



National Naval Medical Center

Patient - Centered Medical Home

A Partnership Committed to Improving Healthcare

NNMC MEDICAL HOME

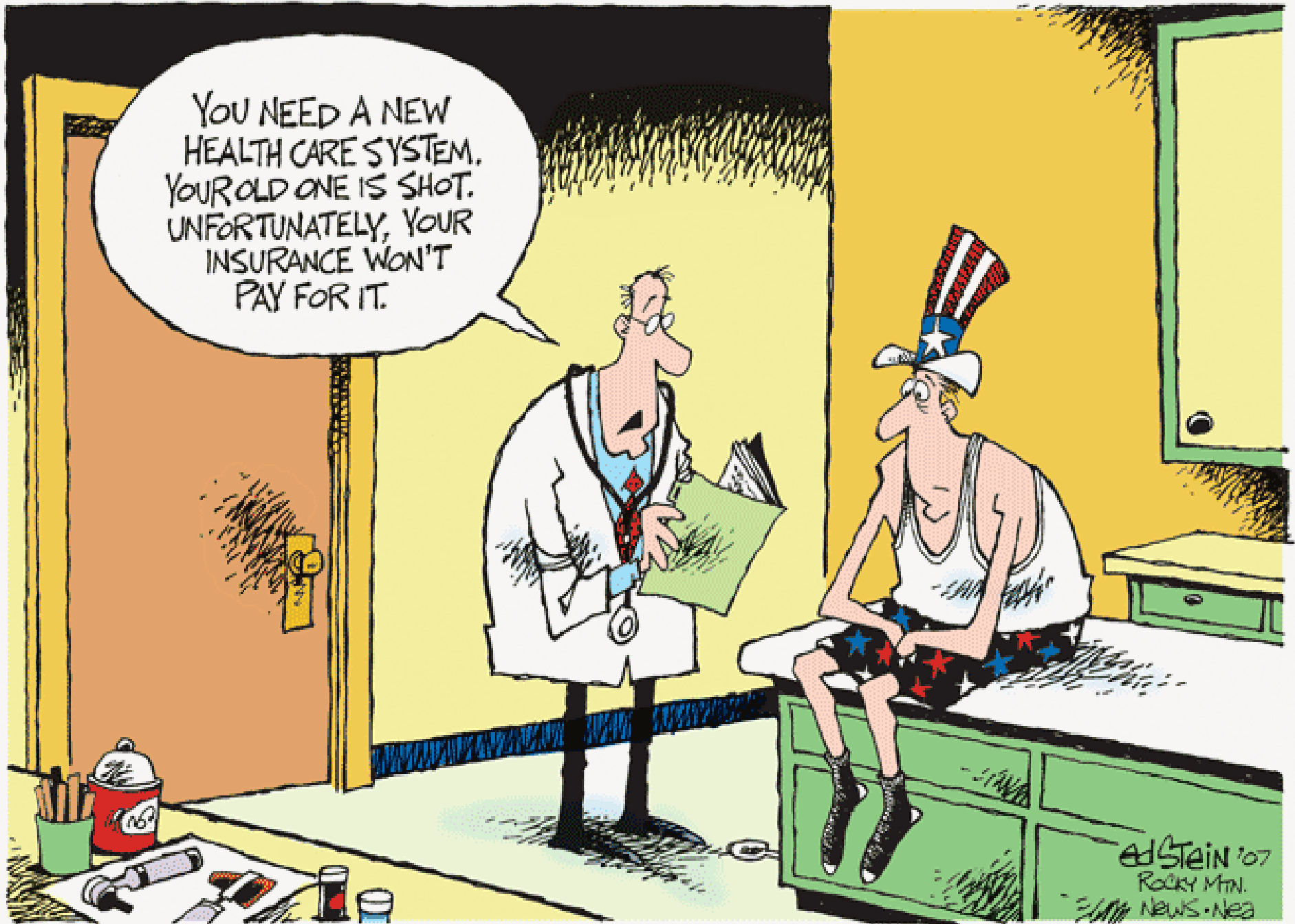
AMBULATORY CARE FOR THE 21ST CENTURY

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CDR/MC/USN

The views expressed in this presentation are those of the authors and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, nor the U.S. Government.

YOU NEED A NEW
HEALTH CARE SYSTEM.
YOUR OLD ONE IS SHOT.
UNFORTUNATELY, YOUR
INSURANCE WON'T
PAY FOR IT.

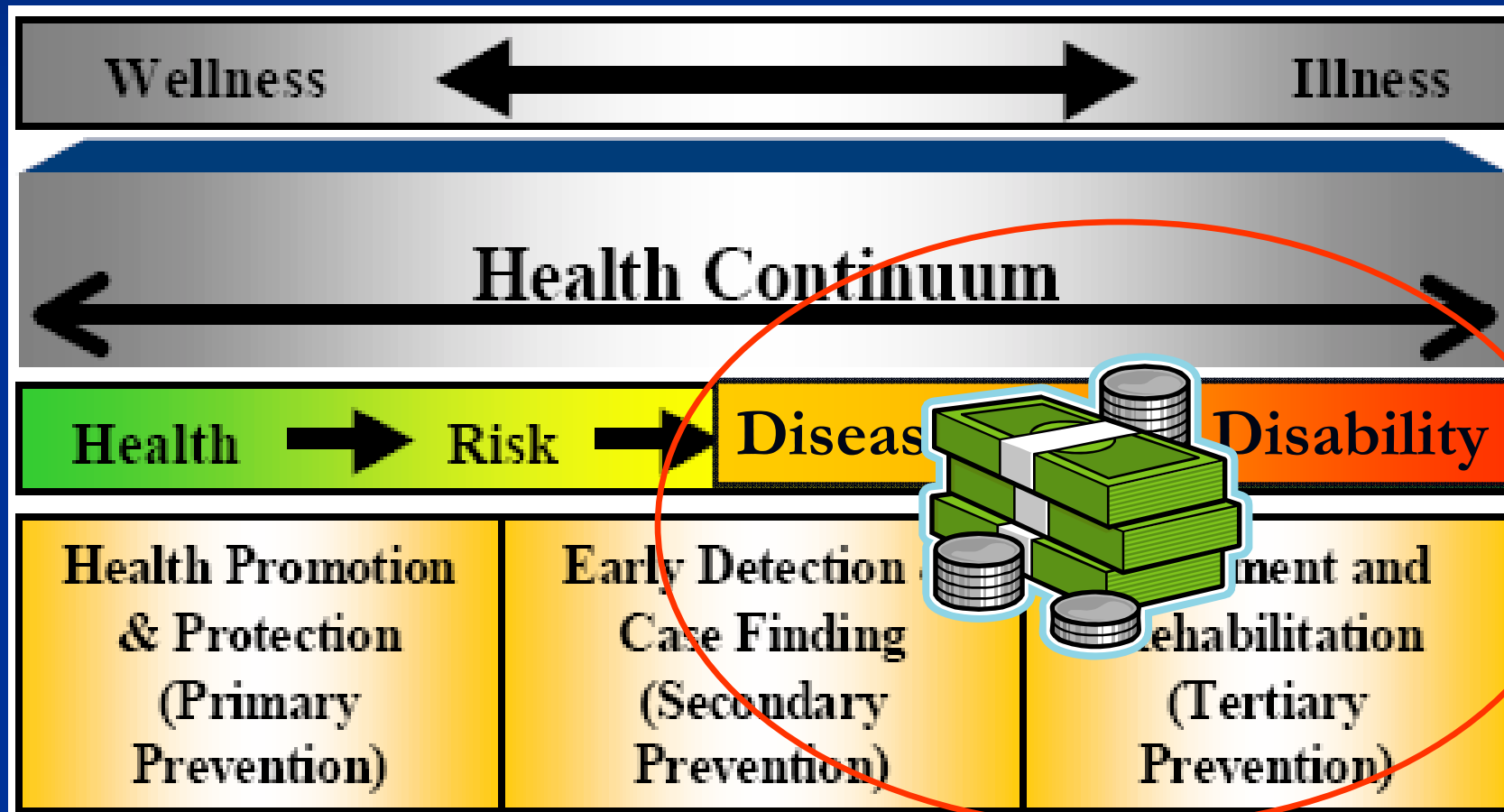


edStein '07
ROCKY Mtn.
NEWS-NEA

What's Wrong with our Health Care System?

