

# Supporting Care Coordination within the PCMH

*Supported by the Center for PCMH Advancement*

## Welcome

**Guy Mansueto**  
PCPCC Co-Chair  
Center for PCMH Advancement

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## Executive Educational Series – Part 1 of 3

**Date:** Friday, April 6, 2012

**Time:** 1 - 2:30pm ET

**Speakers:** Jaan Sidorov, MD, MHSA, FACP  
Sidorov Health Solutions

James Crawford, MD, PhD

North Shore-Long Island Jewish Health System

# Register Today

Parts 2 and 3

**Registration Link**

<http://bit.ly/Hm5lJT>

**Registration Link**

<http://bit.ly/HPLT6J>

## Implementing Care Coordination within the PCMH Model

May 17th, 2012

1:30 p.m. - 3:00 p.m. EST

Improved care coordination is a critical success factor for medical homes. In this webinar, we'll review models and effective implementation practices. In addition, we'll take a close look at Geisinger's team approach to achieving improved care across the continuum and how its program, established in 2006, improves quality and reduces total cost of care.



**Jane Brock, MD, MSPH**  
Chief Medical Officer,  
Colorado Foundation  
for Medical Care



**Thomas Graf, MD**  
Chairman, Community  
Practice and Associate  
Chief Medical Officer,  
Population Health,  
Geisinger Health System

## The Medical Home Experience: Care Coordination and the Patient's Role in Shared Decision Making and Team Communication

July 12th, 2012

1:00 p.m. - 2:30 p.m. EST

In this webinar, we will explore the definition of the care team and care coordination as well as the key elements of care coordination within the PCMH. We will also talk about the patient's perspective by reviewing Christine Bechtel's research on patients and the delivery system as a whole – its challenges and potential solutions – including care coordination and the medical home.



**Christine Bechtel**  
Vice President,  
National Partnership  
for Woman & Families



**Melinda Abrams, MS**  
Vice President,  
The Commonwealth Fund

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*"I just want my doctors to talk to each other."*

- Quote from forward by Christine Bechtel, vice president, National Partnership for Women & Families

**This report features 3 core elements:**

- 1) Expert-authored articles on the definition, role and function of care coordination, as well as tools for implementation, and measurement and monitoring of its effectiveness.
- 2) Case examples
- 3) Summary of survey responses from select practices

# Supporting Care Coordination within the PCMH

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## **Jaan Sidorov, MD, MHA, FACP**

General and Internal Medicine Physician  
Principal, Sidorov Health Solutions

### **Author/Speaker:**

Disease Management Care Blog –

<http://diseasemanagementcareblog.blogspot.com>; Health Affairs, Wall Street Journal, NPR's "All Things Considered," Disease Management Advisor

### **Professional Affiliations:**

Board of Directors of the Disease Management Association of America (DMAA),  
Medical Director in the HP Medical Informatics Center of Excellence, Chair of  
Board of NORCAL Mutual Insurance



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## **James Crawford, MD, PhD**

Chair, Department of Pathology and Laboratory Medicine  
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### **Prior Position:**

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College of American Pathologists; US and Canadian Academy of Pathology;  
Hans Popper Hepatopathology Society

# Supporting Care Coordination within the PCMH Model

**Jaan Sidorov, MD, MHSA**

**The Disease Management Care Blog**

**<http://diseasemanagementcareblog.blogspot.com/>**

**[jaans@aol.com](mailto:jaans@aol.com)**

**Tel: 570-490-6618**

# Outline

- Define PHM and describe its “key” ingredients
- Review the evidence that it saves money
- Review “quick hits”
- Look at what’s at stake





# “Population Health Management”

“Population-based” approach to care that is:

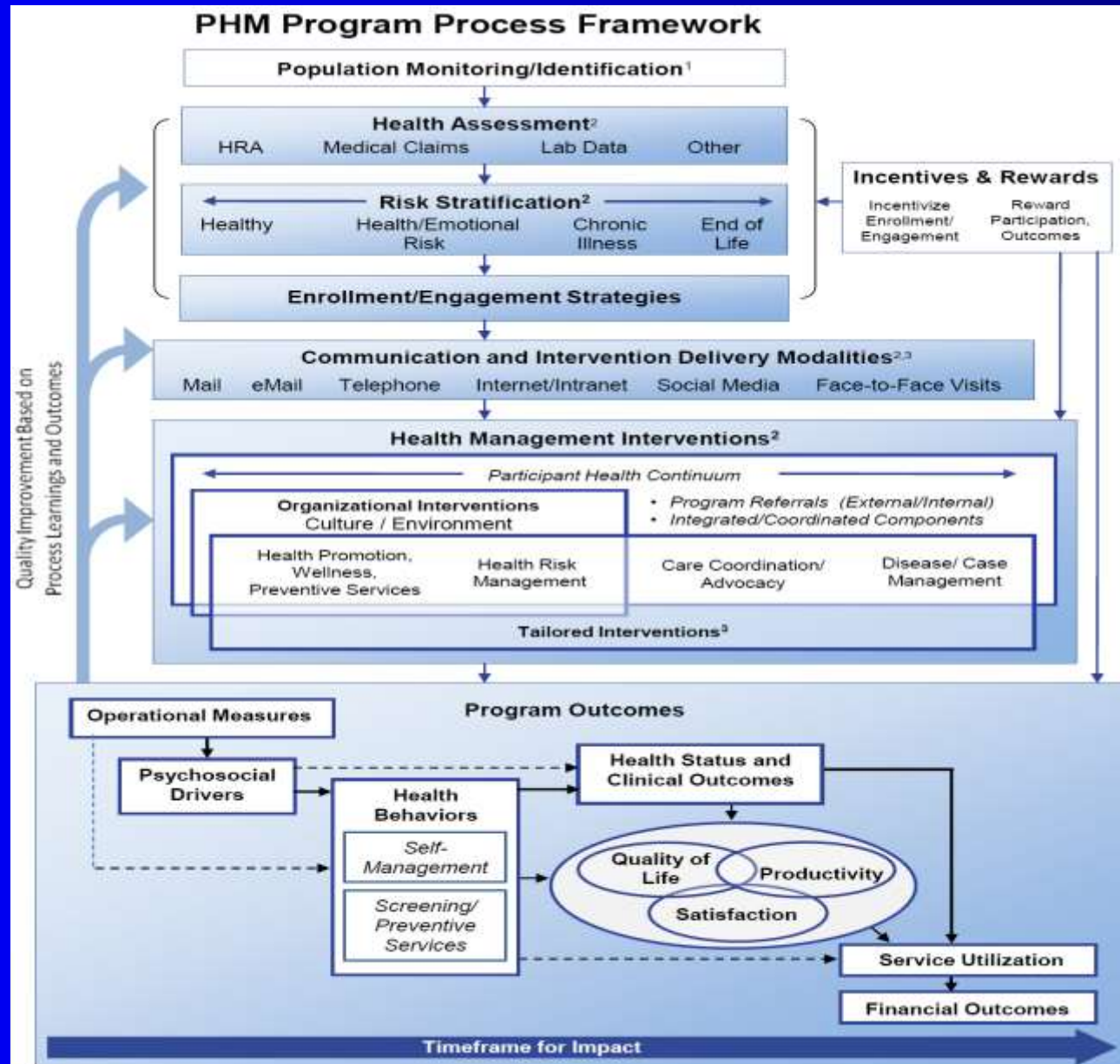
1. Proactive, accountable and patient-centric
2. Physician-guided
3. Enabling informed and activated patients
4. Teaming

PHM rests upon three core principles:

1. the central care delivery and leadership roles of the primary care physician;
2. the critical importance of patient activation, involvement and personal responsibility;
3. the patient focus and capacity expansion of care coordination provided through wellness, and chronic care management programs



# Population Health Management Framework Detail



<sup>1</sup>For a more detailed discussion of monitoring and identification flow please refer to the work of the Operational Measures Workgroup

<sup>2</sup>Represents example components for each Essential Element. Does not necessarily reflect the universe of components.

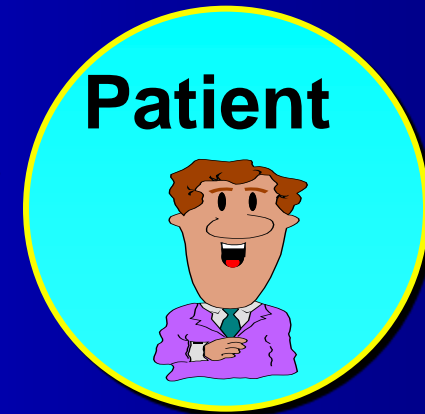
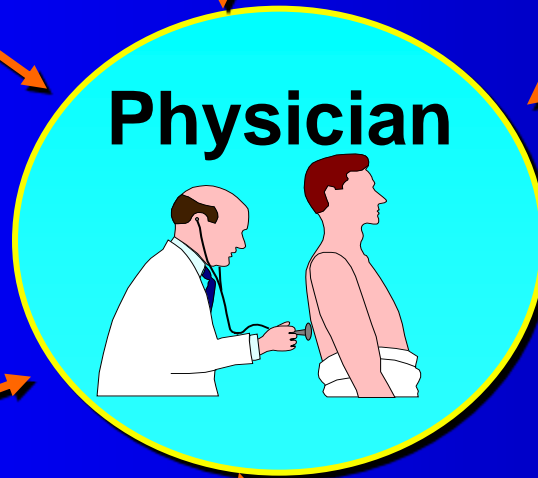
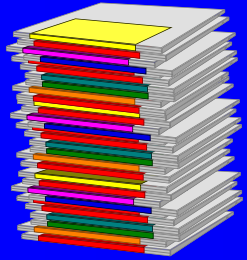
<sup>3</sup>Communication may utilize one or more touch points within the provider system

