



UNIVERSITY OF UTAH
HEALTH CARE

Primary Care 3.0: Back to the Future?

2013 CLIC Conference
Big Sky, MT

Michael K. Magill, MD

Professor and Chairman
Department of Family and
Preventive Medicine
University of Utah
School of Medicine
Executive Medical Director
University of Utah
Health Plans



Primary Care 1.0: Solo General Practice





H.A. Moore, MD,
Solo General Practice
Oxford, Ohio
1915-1965

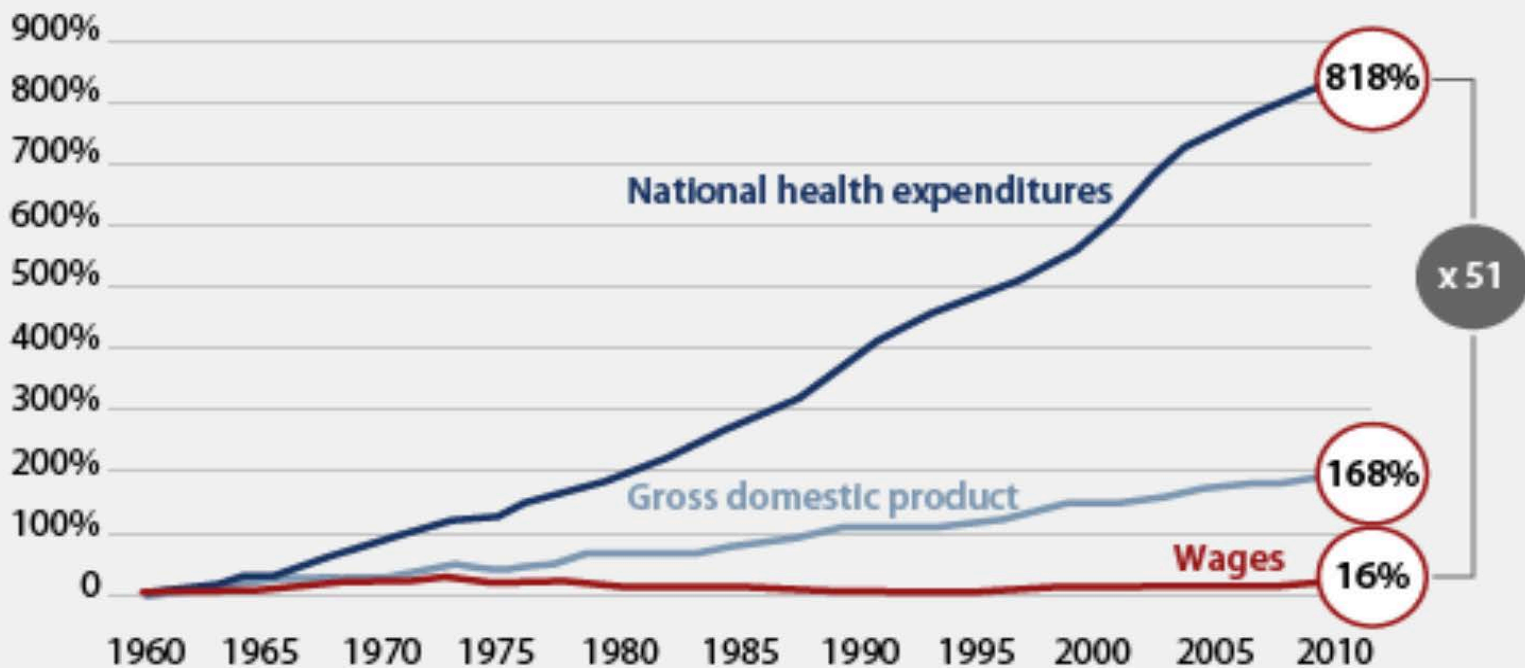




Why redesign health care?

Crisis

The cost of health care in the past 50 years has risen more than 800%, almost 5x the rise in the gross domestic product and over 50x the increase in wages for the average American.



Source: McKinsey, "Accounting for the cost of U.S. Health care" (2011)

Goal of Redesign: The Triple Aim

- Better health
- Better care
- Lower cost



Business Model



Revenue
Enhancement



Cost
Reduction



Achieving the Triple Aim:



“The two major problems in U.S. health care are...