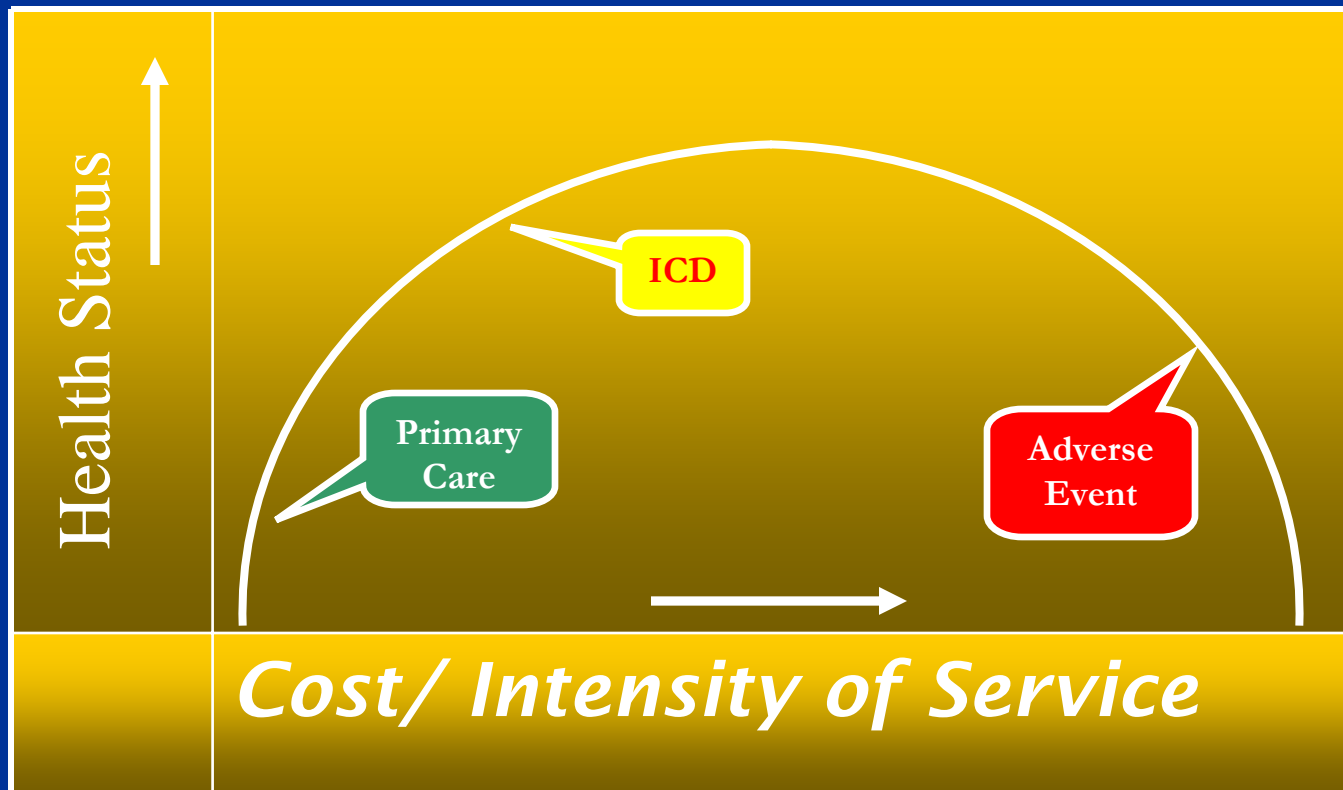
- Cost ≠ Quality
 - 16% of GDP
 - 2X all other developed nations
 - Ranked 19th in all quality health indicators (OECD Report)
 - Life expectancy for all demographics rank among the bottom
 - The Uninsured: In this, the richest country in the world, there are 50 million uninsured people.

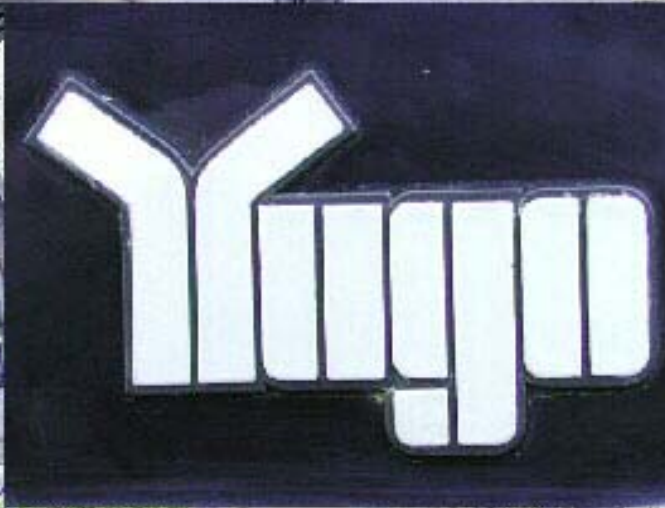
Current Health Care Model



Cost vs. “Product”

There is a relationship between cost and health status improvement:





<http://peter.mcnabbs.org>

Tuning the Yugo

- Disease Management
- Population Health
- P4P
- PBB
- Balance Score Cards
- LSS
- Microsystems



Primary Care: What's My Role?

- What are your Challenges?
 - Staffing
 - Information Management
 - System Support
 - Funding
 - Patient and Staff Buy-In
 - Facilities Limitations
 -others

Medical Home Model of Care

- Holistic Approach
 - Partnership with Patients and Families
- Comprehensive
 - Spectrum from wellness to end of life
- Coordinated
 - Team Approach
- Patient-Centered
 - Enhanced Access
 - Consistent PCM Continuity