**Support Staff**

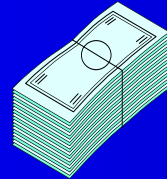
**Triage**

**Usual  
Care**

**Records**

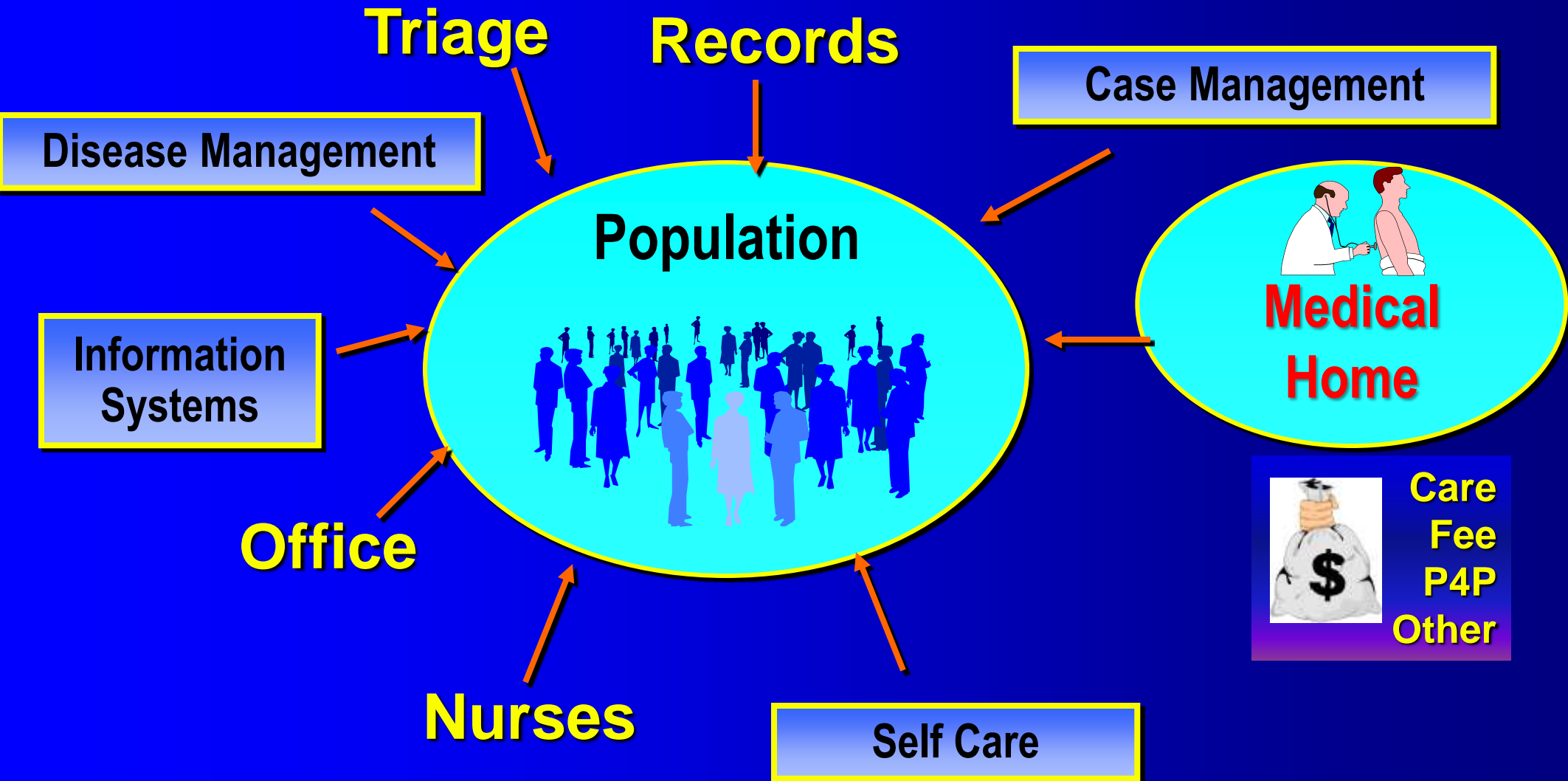


**Nurses**



**Money**

# Population Health Management

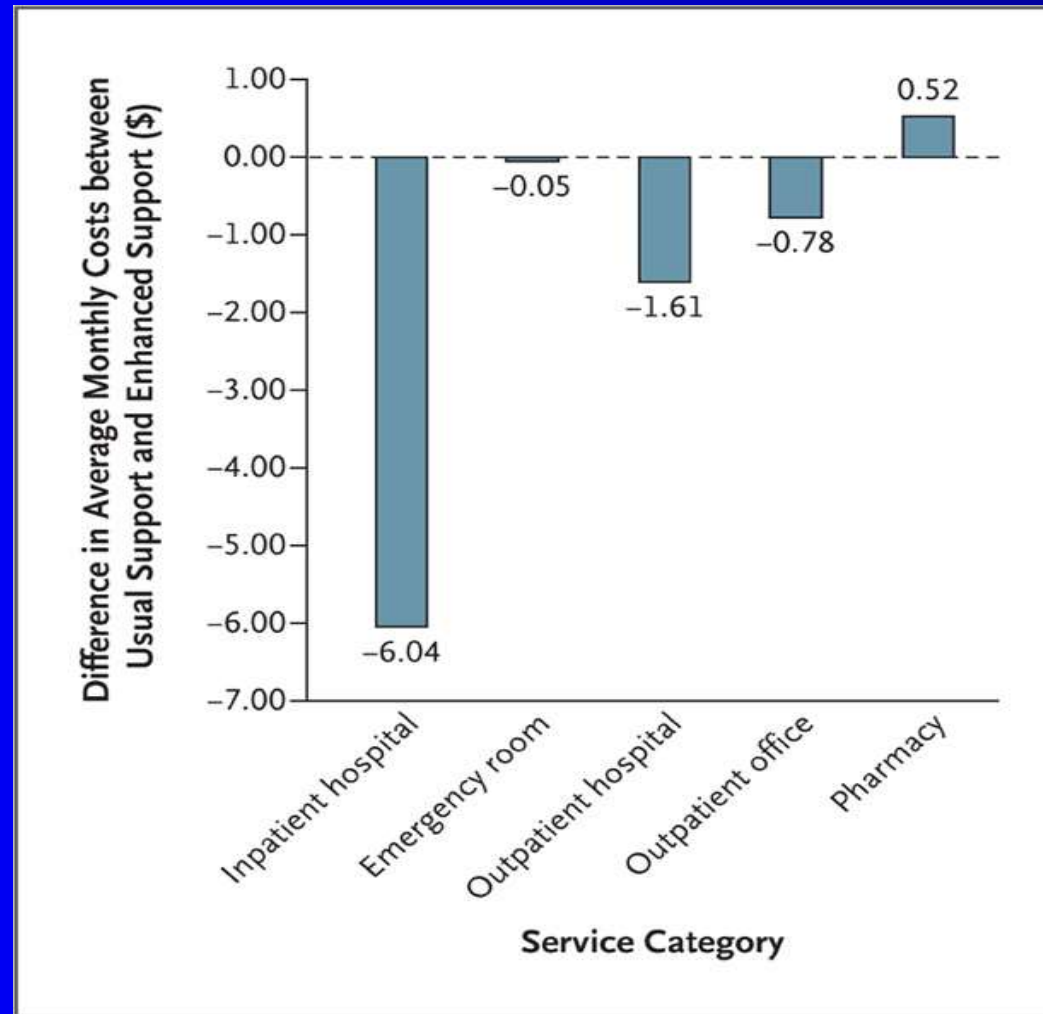


“Population Health Management”

But...Does It Work?



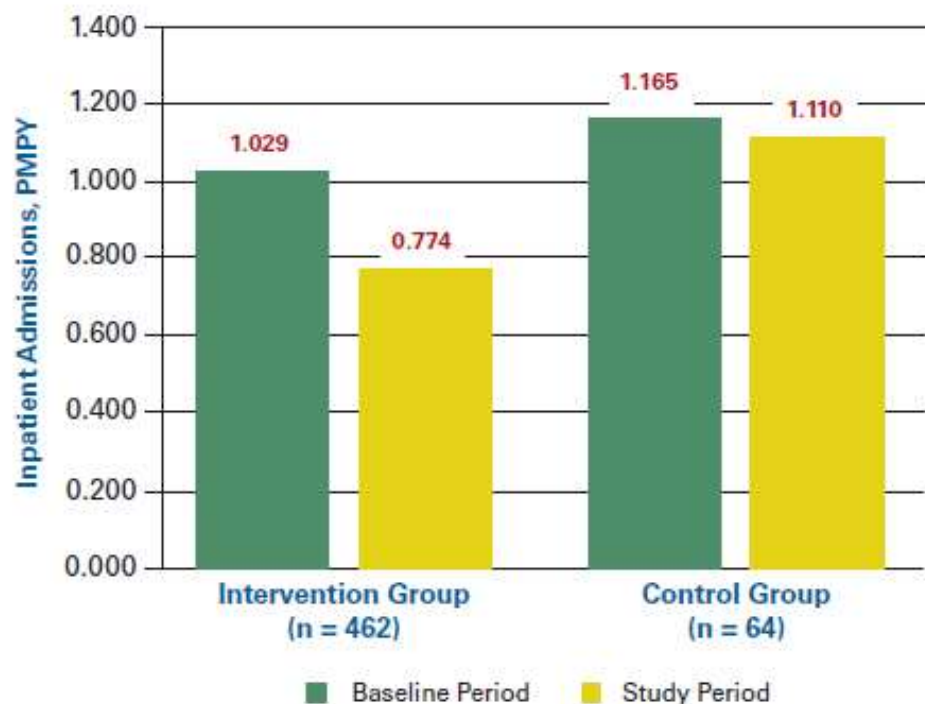
## Enhanced vs. Usual Support, According to Service Category.