- the way we deliver primary care, and
- the way primary care is financed”

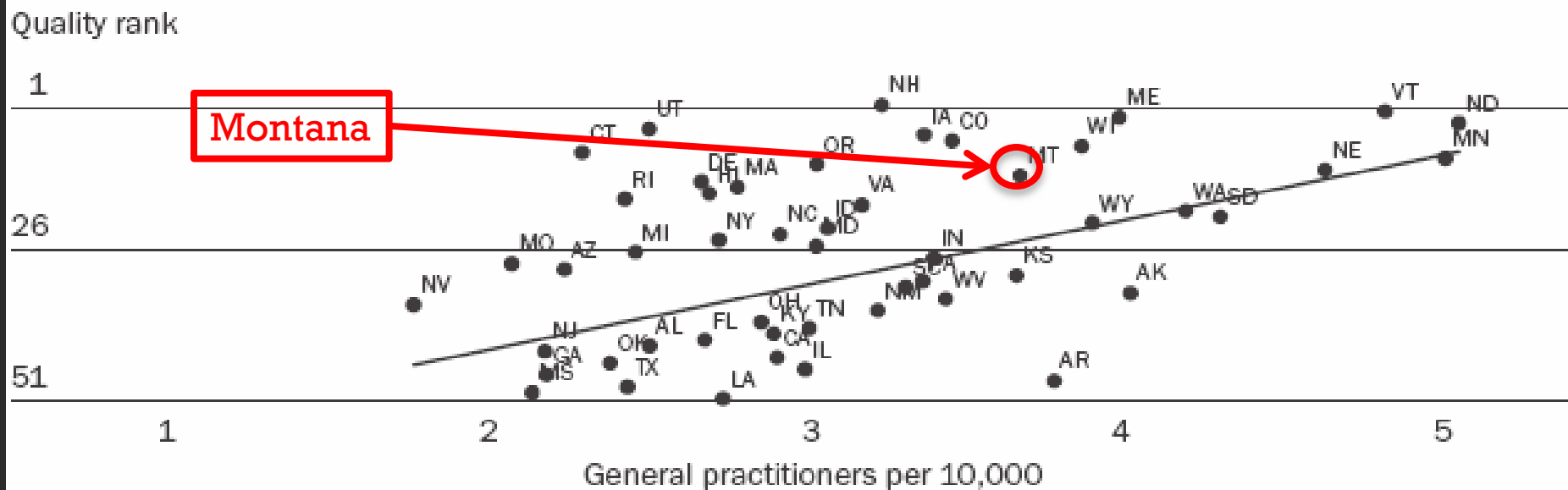
“Primary care is the only natural locus of control of health care quality and costs”



Paul Grundy MD, MPH, FACOEM, FACPM
Director of Healthcare, Technology and Strategic Initiatives, IBM
President, Patient Centered Primary Care Collaborative
Adjunct Professor, Family and Preventive Medicine,
University of Utah School of Medicine

Primary Care = Higher Quality

Relationship Between Provider Workforce And Quality: General Practitioners Per 10,000 And Quality Rank In 2000



SOURCES: Medicare claims data; and Area Resource File, 2003.