CONTINUOUS RELATIONSHIP

Team-Based
Healthcare
Delivery

Population
Health

Improved
Access to
Care

Patient-Centered
Care

Advanced IT
Systems

Refocused
Medical Training

Decision Support
Tools

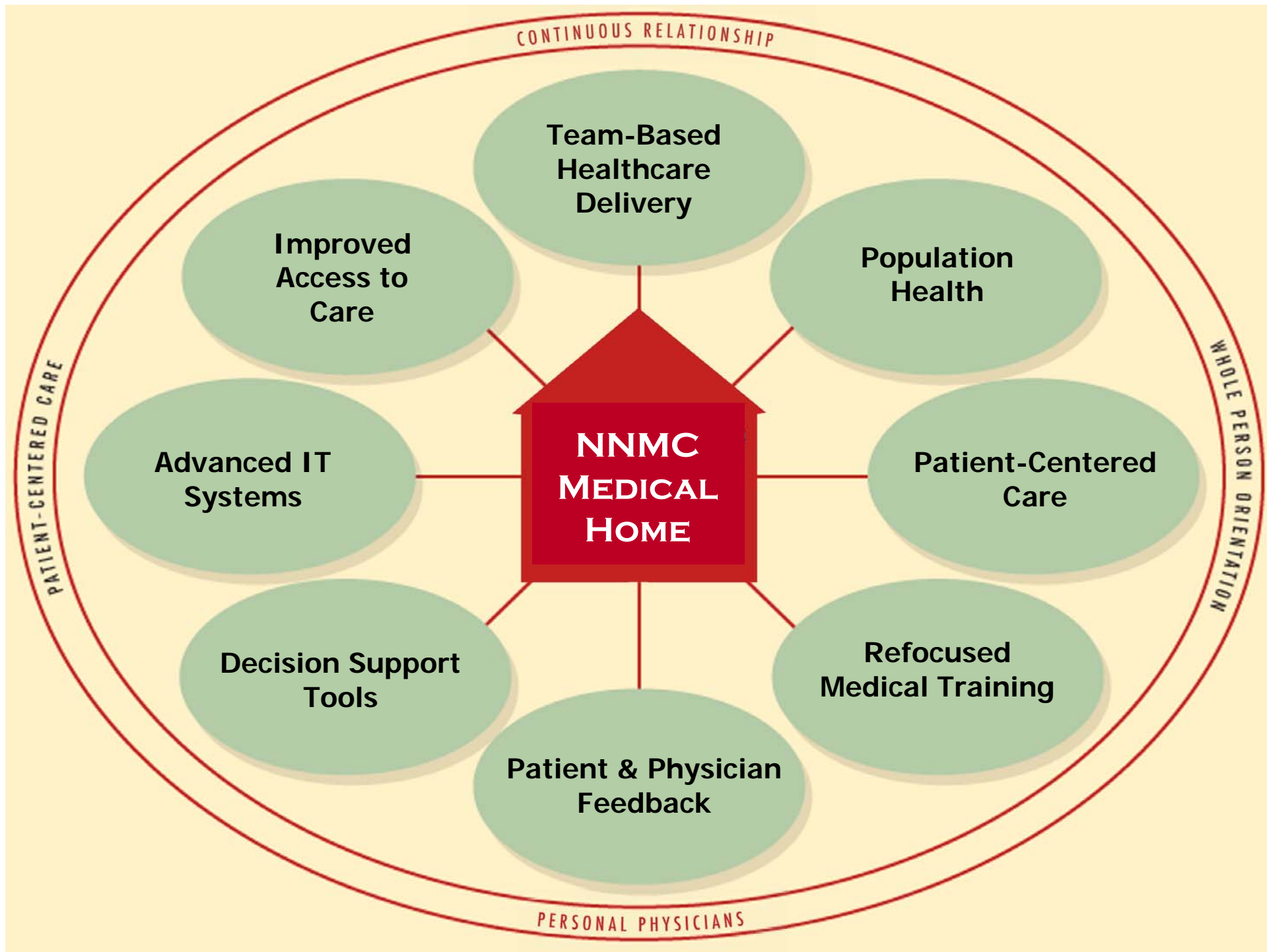
Patient & Physician
Feedback

**NNMC
MEDICAL
HOME**

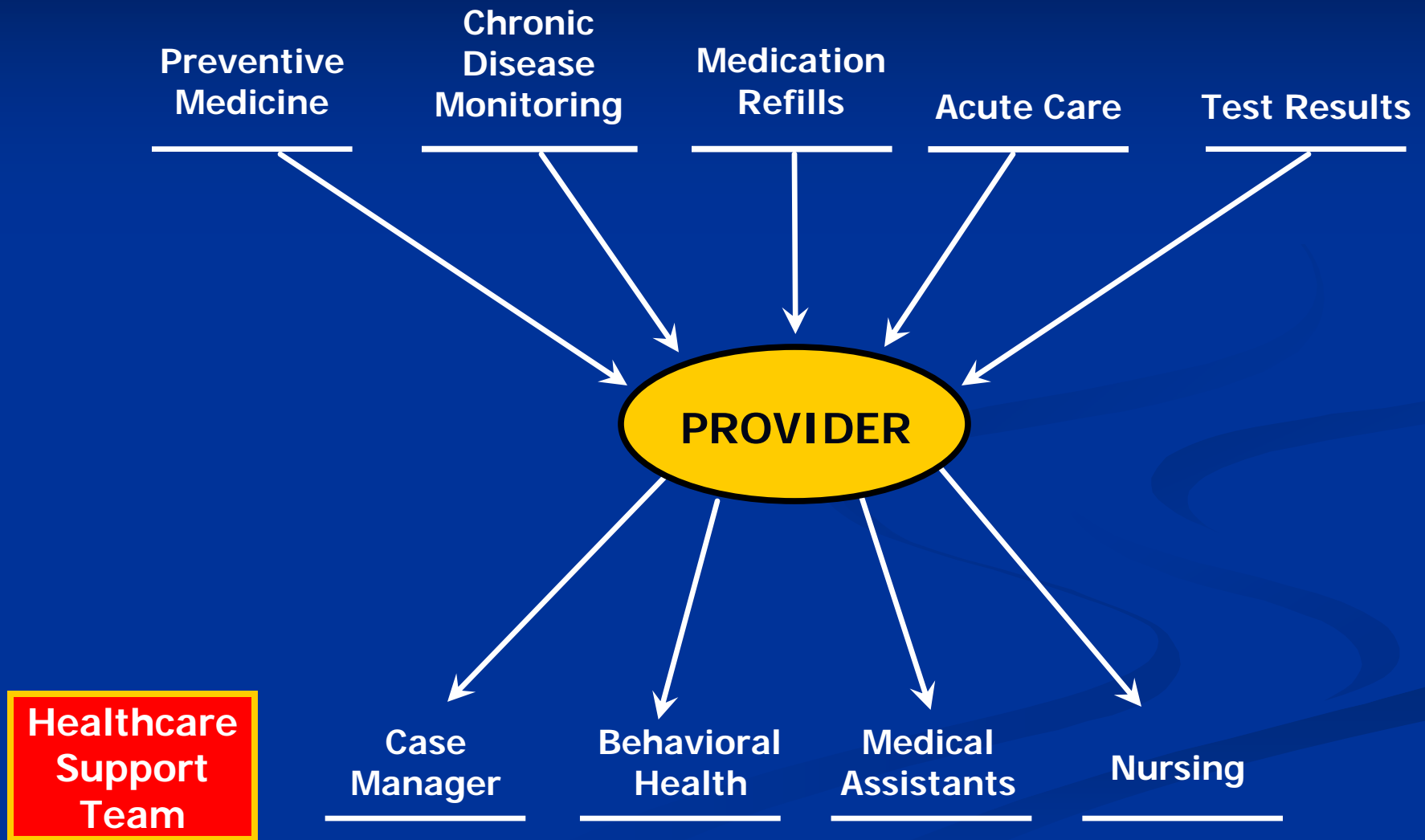
WHOLE PERSON ORIENTATION

PATIENT-CENTERED CARE

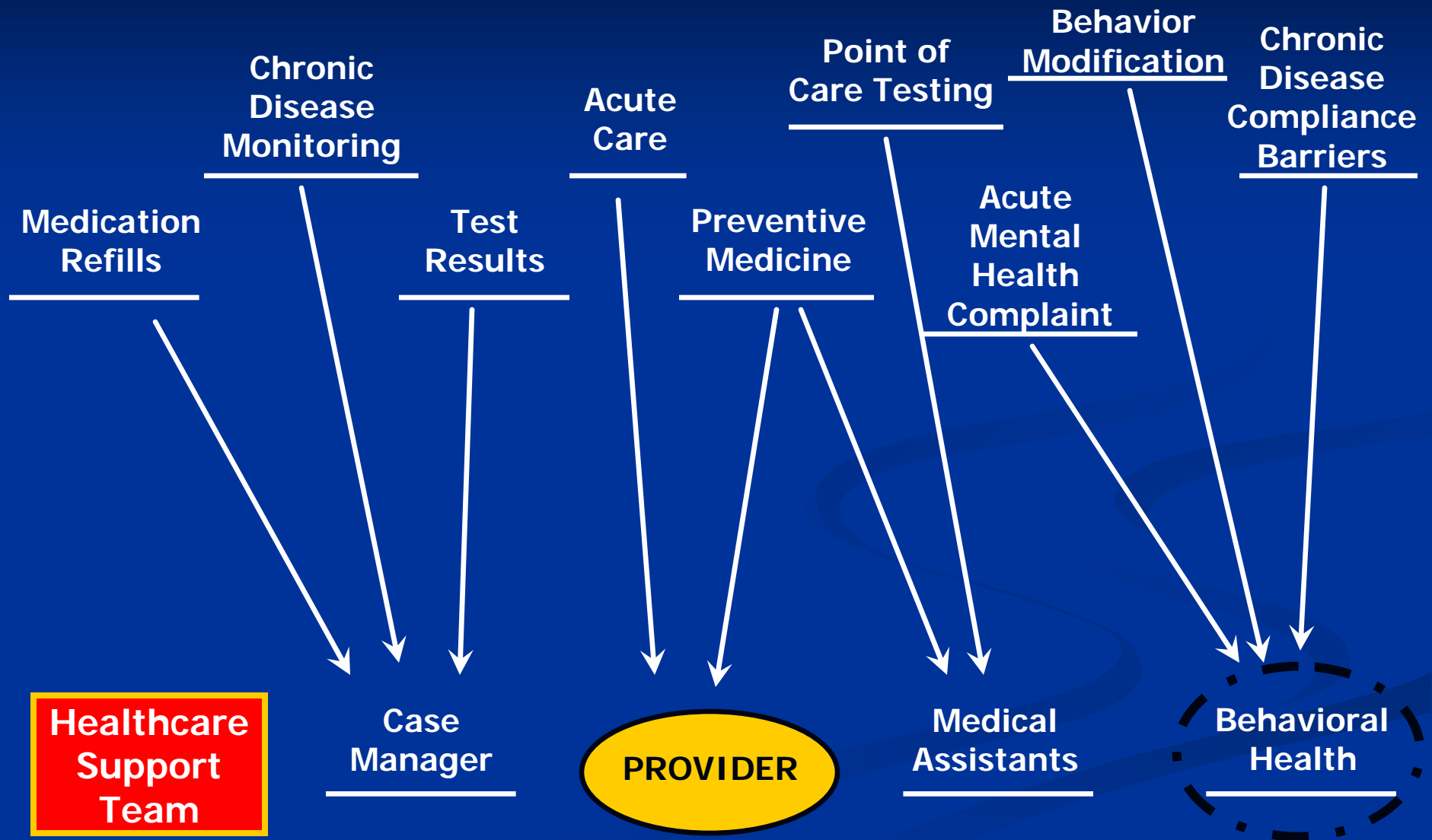
PERSONAL PHYSICIANS



Traditional Work Flow Design



Parallel Work Flow Design



Health Care Delivery Team

- Team Concept (Clinical Micropractice): IM, FM, Non-Physician Provider, RN, LPN and clerical support
 - Collaborative: All members engaged in preventive and chronic care
 - Team members work up to level of training
- Integrated care model:
 - Behavioral Health into the delivery system.
 - Self management Support
- Proactive preventive and chronic care
 - Appointing: Data driven and patient-centered
- Coordination

Population Health

- Clinical Micropractice:
 - Responsible for manageable population
 - Reports and Daily Action Lists
 - Disease Management
 - Preventive Care
 - Coordination
- Quality Health Metrics
 - Promote Best Practices

Improved Access to Care

- Point of Care Appointing
 - Subspecialty care
 - Ancillary services
- Point of Care Behavioral Health
 - Removing barriers to obtaining necessary interventions
- Chronic/Preventive Care
 - Proactive appointing
- Open Access
 - Patients are seen when they need to be and when they want to be

Patient-Centered Care

- Patient advisory council
 - Medical Home planning
 - Longitudinal
- Evidence based design
 - Optimal Healing environment
- Improved access
- Reduced wait times / Increased Patient Satisfaction