Wennberg DE et al. N Engl J Med 2010;363:1245-1255.

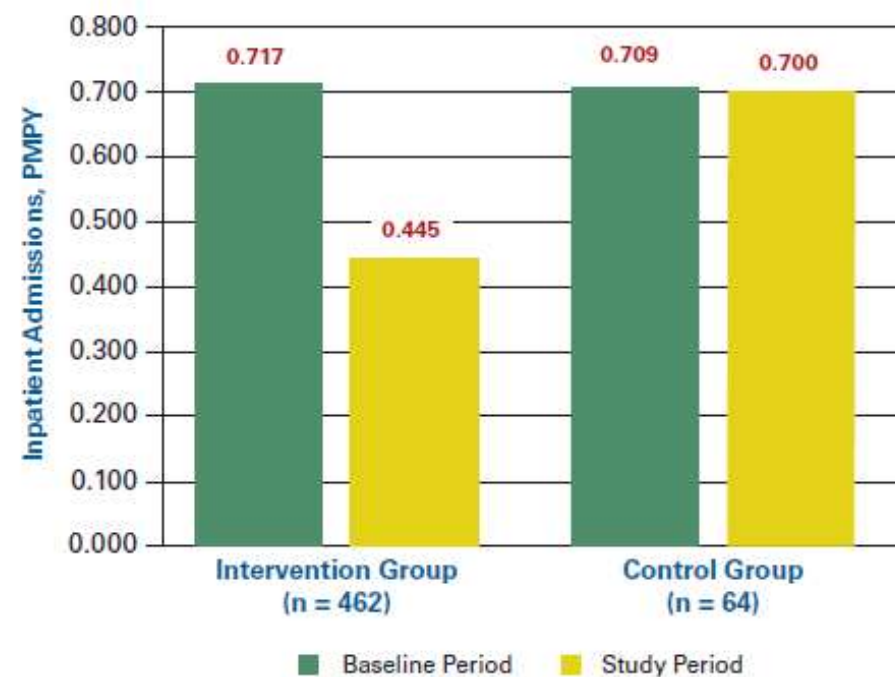


■ **Figure 1. All-Cause Inpatient Admissions per Member per Year (PMPY)<sup>a</sup>**



<sup>a</sup>Wilcoxon test result comparing the change from baseline to study period for the intervention group and the control group was significant at  $P \leq .05$ .

■ **Figure 2. Diabetes-Related Inpatient Admissions per Member per Year (PMPY)<sup>a</sup>**



<sup>a</sup>Wilcoxon test result comparing the change from baseline to study period for the intervention group and the control group was significant at  $P \leq .05$ .

From Rosenzweig et al: Diabetes disease management in Medicare advantage reduces hospitalizations and cost. Am J Manag Care 2010 16(7):e157

<b>Diabetes</b>				
<b>Diabetes related</b>				
Inpatient days	0.28 (0.012)	0.32 (0.005)	-0.05 <sup>c</sup>	-0.15
Emergency visits	0.22 (0.005)	0.20 (0.002)	0.02 <sup>c,d</sup>	0.09
Outpatient/ambulatory	4.99 (0.03)	4.87 (0.02)	0.13 <sup>c</sup>	0.03
Prescriptions, 30 day	20.92 (0.09)	22.03 (0.07)	-1.11 <sup>c</sup>	-0.05
Medical costs	\$3378 (\$31)	\$3627 (\$15)	-\$249 <sup>c</sup>	-0.07
<b>Total</b>				
<b>Inpatient days</b>	<b>1.42 (0.04)</b>	<b>1.50 (0.01)</b>	<b>-0.08</b>	<b>-0.05</b>
<b>Emergency visits</b>	<b>1.12 (0.02)</b>	<b>1.06 (0.01)</b>	<b>0.06<sup>c,d</sup></b>	<b>0.06</b>
Outpatient/ambulatory	19.89 (0.14)	18.94 (0.07)	0.95 <sup>c</sup>	0.05
Prescriptions, 30 day	81.57 (0.31)	87.41 (0.26)	-5.84 <sup>c</sup>	-0.07
<b>Medical costs</b>	<b>\$11,359 (\$114)</b>	<b>\$12,142 (\$50)</b>	<b>-\$783<sup>c</sup></b>	<b>-0.07</b>
Percentage with A1C test	0.61	0.58	0.02 <sup>c</sup>	0.04
Percentage with retinal exam	0.26	0.23	0.02 <sup>c</sup>	0.10
Percentage with microalbumin urine test	0.39	0.33	0.06 <sup>c</sup>	0.18

From Dall et al: Outcomes and lessons learned from evaluating TRICARE's disease management programs. Am J Manag Care 2010; 16(6): 4388

# Polling Question

**What additional features do you feel is necessary for successful case management?**

- A. Employed by the primary care site(s) and not by a health insurer
- B. Advance practice licensing that includes medication prescribing
- C. Expertise in maximizing the health insurance benefit.

# “Key” PHM Ingredients That Can Be Adapted to the PCMH



# PHM Ingredients

## 1. Risk Stratification

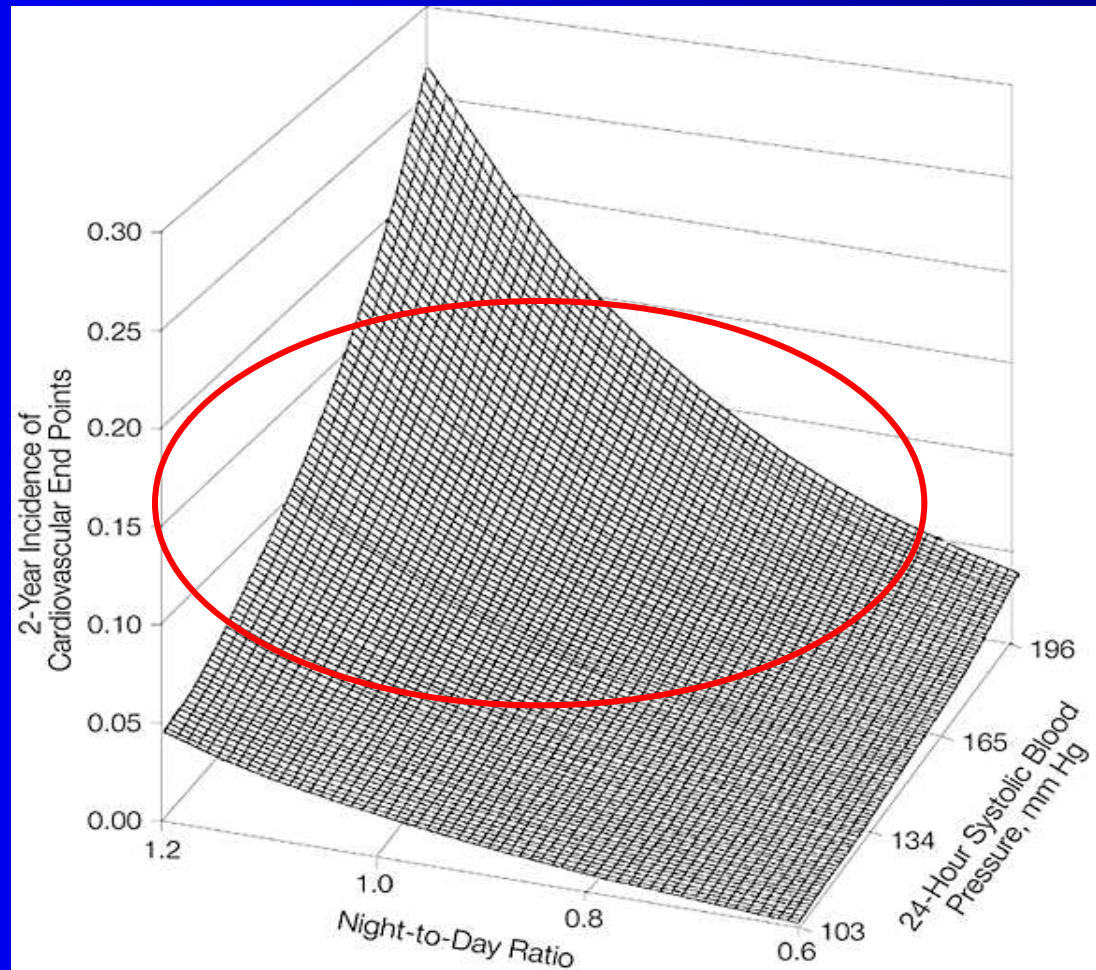


- Multi-dimensional and computer analytic process that uses HRAs and multiple other data associations
- Assesses patients' future "trajectory" into higher risk categories such as hospitalization, death or elevated claims expense.
- Other predictions: obesity, diabetes mellitus and other chronic conditions.
- Detects "invisible" patients
- Challenges: *loss of information transfer, poor fit with clinical work flows and questionable "actionability."*



# *Uneven distribution of risk*

## *Not All Hypertension is Created Equal*



Staessen, J. A. et al. JAMA 1999;282:539-546.



