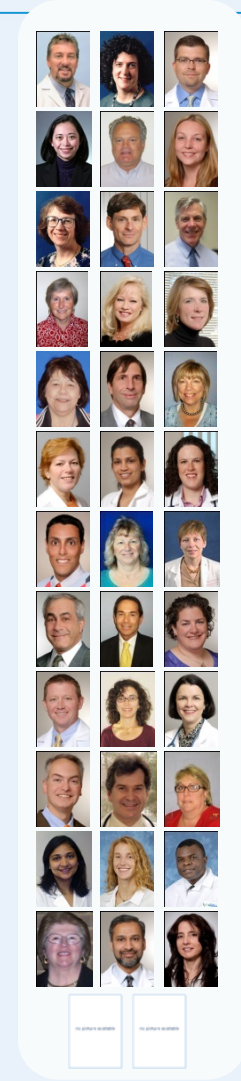
Leadership Academy III  
October 2009  
(35 participants)



Leadership Academy IV  
January 2010  
(45 participants)



Leadership Academy V  
September 2010  
(37 participants)



Leadership Academy VI  
January 2011  
(38 participants)

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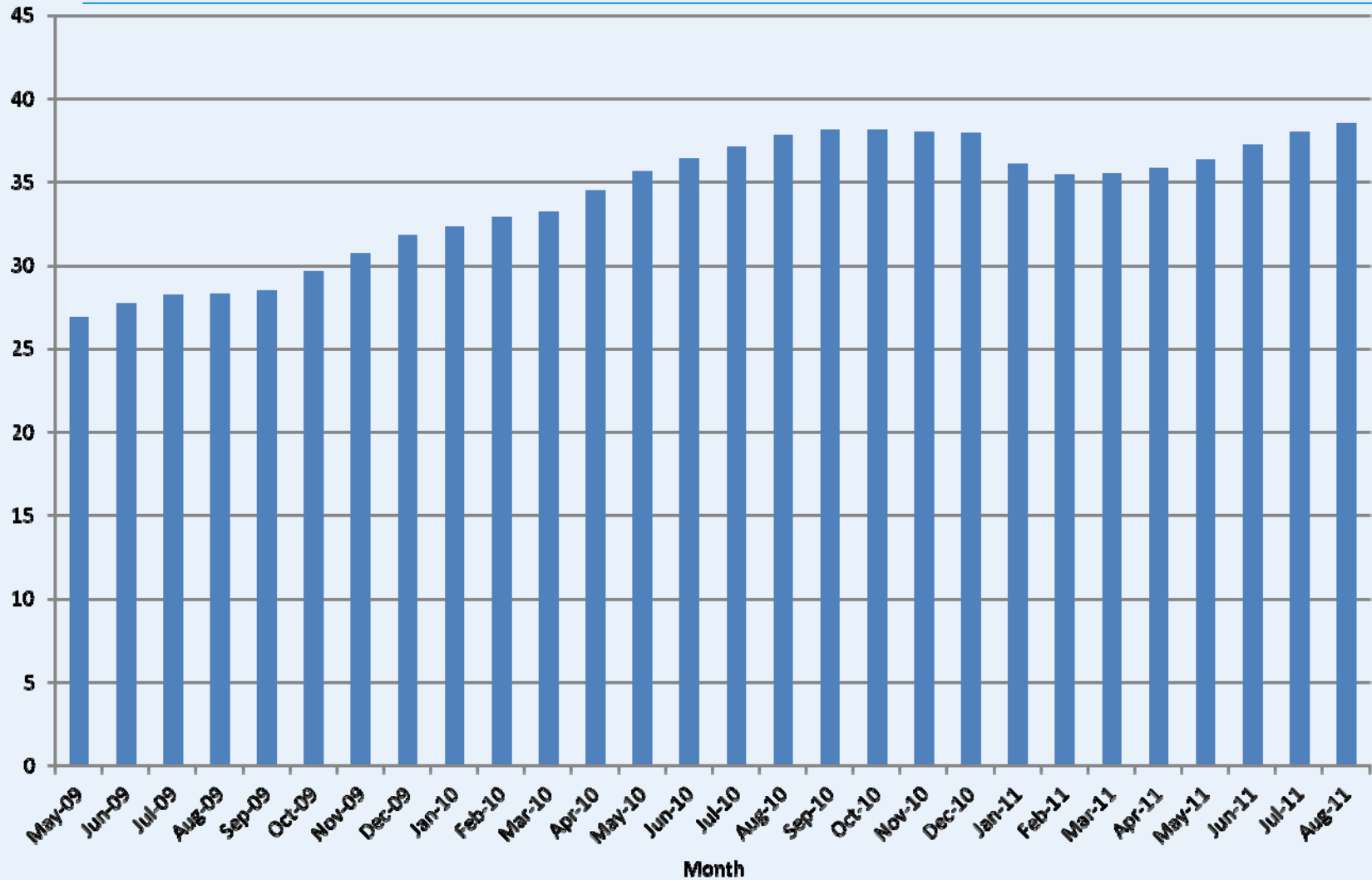