- Encourage patient and family self management

IT Requirements

- Clinic Level Actionable Dashboard
 - Population Management
 - Adaptable and Flexible
 - Local Control of Data

- Secure, Web-Based Personal Health Record
 - Patient communication portal
 - Virtual office visits / Check-in capability
 - Self management tools
 - Personal Health Record

- Evidence Based Medicine: Point of Care
 - Decision Support

- Quality Improvement / Systems Competency Tool

Medical Home Management Portal

Parameter Region

Reports

Build Team

WRNMMC Medical Home Preview

MTF



Measurement



➤ HEDIS definition

Explanation of inclusions and exclusions

Provider Panel

<u>Provider Name</u> ▲	<u># Total Patient</u>	<u># Current Admission</u>	<u># Last Month Admission</u>	<u># Current ER</u>	<u># Last Month ER</u>	<u># Current Consult</u>	<u># Last Month Consult</u>
ADE	718	0	2	2	20	0	0
ALL	1	0	0	0	0	0	0
AUS	158	0	0	0	1	0	0
BER	1	0	0	0	0	0	0
BEL	106	0	0	1	3	0	0
BLA	226	1	2	1	7	0	0
BLA	10	0	0	0	0	0	0

Medical Home Management Portal

PCM with their patient mammogram Number Check

HEDIS® 50th-75th-90th percentiles: National Committee for Quality Assurance (NCQA), State of Health Care Quality, 2007.

Benchmark	HEDIS® Percentiles (50-75-90)
women age 42-69	68.7%---73.4%---76.7%
women age 42 - 51	65.3%--69.8%--73.8%
women age 52 – 69 *	71.8%- 76.3%-80.1%

Benchmarks

- Below 75th percentiles
- Between 75th-90th percentiles
- Above 90th percentiles

Compliance	# Eligible	Percentage
% Met HEDIS Mammogram Goal(52-69)	2907	81.4% ●
% Met HEDIS Mammogram Goal(42-51)	2247	73.4%
% Met HEDIS Mammogram Goal(42-69)	5154	77.9%

Overall Percentages for eligible patients enrolled to MTF.

Columns are sortable.