# PHM Ingredients

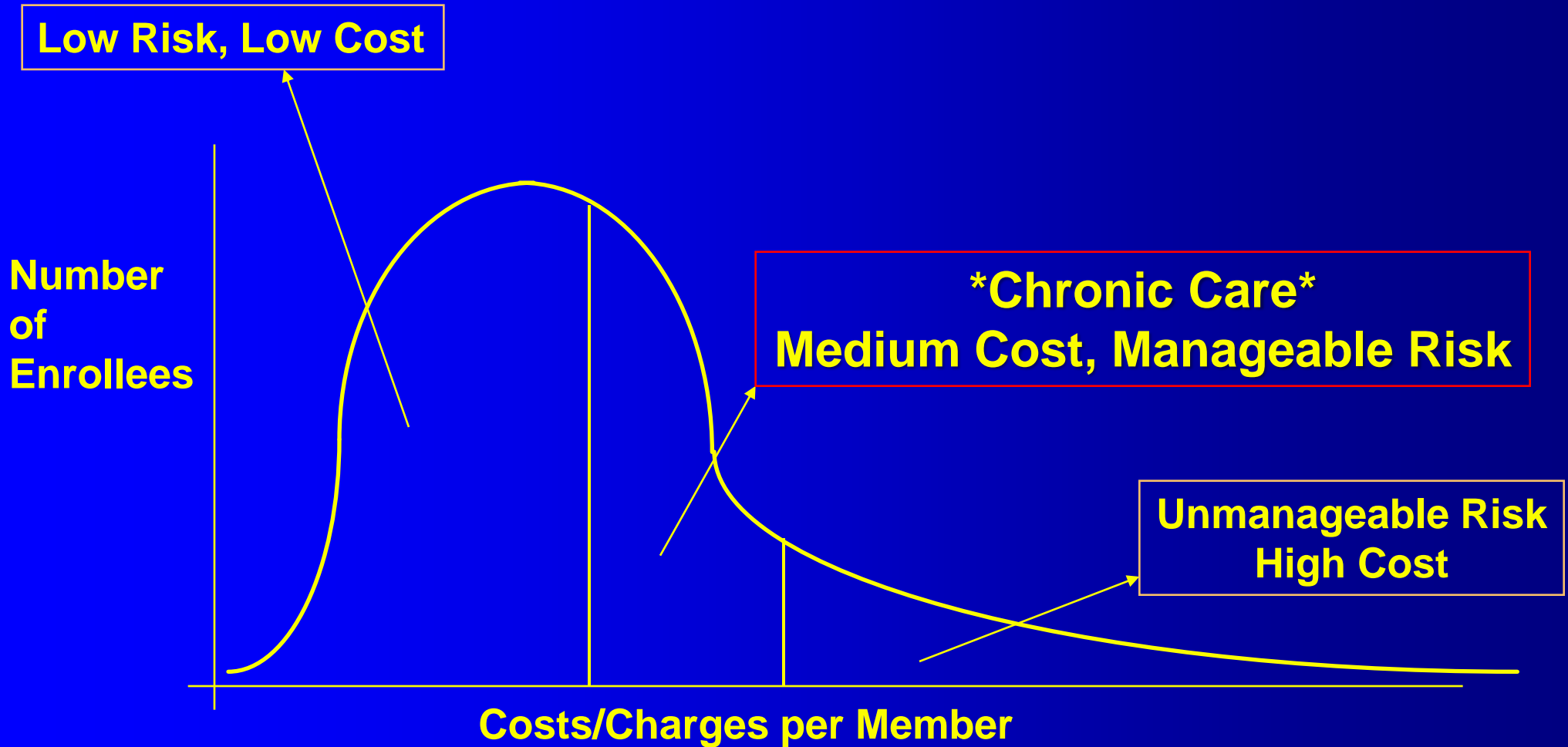
## 2. Patient Enrollment



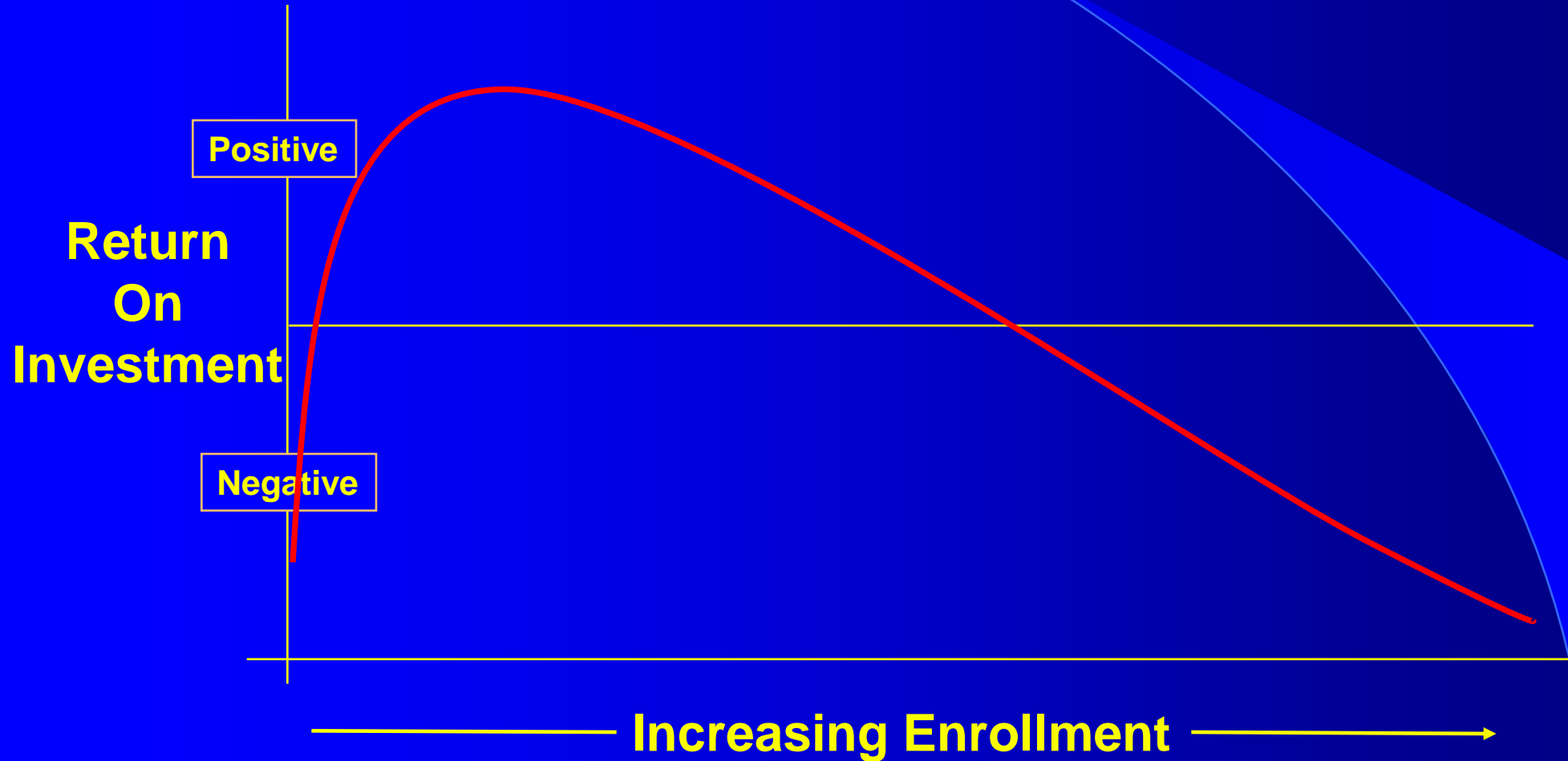
- Recruitment that uses incentives, is culturally appropriate via multiple channels, including mail, telephony and social media.
- “Opt-in” vs. “opt-out”
- Data are stored in Registries: multi-sourced repositories of formatted data
  - Easy extraction and manipulation of individual or grouped information including demographic, insurance claims, survey, clinical and other data.
- *Challenges:* recruitment rates typically run 5-15% thanks to limited patient incentives and lack of physician buy-in, time and compensation of work effort.