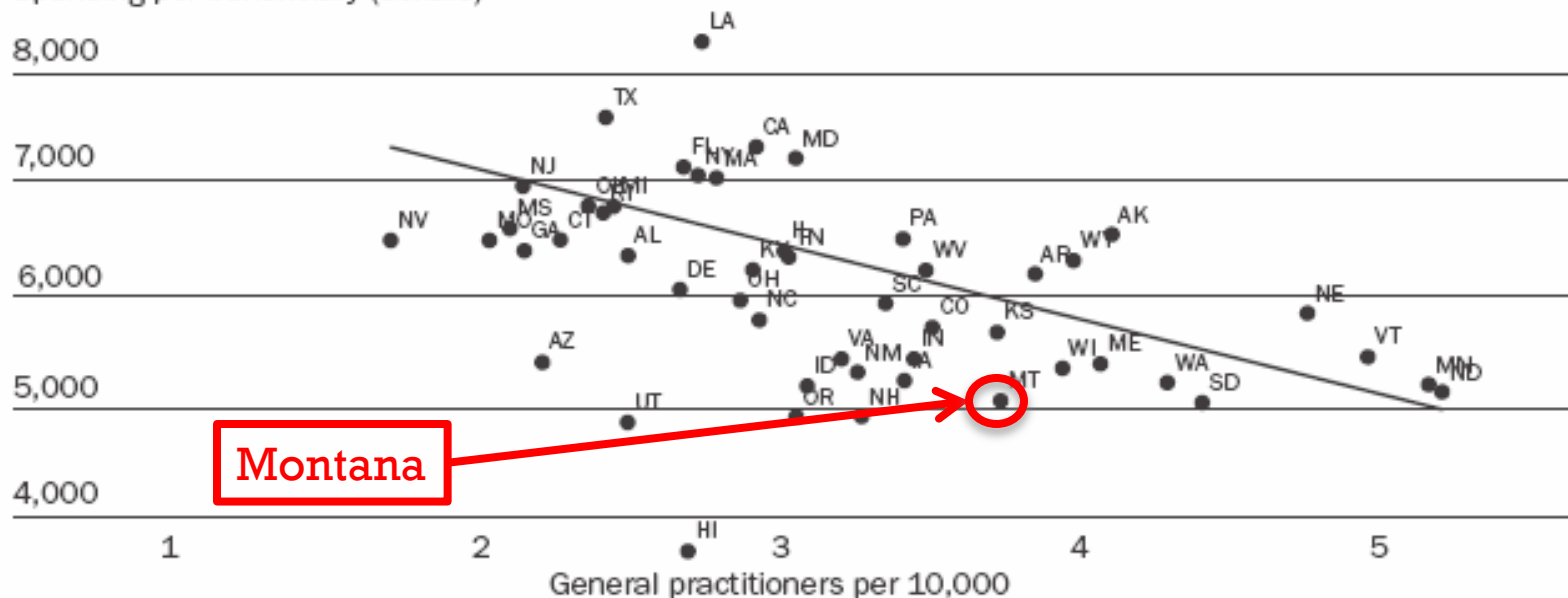
NOTES: For quality ranking, smaller values equal higher quality. Total physicians held constant.

Primary Care = Lower Cost

EXHIBIT 9

Relationship Between Provider Workforce And Medicare Spending: General Practitioners Per 10,000 And Spending Per Beneficiary In 2000

Spending per beneficiary (dollars)



Montana

SOURCES: Medicare claims data; and Area Resource File, 2003.

NOTE: Total physicians held constant.

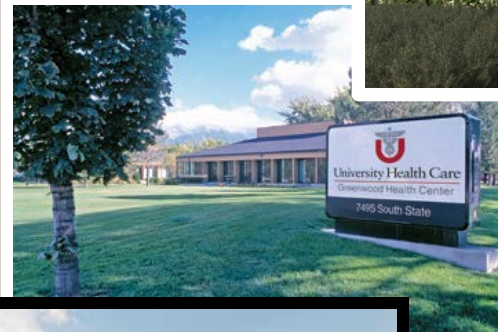
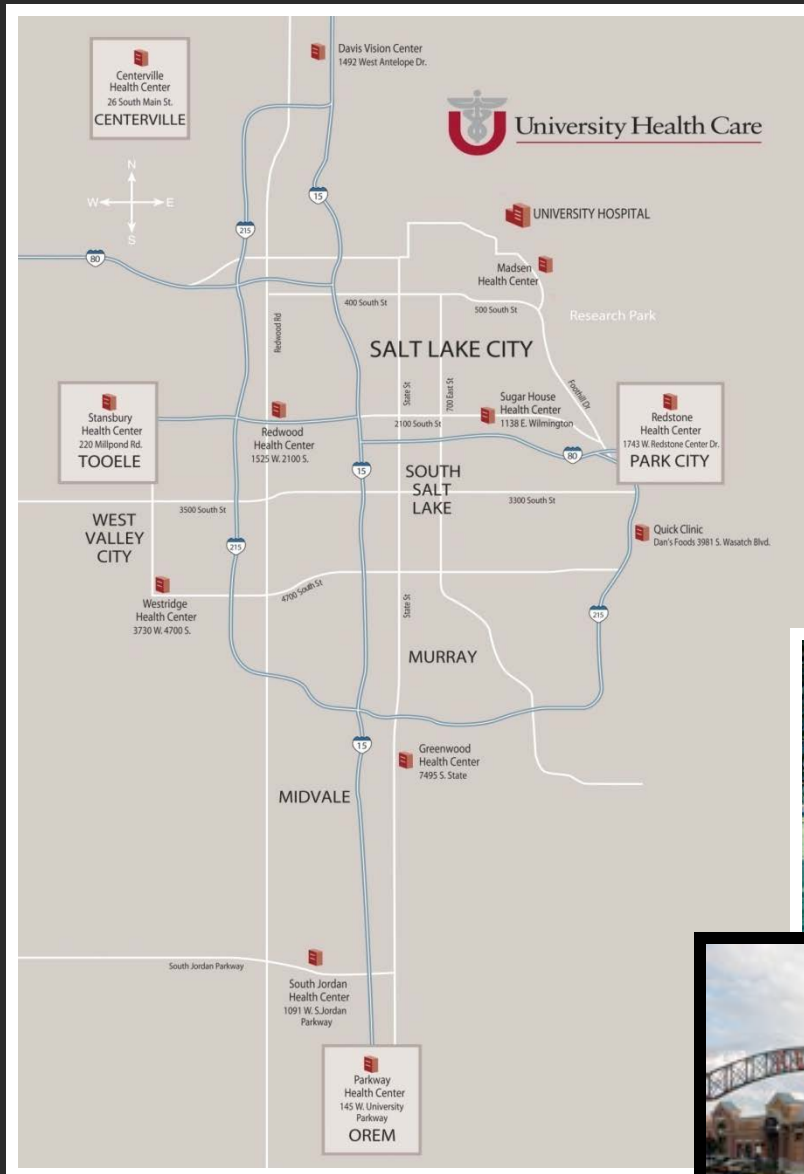
Primary Care 2.0: Patient Centered Medical Home