# Evolution of Physician Compensation

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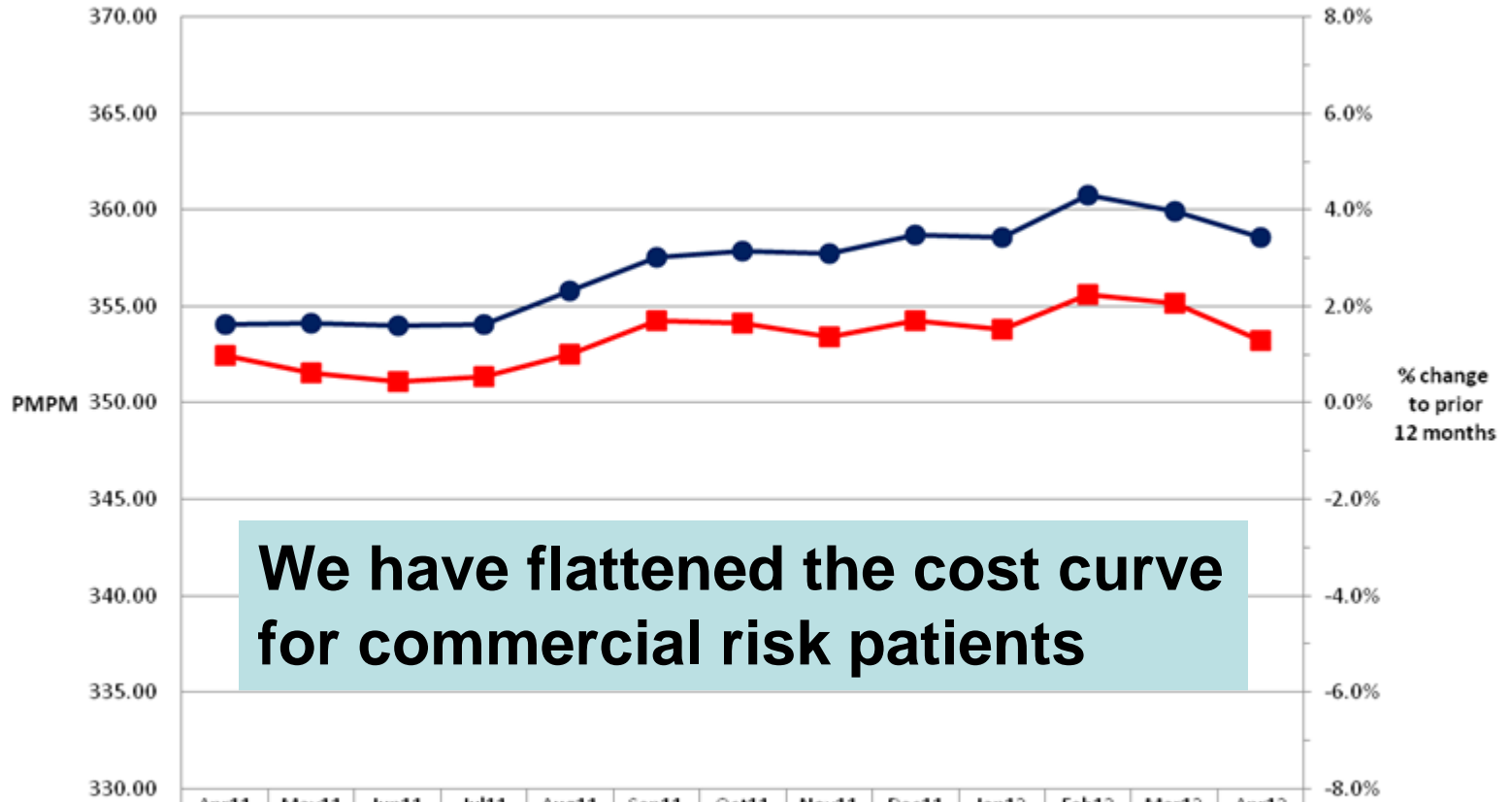
<p><b>The Value Model:</b></p> <p>Group paid mostly for Value, Physicians paid mostly for Value (or salaried)</p>	<p><b>The Charitable Model:</b></p> <p>Group paid mostly for Volume, Physicians paid mostly for Value (or salaried)</p>
<p><b>The Funky Model:</b></p> <p>Group paid mostly for Value, Physicians paid mostly for Volume</p>	<p><b>The Volume Model:</b></p> <p>Group paid mostly for Volume, Physicians paid mostly for Volume</p>