# PHM Elements

## 2. Patient Enrollment

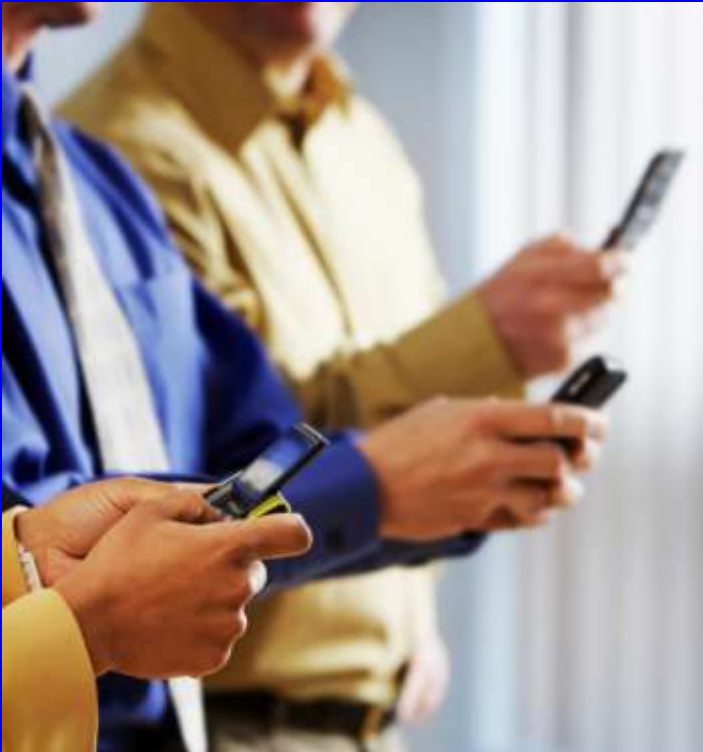


# The “Return on Investment”



# PHM Ingredients

## 3. Multiple Communication Channels



- Old: print materials, one-on-one face-to-face and telephonic instruction
- New: education that leverages behavior change using psychological principles of recruitment, engagement, assessment of barriers, formulation of strategies to overcome barriers, goal setting, coaching, support and follow-up.
- Includes “texting,” variations of email and social media such as Facebook.
- *Challenges:* disconnected from the electronic health record and physician input

# 4. Enter Care & Case Management



**Nurses, your ship  
has come in!**

- Collaborative assessment, planning, facilitation and advocacy for care options and services to meet an individual's health needs through communication and available resources to promote quality cost-effective outcomes
- Provides education, promotes informed decision making, develops a care plan that coordinates insurance benefit designs, psychosocial issues, input of family, community resources and the physicians' judgment.
- Associated with greater frequency of self care, control of lifestyle behaviors, problem solving, medication compliance and improved outcomes
- **Meets all of the challenges::**
  - Using predictive modeling to prioritize patients and needs
  - Facilitating patient enrollment
  - Advocating on behalf of the intelligent adoption of guidelines
  - Collaborating & Integrating providers

# Features of Successful Case Management Health Professionals Who Are...

**Mobile**

**Interact with  
patients more  
than once a  
month**

**“Top of license”**

**Connected**

**Dedicated**



**Credentialed**

**Telephonic  
& face to  
face**

**Patient self-care**

**Change Agents**



# “Quick Hits”

# Triangulation on the Truth

(Multiple studies....)



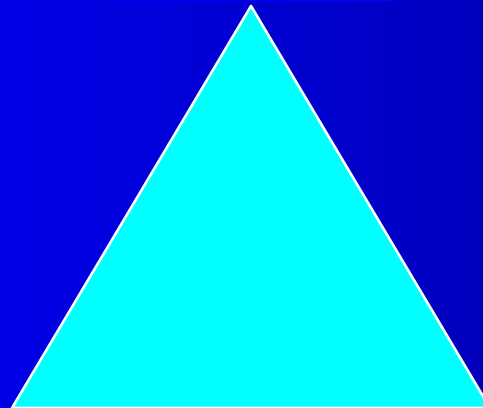
(...point in the same direction!)



Accuracy

Speed

Completeness



# PHM Program Design: Soufflé vs. Soup



# Central “Administration” Peripheral “Distribution”

September 2010

## Evaluation of Medicare Care Management for High Cost Beneficiaries (CMHCB) Demonstration: Massachusetts General Hospital and Massachusetts General Physicians Organization (MGH)

### Final Report

#### Prepared for

**David Bott, PhD**  
Centers for Medicare & Medicaid Services  
Office of Research, Development, and Information  
7500 Security Boulevard  
Baltimore, MD 21244-1850

#### Prepared by

**Nancy McCall, ScD**  
**Jerry Cromwell, PhD**  
**Carol Urato, MA**  
RTI International  
3040 Cornwallis Road  
Research Triangle Park, NC 27709



RTI Project Number 0207964.025.000.001

# Shared Services Model Option

*Centrally coordinated*  
PHM support:

- Short time window
- Available competencies
- Unburden physicians
- *Complements* medical homes



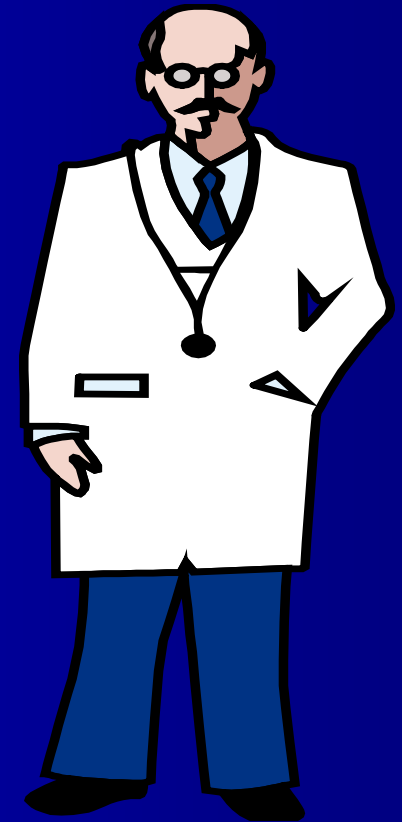
1:1500





# The Physicians

- *Business case for quality*
- *Today's dollars for tomorrow's savings*
- *Location of care*
- *Level of care*
- *Population-based responsibility*
- *Teaming*
- Money, Patients or Time
- “Physician Stuff”



# Polling Question

**What additional ingredient would you choose to aid physician engagement?**

1. Local physician opinion leaders charged with engaging their colleagues
2. Inclusion of participation in care management programs as an element in physician credentialing
3. Insisting that they view a rebroadcast of this excellent presentation by Dr. Sidorov

# Healthwatch


THE HILL'S Healthcare Blog

## Debt panel chairmen call for second look at the public option

By Alexander Bolton - 11/10/10 03:37 PM ET

 COMMENT

 EMAIL

 PRINT

 SHARE

The chairmen of President Obama's fiscal commission are calling for a second look at a robust government-run healthcare program, which Congress shelved last year following acrimonious debate.

Former Clinton White House Chief of Staff Erskine Bowles and former Sen. Alan Simpson (R-Wyo.), the chairmen of the National Commission on Fiscal Responsibility and Reform, suggested reviving the public option in the future if healthcare costs continue to soar.

**Thank you**

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SVP of Laboratory Services  
North Shore Long-Island Jewish Health System

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College of American Pathologists; US and Canadian Academy of Pathology;  
Hans Popper Hepatopathology Society



***(So how are we actually supposed to do this?)***

**James M Crawford, MD, PhD**

Senior Vice President for Laboratory Services  
*North Shore-LIJ Health System*

Chair, Department of Pathology  
*Hofstra North Shore-LIJ School of Medicine*  
*Manhasset, NY*

[jcrawford1@nshs.edu](mailto:jcrawford1@nshs.edu)



Savings and improved health care are to be achieved through “Coordinated Care”.

# What is “Coordinated Care”?\*

Chronic Disease Management  
Management of “Ambulatory Sensitive Conditions”  
- prevention of hospitalization and ED visits  
Heart Failure, COPD, Diabetes, CAD.....  
Transitions in Care (“up”, “down”, and “over”)  
Medication Reconciliation  
Safety & Reduction in Errors  
Screening and Follow-through  
Emergency Medicine and Follow-through