<u>Provider Name</u>	<u># eligible patient (42-69)</u> ▼	<u>% Breast Cancer Screening women age 52-69</u>	<u>% Breast Cancer Screening women age 42-69</u>	<u>% Breast Cancer Screening women age 42-51</u>
<u>R/</u>	367	80 ●	74.1 ●	72.9 ●
<u>K/</u>	282	74.4 ●	72.3 ●	76.7 ●
<u>H/</u>	281	72.1 ●	65.1 ●	62.5 ●
<u>M/</u>	264	81.9 ●	79.9 ●	82.3 ●
<u>Q/</u>	261	75.3 ●	72.4 ●	73.3 ●


Medical Home Management Portal

Call Status Count

Final Call Status	Unique Patient Count
CONTACT PATIENT BUT NO APPOINTMENT MADE	107
LEFT MESSAGE	53
MADE AN APPOINTMENT	33
NO ANSWER	11
WRONG NUMBER OR NO NUMBER TO CALL	19
YET NOT CALLED	447
report total:	670

Telephone call results for provider panel.

Provider configured alerts

Patient Name	Pt Age	A1c Date HEDIS Flag	A1c Value HEDIS Flag	LDL Date HEDIS Flag	LDL Value HEDIS Flag	Cervical Screening HEDIS Flag	Breast Screening HEDIS Flag	Colon Screeni HEDIS Flag	Call Status 
DUJ	62.5	-	-	-	-	-	●	●	CONTACT PATIENT BUT NO APPOINTMENT MADE
BRG	27	-	-	-	-	-	-	-	CONTACT PATIENT BUT NO APPOINTMENT MADE
TEL	56.7	●	●	●	●	●	●	●	CONTACT PATIENT BUT NO APPOINTMENT MADE
PEP	49.8	-	-	-	-	●	●	-	CONTACT PATIENT BUT NO APPOINTMENT MADE
GAF	56.7	-	-	-	-	●	●	●	CONTACT PATIENT BUT NO APPOINTMENT MADE
GOJ	55.7	●	●	●	●	-	-	●	CONTACT PATIENT BUT NO APPOINTMENT MADE
ROI	78.1	-	-	-	-	-	-	●	CONTACT PATIENT BUT NO APPOINTMENT MADE

Web-Based Personal Health Record

Colleague to Colleague Connectivity

Home Messages eScript Results Patients Broadcast Settings

Message to Colleague

Recipients **1**

Provider or Practice John Roberts, MD - Emeryville Family CC FYI [Add Link](#)

[Add](#)

Subject CC Action [Add Link](#)

Message

[Compose Message](#) [View Message History](#) **2**

[Message Templates](#) | [Check Spelling](#)

Dear Dr. Roberts,

I am writing regarding a patient seen here by Dr. Gamer, Joe Prime. You saw him regarding his CHF, and prescribed him a beta blocker. Dr. Gamer recently reduced the dose of his beta blocker due to some serious side effects, and is adding a calcium channel inhibitor.

Attachments [Add](#) Web Links [Add](#)