10 Community Clinics

Visits: 320,000

Active patients: 100,000



Definition: Medical Home



- Comprehensive
- Patient-Centered
- Coordinated
- Continuous
- Accessible
- Quality and Safety
- Others: IT, Workforce, Payment

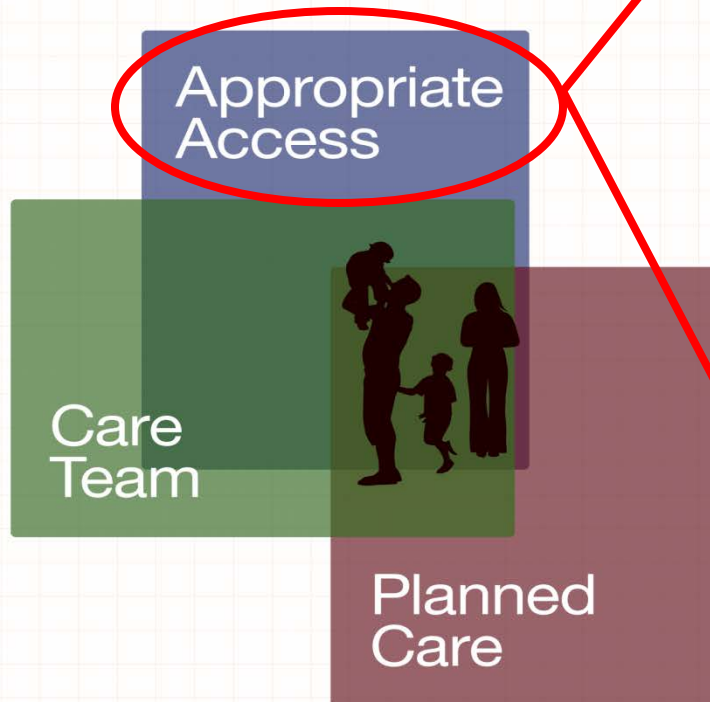


care BY design



University Health Care
Community Clinics

care BY design



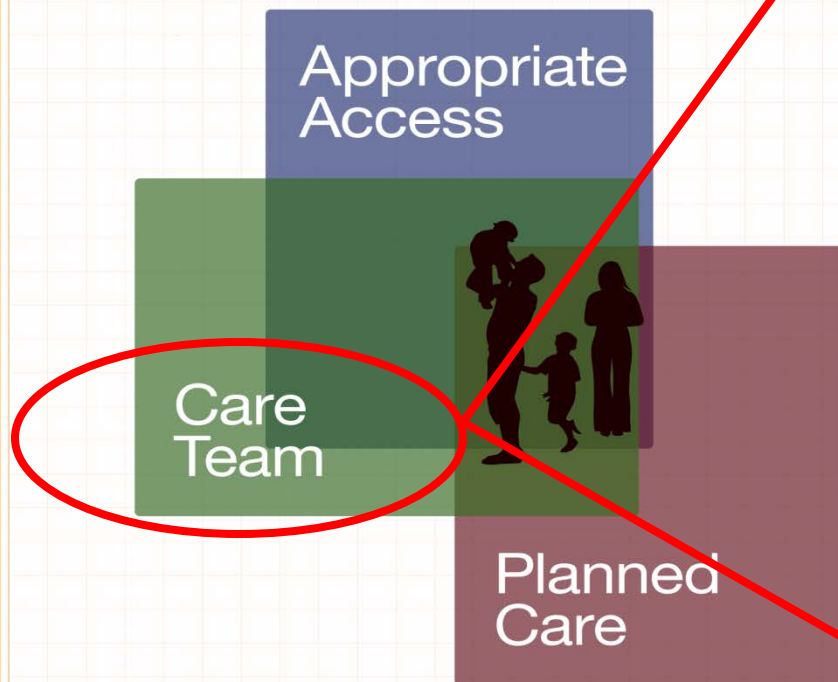
Appropriate Access

- Patient centered care requires access
- Understand acute and chronic care demand
- Balance supply and demand
- Standard appointment types
- Contingency planning