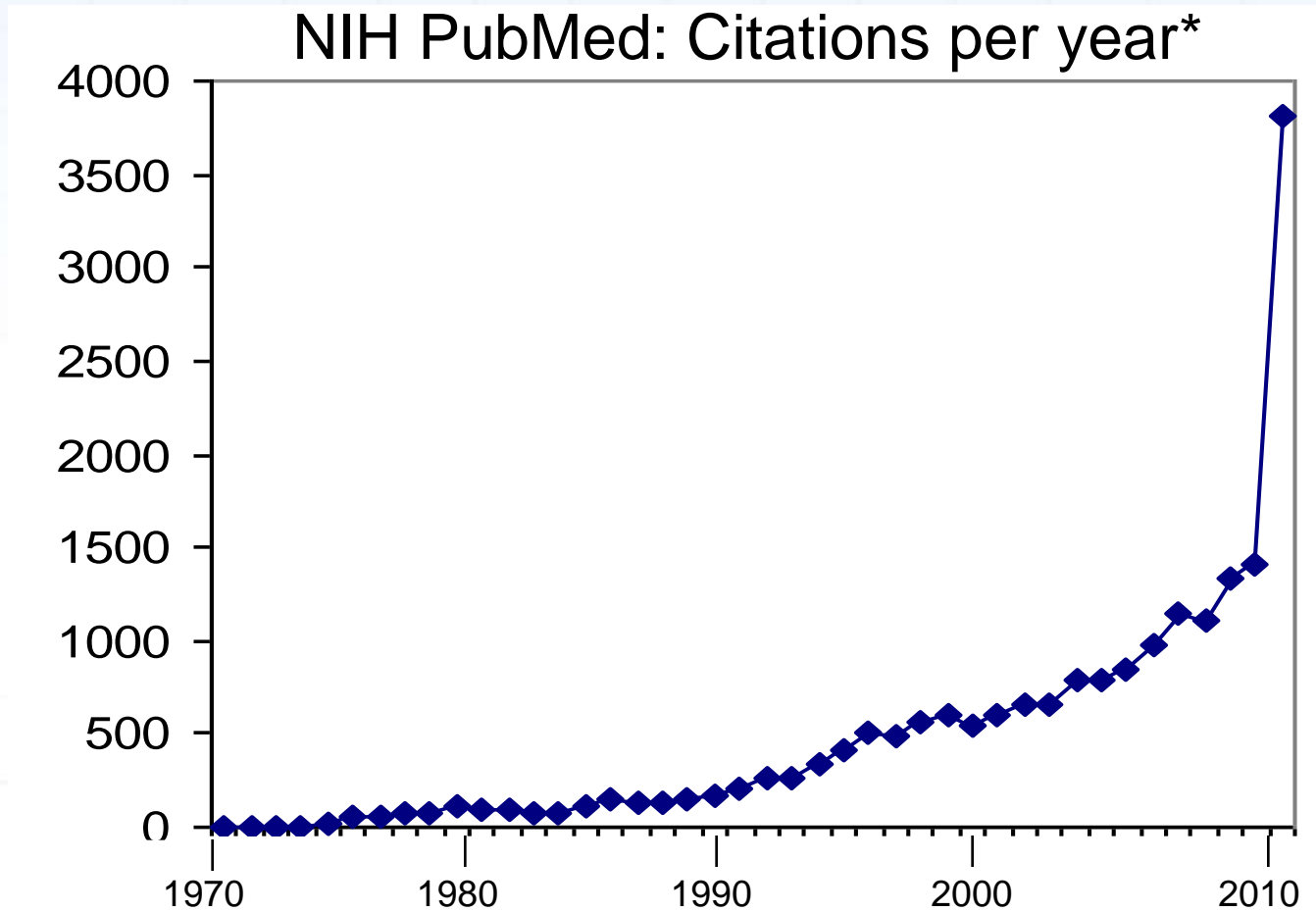
\*PubMed published papers

# Literature: “Coordinated Care”

<u>Search topic</u>	<u>first citations</u>	<u>Pubmed #*</u>
Coordinated Care	ca. early 1970's	382
Continuity of Care	ca. late 1960's	12,782
Care Continuum	ca. mid 1960's	13,682
Transitions in Care	ca. late 1980's	1,058
<u>Integrated Care</u>	<u>ca. mid 1950's</u>	<u>23,649</u>
		47,817

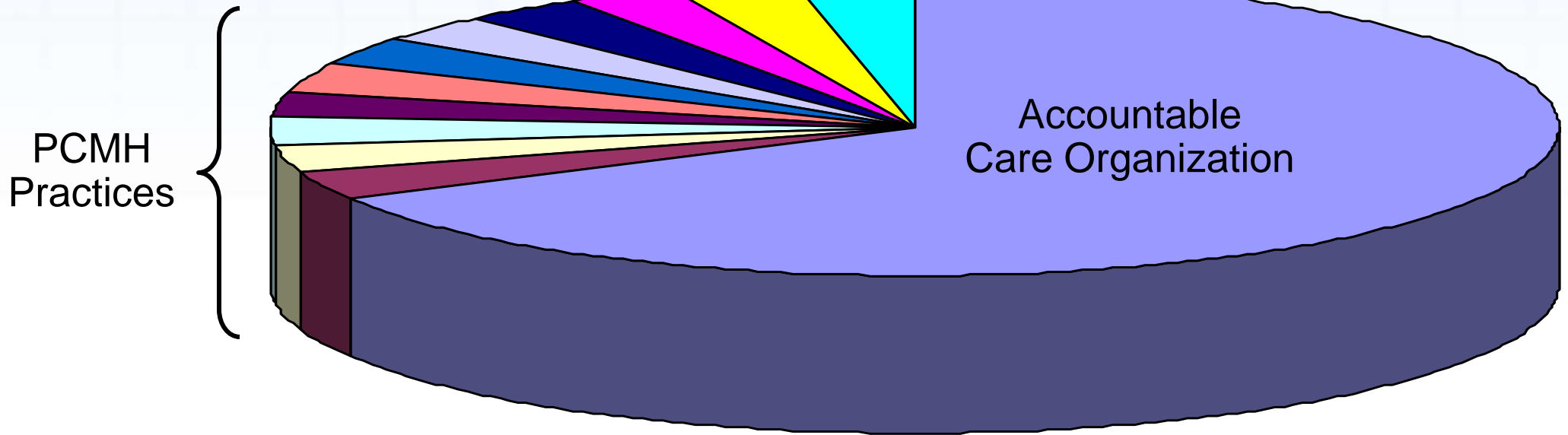
\*Jan 21, 2012

# Coordinated Care





# PCMH vs ACO



# PCMH vs. ACO

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## *Medical Home:*

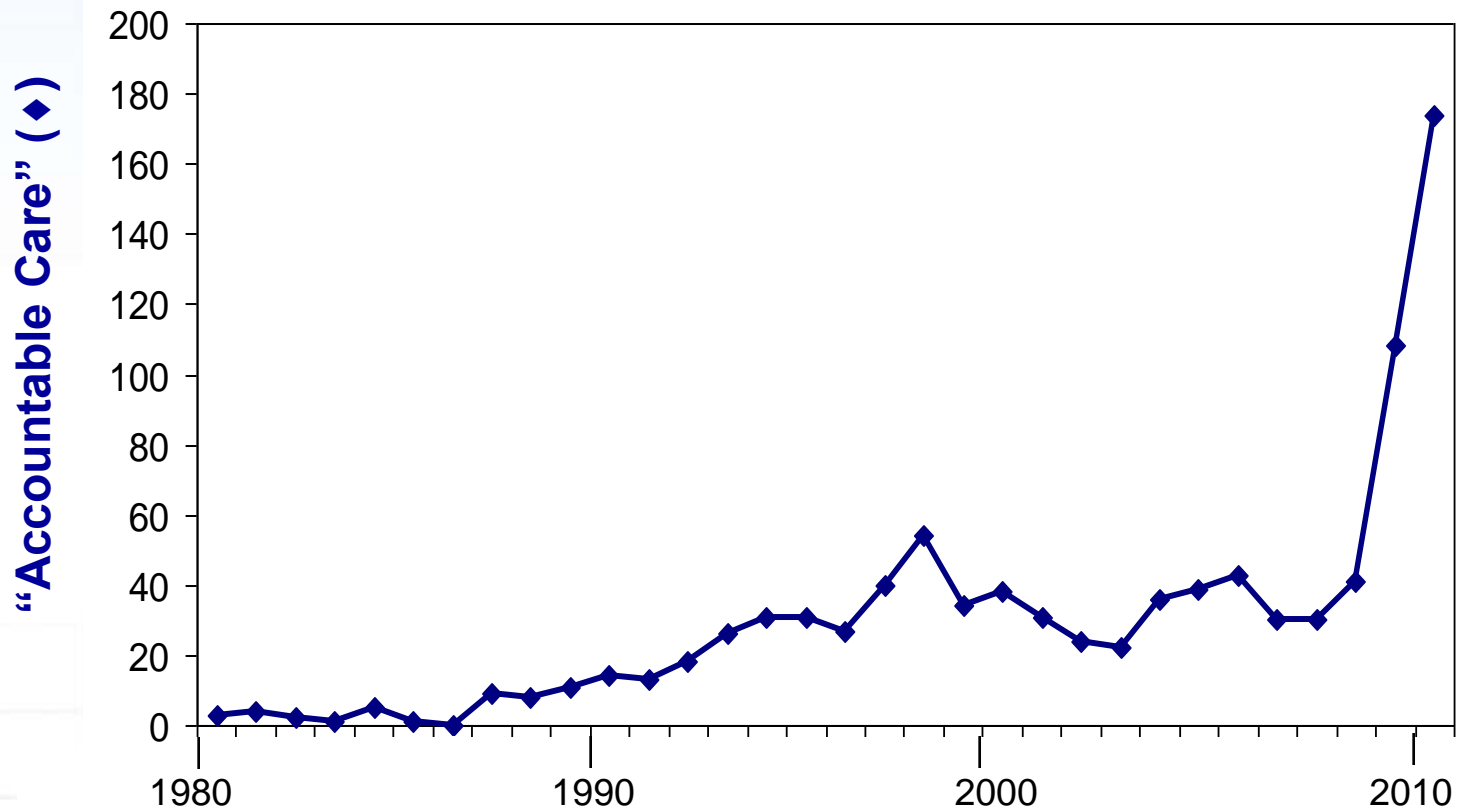
Patient Centered Healthcare focusing on “physician practice”