Attach Patient Health Record **3**

Name or MRN#

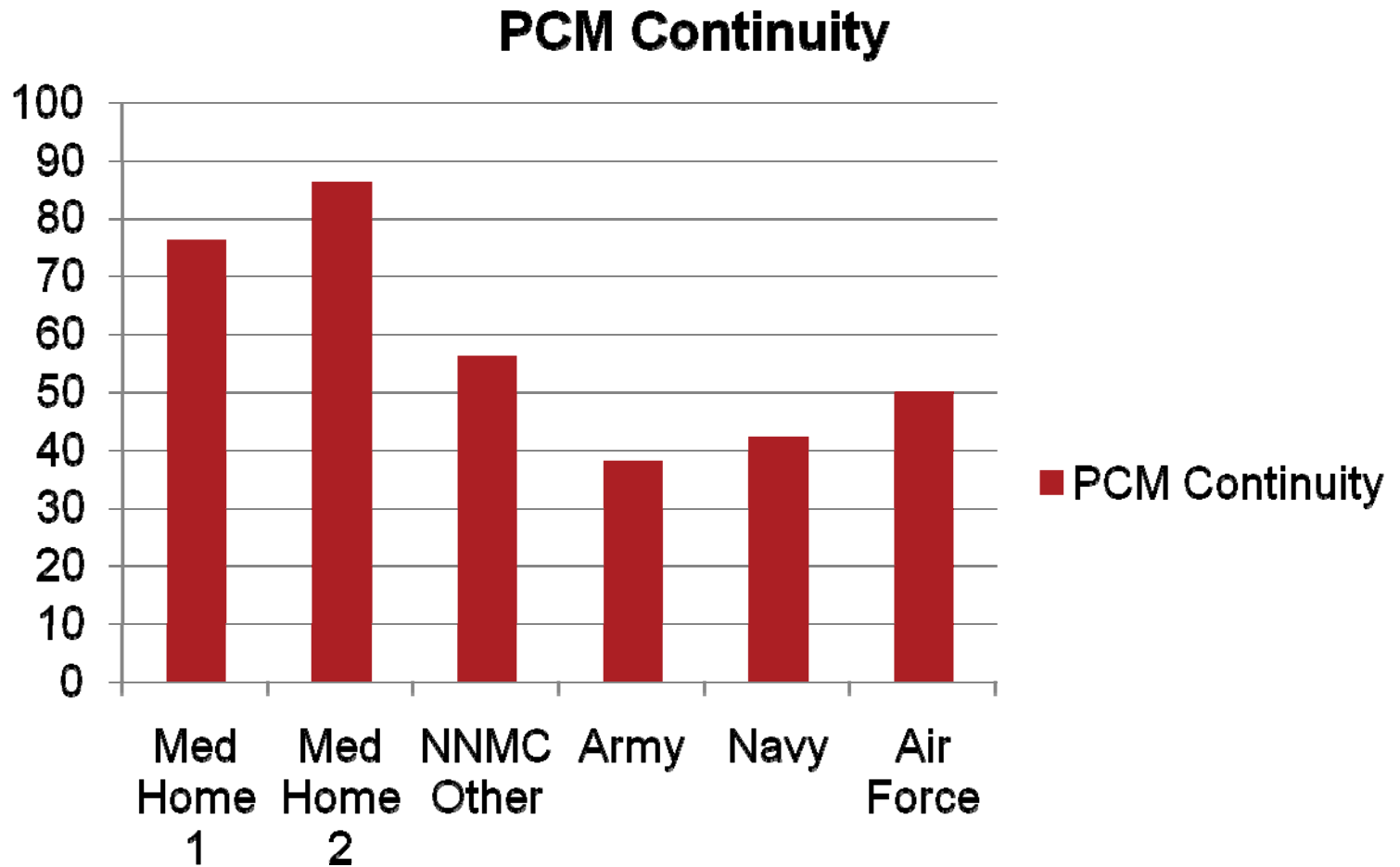
1. Flexible communication

2. Messaging tools

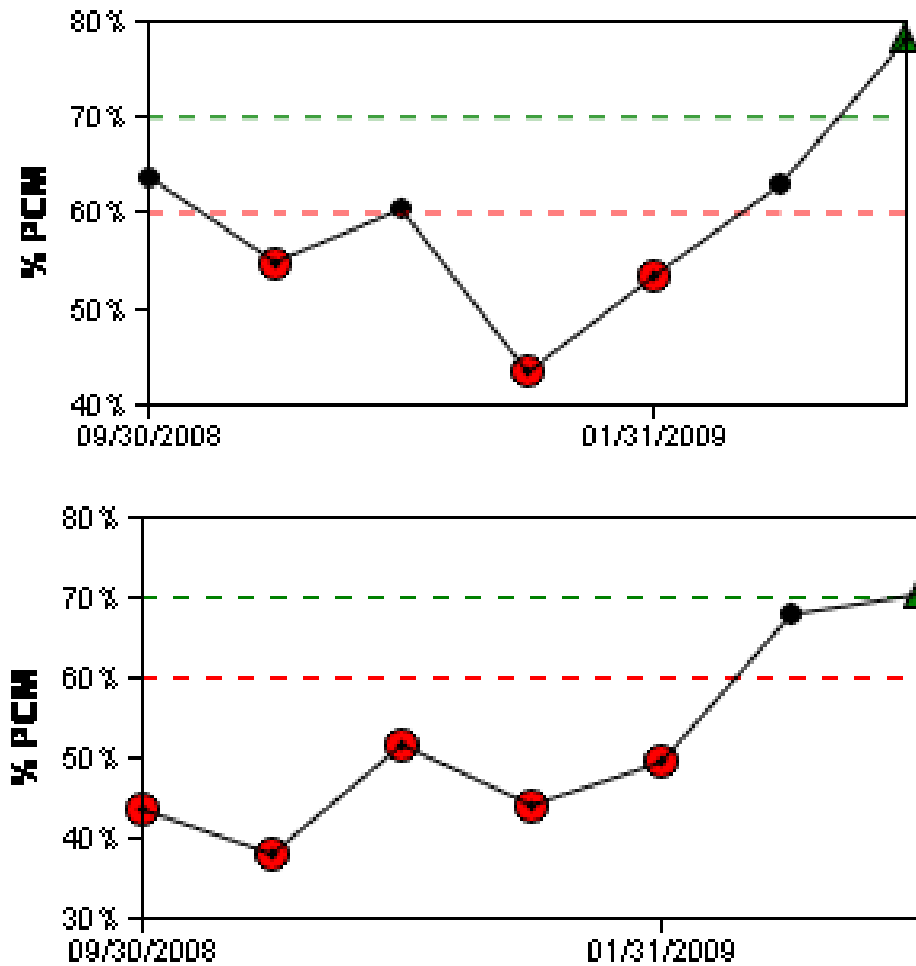
3. Patient record sharing

PCM Continuity

13 Sep 08 – 3 Jan 09

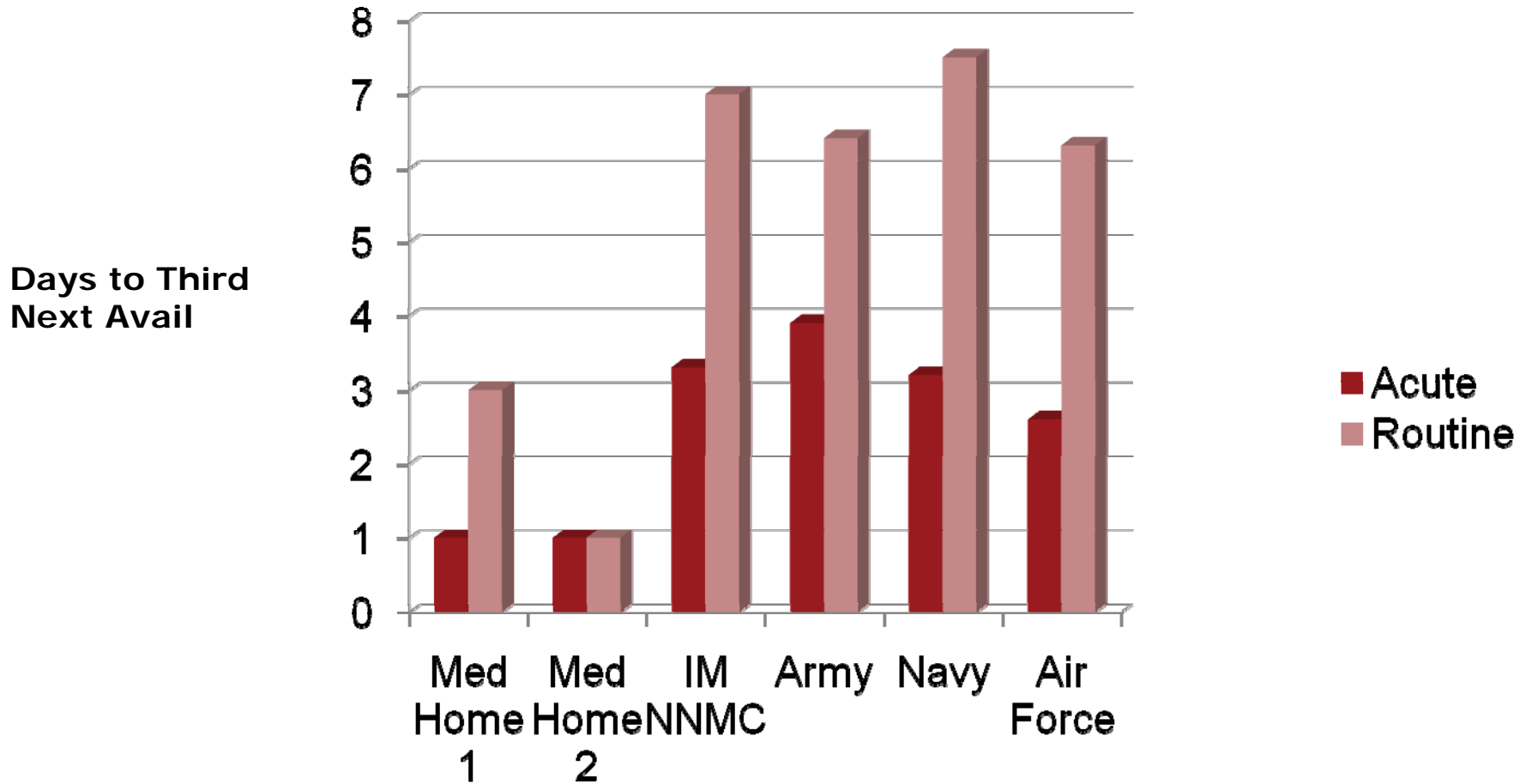


PCM Continuity: Teams 3&4



Source: CDR Maureen Padden, Deputy Commander NCA

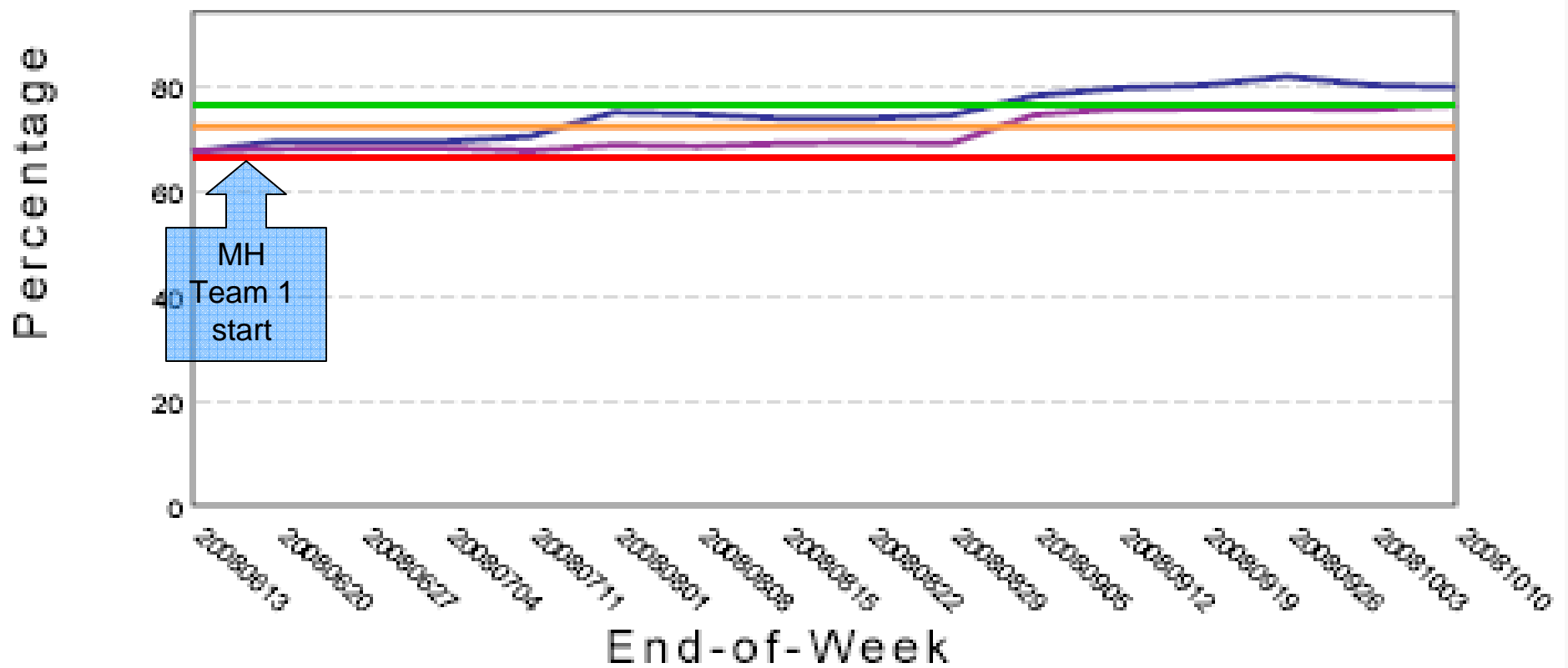
Days To Third Next Available Medical Homes vs. Non Medical Homes



Results

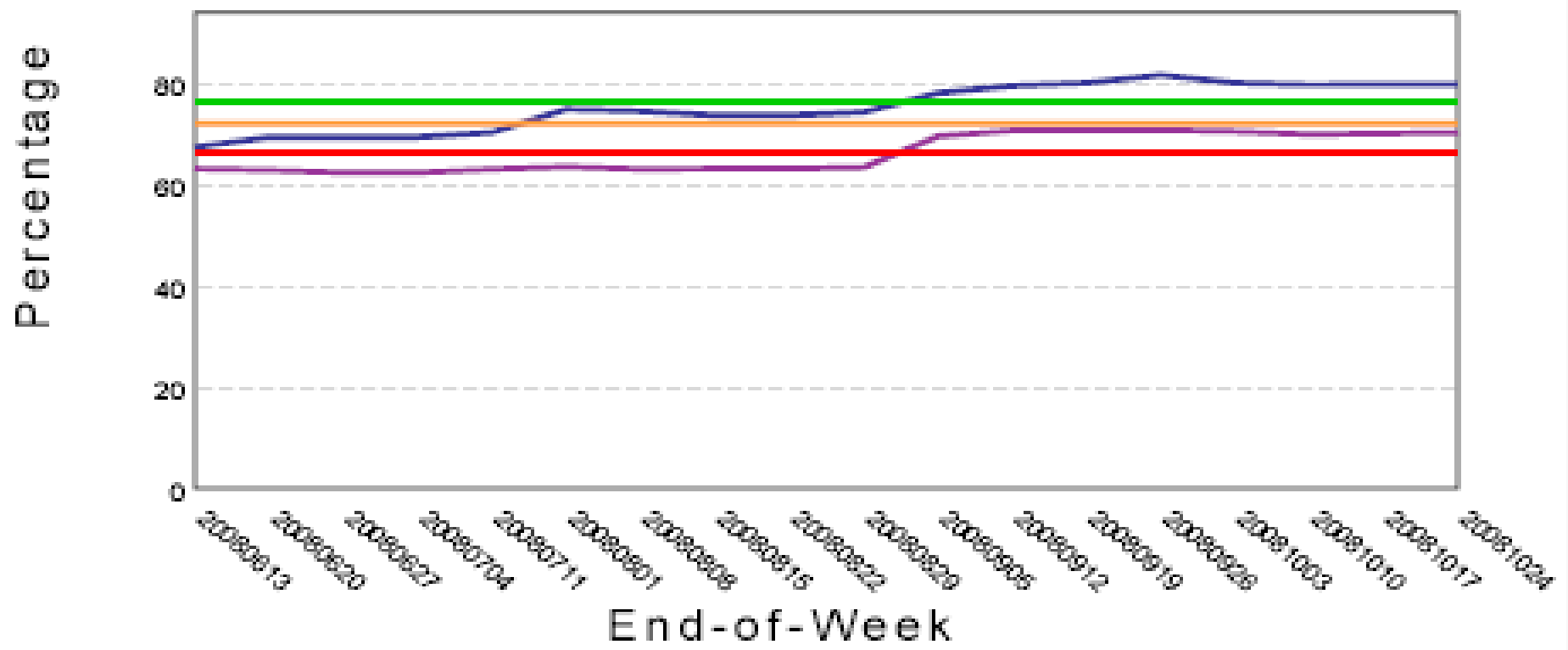
- Medical Home Team HEDIS statistics from 50% to 90%
 - Hemoglobin A1C done
 - LDL done
 - Mammogram done
- NNMC Results as a whole improved
 - Mammograms
 - Colorectal Cancer Screening
 - Hemoglobin A1C done

Diabetes Annual A1c Test Result



Diabetes Annual A1c Test Result

■ NNMC MED HOME 1 ■ 75 Percentile Goal
■ ALL WRAMC ■ 50 Percentile Goal
■ 90 Percentile Goal



HEDIS Breast Cancer Screening

Library of NNMC performance against clinical benchmarks.

Content Editor Web Part

FOCUS - Percentage of women enrolled to a MTF, age 52-69, who had a mammogram in the previous 24 months.