# Outstanding Quality Measurement



DM Composite Outcomes: LDL control, HbA1c Control, BP control

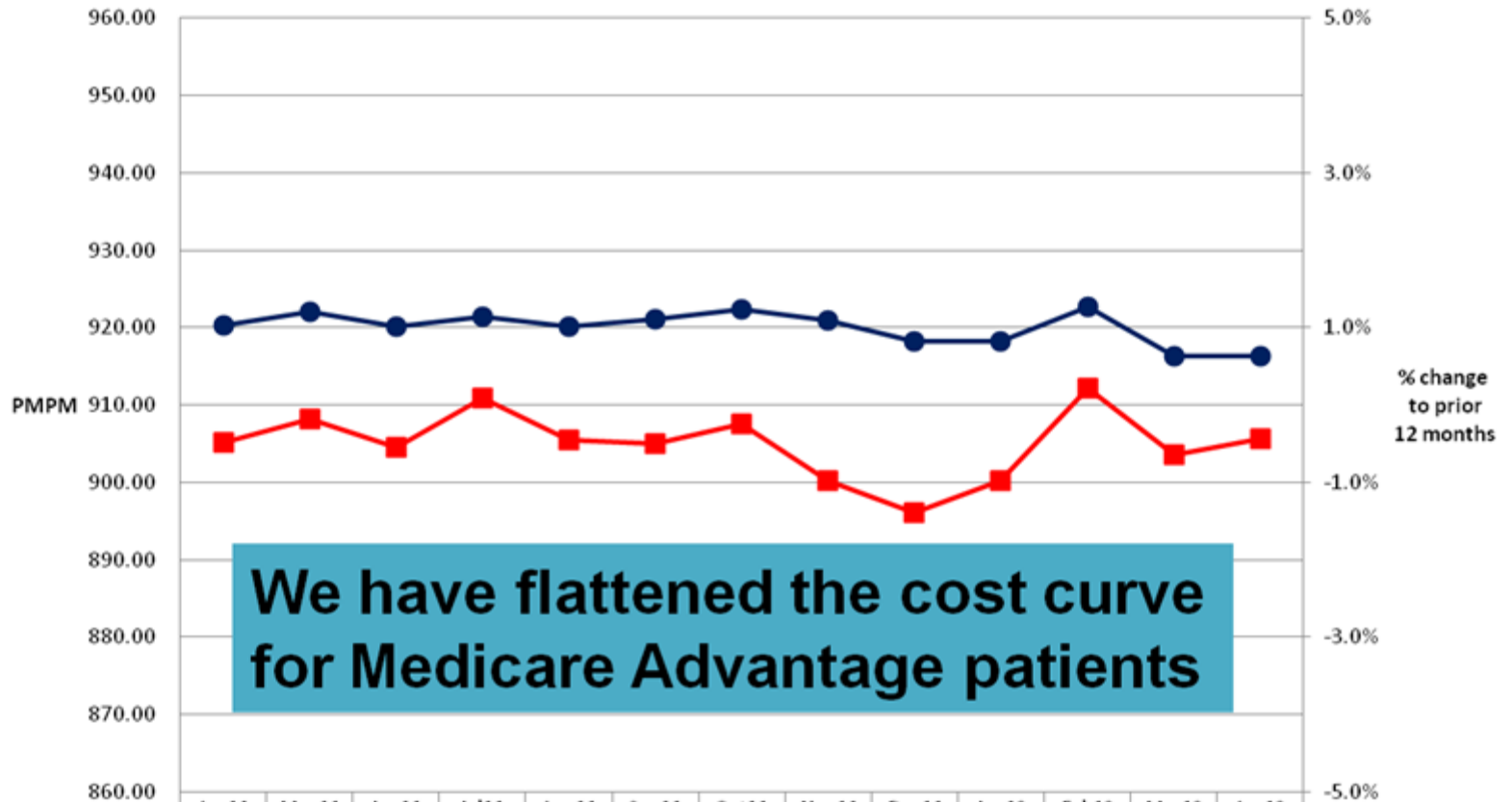
## Fully Loaded Total Medical Expense Rolling 12 Month PMPM Commercial Risk Patients Harvard Vanguard Medical Associates