## *Accountable Care Organization:*

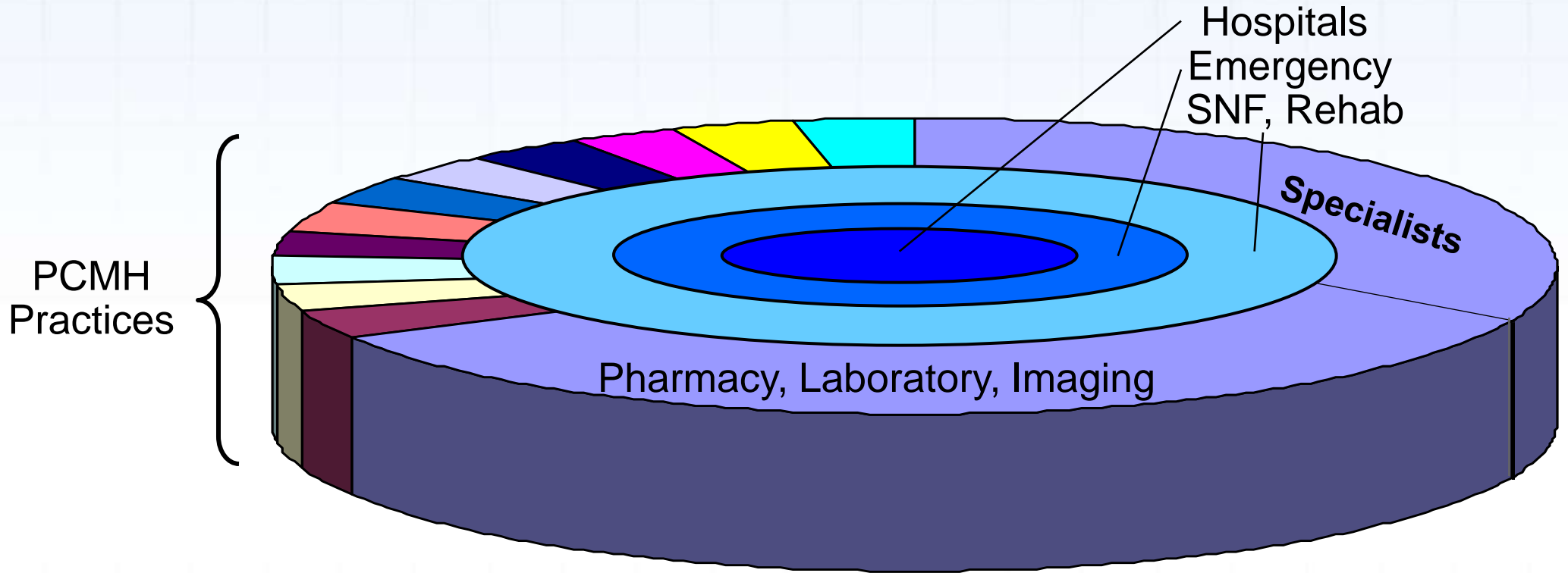
Coordinated Care at the “health system” level

# Accountable Care

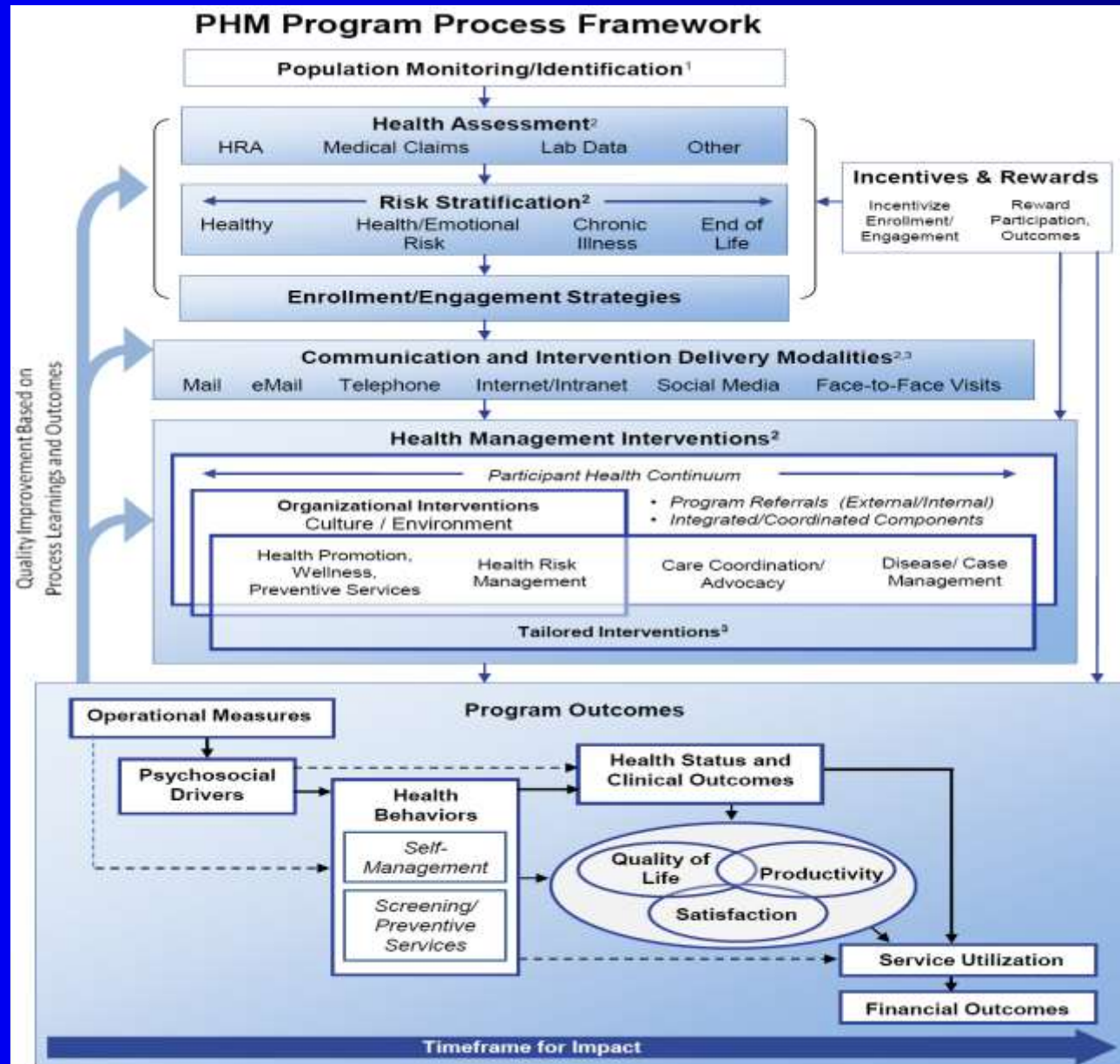
NIH PubMed: Citations per year\*



# PCMH vs ACO



# Population Health Management Framework Detail



<sup>1</sup>For a more detailed discussion of monitoring and identification flow please refer to the work of the Operational Measures Workgroup

<sup>2</sup>Represents example components for each Essential Element. Does not necessarily reflect the universe of components.

<sup>3</sup>Communication may utilize one or more touch points within the provider system



# Lessons from Medicare's Demonstration Projects on Disease Management and Care Coordination

Lyle Nelson  
Health and Human Resources Division  
Congressional Budget Office  
([Lyle.Nelson@cbo.gov](mailto:Lyle.Nelson@cbo.gov))

January 2012

Working Paper 2012-01

Working Paper Series  
Congressional Budget Office  
Washington, D.C.

# “Disease Management”

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Patient education

Motivational programs to promote behavioral change

Monitoring of patient symptoms and metrics (biometrics, laboratory)

Monitoring of patient adherence to treatment recommendations

Monitoring of providers' adherence to evidence-based practices

*Providing feedback to patients' primary care physicians*

# “Disease Management”

---

Patient education

Motivational programs to promote behavioral change

Monitoring of patient symptoms and metrics (biometrics, laboratory)

Monitoring of patient adherence to treatment recommendations

Monitoring of providers' adherence to evidence-based practices

*Providing feedback to patients' primary care physicians*

*Typically are focused on a specific chronic disease*

# “Care Coordination”

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Managed flow-of-information between providers  
within the Primary Care Practice  
between practice sites (specialists, ancillaries, inpatient)

Proactive management of Transitions-in-Care  
includes identifying when patients undergo a transition-in-care!

Helping patients access medical and social support services

*Address patients' multiple chronic conditions*

# The Data Elements: Patient

---

## Data Interoperability

current: Ambulatory EHR, Inpatient EHR, Laboratory, Claims Medications

future: Emergency (EDIS), Imaging (PACS), Pharmacy

## Data Completeness

Specialists (scanned documents vs. common EHR usage)

Data Access: Information at the point-of-care

## EXECUTION: *The Care Plan*

Access and input: multiple providers

Critical Pathway: the chronological order of execution

# The Data Elements: Population

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## Population Segmentation

by disease condition

by beneficiary coverage (contracts)