Calculations

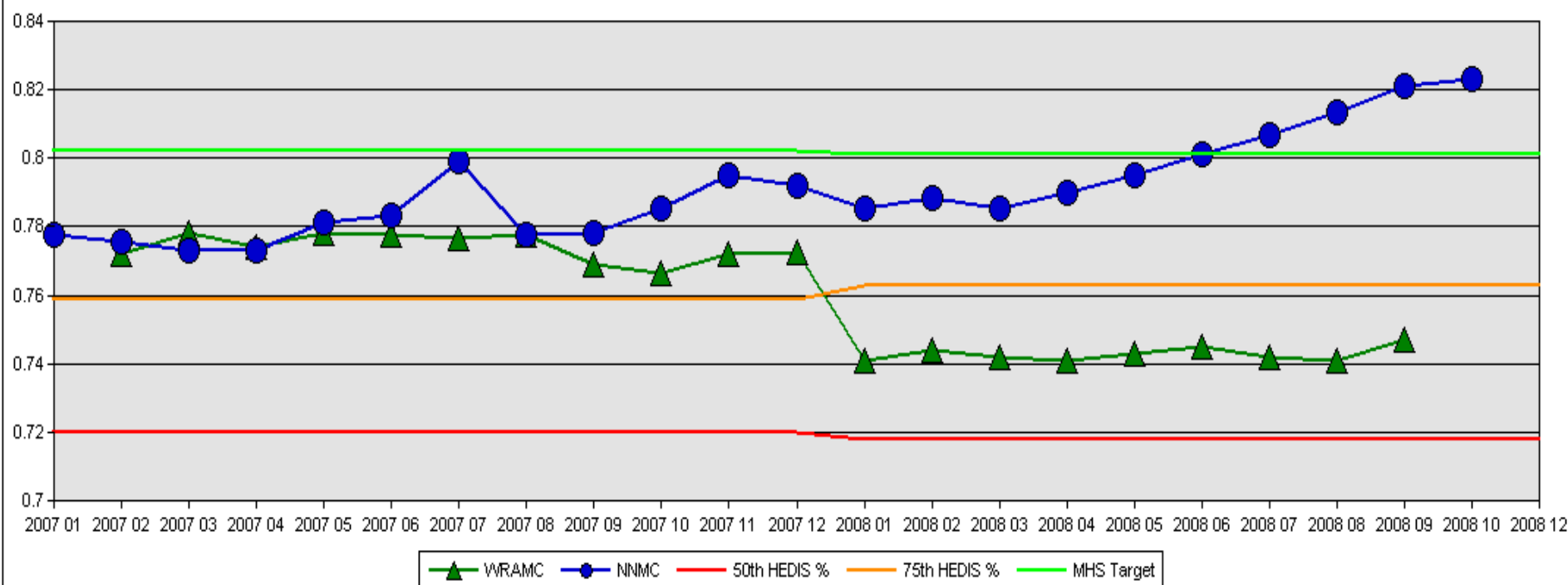
Numerator = Number of women continuously enrolled to an MTF, age 52-69, who had one or more mammograms in the previous 24 months in MTF or Network care.

Denominator = Number of women enrollees as of the last day of the measurement month, age 52-69, continuously enrolled during the preceding 24-month period. A woman whose coverage lapses for more than two months (60 days) during each previous 12-month period of enrollment is not considered continuously enrolled.

[RAW DATA TABLE](#) [MAIN DASHBOARD](#)

Breast Cancer Screening (age 52-69)--This is the MHS-targeted metric

Save | Connect to Data | Toolbar | Show Field List



Things to Consider

- Culture Change: Don't Underestimate
 - Training and Team Building
- Success depends on work flow modification
 - IT systems developed to support work flow
- Productivity: Does it Matter?
 - How do we Measure Nontraditional Care?
- Staffing Model: What is Optimal?
- Transformation: Where to Start
 - Based on Patient Demographics
- Wellness focus: Not Separate from Primary Care



327

LAB →
ER →
X-RAY →

SORRY NOT IN SERVICE

D. Smith 2001

Discussion



OUTCOME MEASURES

WHERE'S THE EVIDENCE!

Health Care Utilization

- As proportions of primary care physicians increases, health care utilization decreases.
 - Inpatient hospitalizations
 - Emergency department visits
 - Total surgeries
 - *Controlled for population and physician variables

CLINICAL RESEARCH STUDY

THE AMERICAN
JOURNAL of
MEDICINE

Health Care Utilization and the Proportion of Primary Care Physicians

Steven J. Kravet, MD, MBA,^a Andrew D. Shore, PhD,^b Redonda Miller, MD, MBA,^a Gary B. Green, MD, MPH, MBA,^c Ken Kolodner, ScD,^a Scott M. Wright, MD^a

^aDepartment of Medicine, Johns Hopkins University School of Medicine, Baltimore, Md; ^bDepartment of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, Baltimore, Md; and ^cDepartment of Emergency Medicine, Johns Hopkins University School of Medicine, Baltimore, Md.

ABSTRACT

BACKGROUND: The impact of primary care physicians on health care utilization remains controversial. Some have hypothesized that primary care physicians decrease health care utilization through enhanced coordination of care and a preventive care focus.

METHODS: Using data from the Area Resource File (a Health Resources and Services Administration US county-level database) for the years 1990, 1995, and 1999, we performed a retrospective cross-sectional analysis with generalized estimating equations to determine if measures of health care utilization (inpatient admissions, outpatient visits, emergency department visits, and surgeries) were associated with the proportion of primary care physicians to total physicians within metropolitan statistical areas.

RESULTS: The average proportion of primary care physicians in each metropolitan statistical area was 0.34 (SD 0.46, range 0.20-0.54). Higher proportions of primary care physicians were associated with significantly decreased utilization, with each 1% increase in proportion of primary care physicians associated with decreased yearly utilization for an average-sized metropolitan statistical area of 503 admissions, 2968 emergency department visits, and 512 surgeries (all $P < .03$). These relationships were consistent each year studied.

CONCLUSIONS: Increased proportions of primary care physicians appear to be associated with significant decreases in measures of health care utilization across the 1990s. National efforts aimed at limiting health care utilization may benefit from focusing on the proportion of primary care physicians relative to specialists in this country.

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KEYWORDS: Health expenditures; Primary care; Resource allocation

Kravet SJ, et al. *Health care utilization and the proportion of primary care physicians.* Am J Med. 2008 Feb;121(2):142-8.

Outcomes / Cost

- Patients with severe chronic diseases who live in states that rely more on primary care have:
 - Lower Medicare spending
 - Inpatient reimbursements and Part B payments
 - Lower resource inputs
 - Hospital beds, ICU beds, total physician labor, primary care labor, and medical specialist labor
 - Lower utilization rates
 - Physician visits, days in ICUs, days in the hospital, and fewer patients seeing 10 or more physicians
 - Better quality of care
 - Fewer ICU deaths and a higher composite quality score

MH Success Stories

- Denmark has organized its entire health care system around patient-centered medical homes, achieving the highest patient satisfaction ratings in the world.
- Primary care physicians are highly accessible and supported by an outstanding information system that assists them in coordinating care.
- Among Western nations, Denmark has among the lowest per capita health expenditures and highest primary care rankings.

C. Beal, et al. *Closing the Divide: How Medical Homes Promote Equity in Health Care: The Commonwealth Fund 2006 Health Care Quality Survey*, The Commonwealth Fund, June 2007

MH Success Stories

- The North Carolina Medicaid program enrolls recipients in a network of physician-directed medical homes.
- In 2004 an upfront \$10.2 million investment **saved \$244 million in overall healthcare costs.** Similar results were seen in 2005 and 2006.

The Bottom Line

- Care delivered by primary care physicians in a Patient-Centered Medical Home is consistently associated with
 - Better outcomes
 - Reduced mortality
 - Fewer hospital admissions
 - Lower utilization
 - Improved patient satisfaction
 - Lower Cost

Containing Cost

- Long Term Thinking!
- Increased up front costs with long term improvements in outcomes and ultimate cost savings
- Prevention and Wellness First!
- Chronic Care Management
 - Proactive management of chronic conditions with evidenced based outcome data
 - Reduced complication rates improve morbidity and mortality
 - Long term reductions in health care costs