**We have flattened the cost curve  
for commercial risk patients**

	Apr11	May11	Jun11	Jul11	Aug11	Sep11	Oct11	Nov11	Dec11	Jan12	Feb12	Mar12	Apr12
<b>Hospital</b>	67.12	66.99	67.35	67.93	68.59	69.10	69.13	69.11	68.99	68.73	69.63	69.68	68.56
<b>Outside Utilization</b>	128.93	128.94	128.40	127.51	128.22	129.15	128.98	128.35	128.42	128.64	129.87	129.03	128.65
<b>Pharmacy</b>	46.37	46.23	45.95	45.93	45.97	45.89	45.98	46.10	46.72	46.65	46.69	46.69	46.86
<b>Operating Cost</b>	111.62	111.96	112.31	112.67	113.03	113.40	113.77	114.16	114.55	114.54	114.54	114.54	114.53
<b>● TME pmpm</b>	354.04	354.12	354.00	354.04	355.82	357.55	357.86	357.72	358.68	358.56	360.73	359.93	358.60
<b>■ TREND %</b>	1.0%	0.6%	0.4%	0.5%	1.0%	1.7%	1.6%	1.4%	1.7%	1.5%	2.2%	2.1%	1.3%

## Fully Loaded Total Medical Expense Rolling 12 Month PMPM Medicare Risk Patients Harvard Vanguard Medical Associates



	Apr11	May11	Jun11	Jul11	Aug11	Sep11	Oct11	Nov11	Dec11	Jan12	Feb12	Mar12	Apr12
<b>Hospital</b>	326.07	325.90	324.25	326.17	323.64	322.81	323.25	321.65	319.58	319.02	320.10	316.34	315.65
<b>Outside Utilization</b>	287.95	288.59	287.65	286.03	286.31	287.15	287.01	285.94	284.52	285.05	288.38	285.99	286.37
<b>Pharmacy</b>	11.85	11.97	11.72	11.57	11.60	11.52	11.50	11.68	11.43	11.49	11.51	11.43	11.61
<b>Operating Cost</b>	294.45	295.52	296.57	297.59	298.63	299.66	300.67	301.67	302.65	302.64	302.63	302.61	302.61



# Reflections...

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The future we predict today is not inevitable. We can influence it, if we know what we want it to be...

We can and should be in charge of our own destinies in a time of change.

Charles Handy  
The Age of Unreason