*by Care Plans: What do your patients need, and when?*

## Population Reporting

Patient Registries

Population Metrics

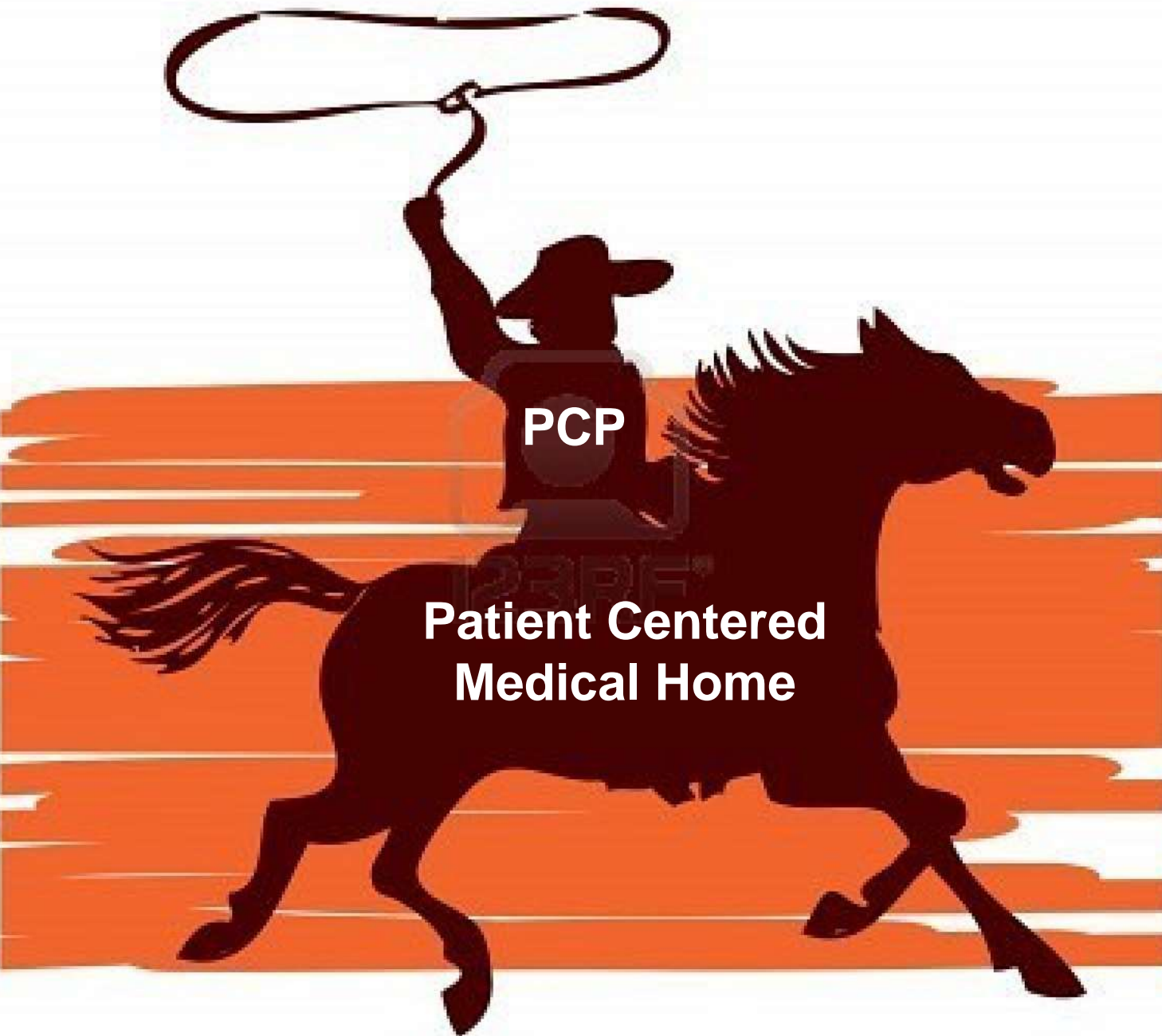
## *THE LEARNING HEALTHCARE SYSTEM*

*The best data is your own*

Monitor your practice patterns and outcomes

Modify, innovate, improve





**Patient Centered  
Medical Home**

- Specialists
- Ancillaries
  - Imaging
  - Laboratory
- Pharmacy
- Emergency
- Hospitals
  - Admissions
  - Discharge
  - Medications
- Rehabilitation
- Home Care
  - Home Devices
  - Home visits
  - Social Care
- Community Resources
  - Access to healthcare
  - Screening

# Who really does this stuff?

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Low-intensity Disease Management

Medium-intensity Disease Management

High-intensity Care Coordination

# Care Coordination



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The “isolated” PCMH

The PCMH as part of an integrated healthcare system

# Polling Question

**Is your Physician Practice part  
of an Integrated Health  
Network?**

(Yes, No, N/A)

# Polling Question

If you have Care Managers within your practice, how many patients are in their panel?

- 1 RN care manager per up to 100 patients support
- 1 RN care manager per 100-249 patients
- 1 RN care manager per 250-500 patients
- 1 RN care manager over 500 patients

# Care Coordination

The “isolated” PCMH\*

Care coordinators, Nurse Care Managers  
Healthplans: Telephonic and web-based

The PCMH as part of an integrated healthcare system

Case coordinators

Nurses and Nurse Care Managers

Home Care specialists

Health Plans: Telephonic and web-based

→ “Care Maintenance Organization”

Nurse Coordinators, Actuaries

Information Technology specialists



# Gaps: “isolated” PCMH

---

## Health Information Technology

Does the Electronic Health Record work?

patient registries, alerts, data analysis

data interoperability: labs, referrals, transitions, meds

Can patients be tracked?

Health Information Exchanges

## Personnel

“practice transformation”

compliance (and collegiality) of specialists, ancillaries

*The narrow margin for financial operation of a Practice*

# Gaps: “integrated” health system

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Assembly of an “integrated physician network”

Incentives (or lack thereof) for Coordinated Care

Fee-for-Service utilization versus risk-sharing

Perpetuation of FFS models vs. “value” alternatives

Health Information Technology

Functionality of EHR: “system” or “physician office”

Data interoperability

Low priority of individual PCMH practices in “system HIT”

“Care Maintenance” Structure

Present/assembled (or not)

Integrated with PCMH practices (or not)

# Gaps: Medicare Demonstrations



Lack of Integration of Care Managers with Physician Practices

Telephonic Programs that stood apart from Physician Practices

Inability to obtain data from Hospital Admissions

(Note: Medicare does not require pre-authorization)

“Care Maintenance” Structure

Present/assembled (or not)

Integrated with PCMH practices (or not)

# Successes: Medicare Demonstrations

---

Care Managers as integral part of Physician Practices

Telephonic Programs integrated with in-person contact

Proactive monitoring and support of Care Transitions

Education/Support of Physician adherence to guideline-based care

Home telemonitoring and video conferencing

# Medicare Demonstration Projects

“On average, the 34 disease management and care coordination programs had little or no effect on hospital admissions or regular Medicare expenditures.”

- Fees-at-risk: had no effect
- Care Managers ↔ Physicians:
  - 7% reduction in hospital admissions
  - 3% reduction in regular Medicare expenditures
- Care Managers: either “telephonic”, “independent”  
no effect on hospital admissions, expenditures

CBO Report, January 2012

# “Low-hanging fruit”

---

## Ambulatory Sensitive Hospital Admissions

Diabetes

Heart Failure

Chronic Obstructive Pulmonary Disease

→ *Management of single conditions*

## Transitions-in-Care

Medication Reconciliation

Post-acute Care

## Patient Engagement

Education

Motivation

Information



# The big challenges

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Poor social support systems

Barriers in access to health care

Difficulties in adapting best-practice guidelines on a disease-by-disease basis to complex patients with multiple co-morbidities

Behavioral and Mental health  
Depression

Crabtree BF et al., *Med Care* 2011; 49: S28-S35

# Practice Transformation

Physicians separate from Care Team

Leadership resistant to change

Selection of EHR without understanding:  
changing roles of personnel  
workflow redesign

Failure to identify practice core values

Inadequate commitment to change

Lack of time spent on reflection and  
relationship-building during change



Physicians integrated into Care Team

Leadership as champion of change

EHR selection with these in mind:  
future roles of personnel  
workflow design

Retention of practice core values:  
care delivery guidelines  
existing preventive services

Persisting through transitional  
inefficiencies

Team meetings:  
changing relationships and roles

*This is not "forced" time.*

# Conclusions

---

“Independent PCMH” or “PCMH in an integrated system”:

- Integration of Care Managers and Physicians
- EHR selected and implemented with “changing roles” and “workflow” redesign clearly in mind
- Successful Change Management
- (*in an imperfect world*), accomplishment of:
  - information management through care transitions
  - systematic management of a population
  - whilst tackling the “low hanging fruit”, paying attention to the “big challenges”

# “Patients” vs. “People”

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“Health is not being free of infirmity.  
Health is doing what you can in spite of your infirmities.”

*René Jules Dubos, PhD (1901 – 1982)*

1959: *The Mirage of Health*



# Supporting Care Coordination within the PCMH

*Supported by the Center for PCMH Advancement*

## QUESTIONS

# Supporting Care Coordination within the PCMH

*Supported by the Center for PCMH Advancement*

## Thank You

**Guy Mansueto**  
PCPCC Co-Chair  
Center for PCMH Advancement



# Register Today

Parts 2 and 3

Registration Link

<http://bit.ly/Hm5lJT>

Registration Link

<http://bit.ly/HPLT6J>

## Implementing Care Coordination within the PCMH Model

May 17th, 2012

1:30 p.m. - 3:00 p.m. EST

Improved care coordination is a critical success factor for medical homes. In this webinar, we'll review models and effective implementation practices. In addition, we'll take a close look at Geisinger's team approach to achieving improved care across the continuum and how it's program, established in 2006, improves quality and reduces total cost of care.



**Jane Brock, MD, MSPH**  
Chief Medical Officer,  
Colorado Foundation  
for Medical Care



**Thomas Graf, MD**  
Chairman, Community  
Practice and Associate  
Chief Medical Officer,  
Population Health,  
Geisinger Health System

## The Medical Home Experience: Care Coordination and the Patient's Role in Shared Decision Making and Team Communication

July 12th, 2012

1:00 p.m. - 2:30 p.m. EST

In this webinar, we will explore the definition of the care team and care coordination as well as the key elements of care coordination within the PCMH. We will also talk about the patient's perspective by reviewing Christine Bechtel's research on patients and the delivery system as a whole – its challenges and potential solutions – including care coordination and the medical home.



**Christine Bechtel**  
Vice President,  
National Partnership  
for Woman & Families



**Melinda Abrams, MS**  
Vice President,  
The Commonwealth Fund