- Balance capacity in the team



University Health Care
Community Clinics

care BY design



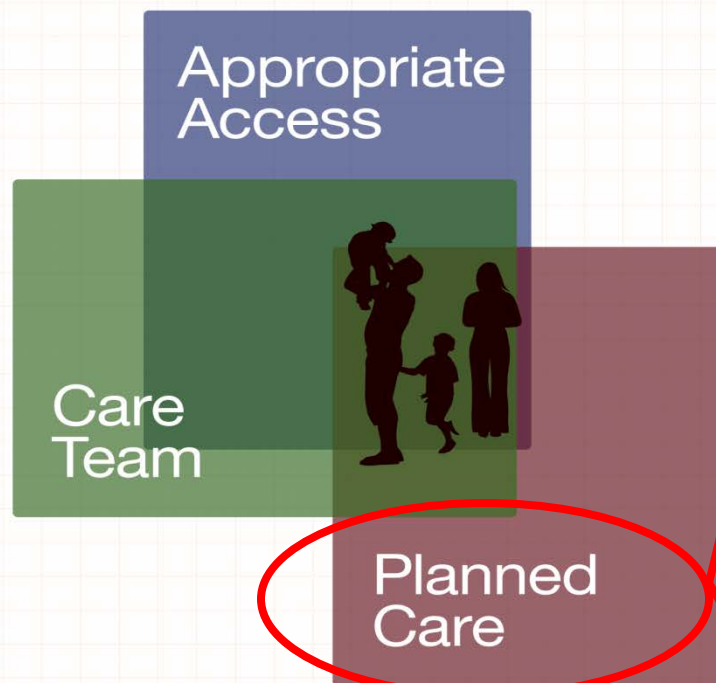
Care Team

- Patient is the center of the team
- Team knows the patient's care plan
- Evidence-based strategies for care
- Maximize skills of team members
- Open and real time communication



University Health Care
Community Clinics

care BY design



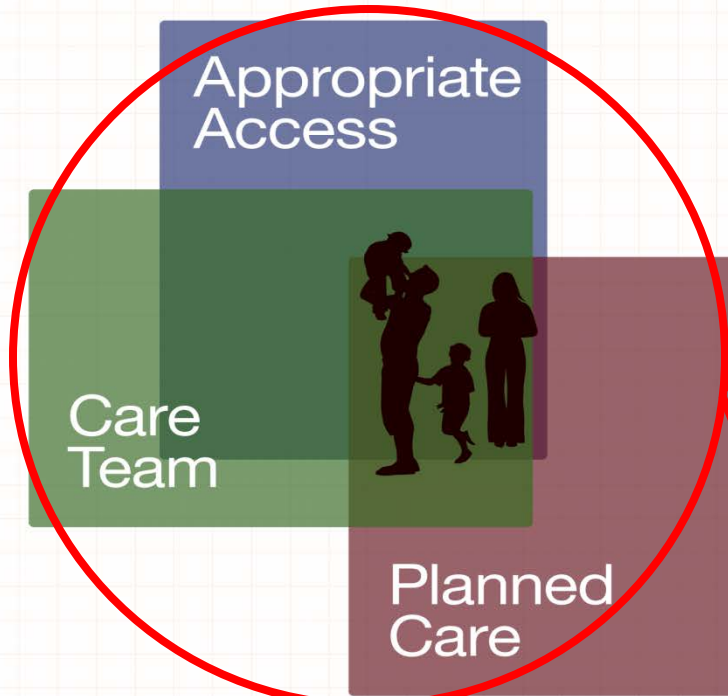
University Health Care
Community Clinics

Planned Care

- A plan—in writing—for every patient
- Evidence-based care plans
- Mutual goal setting
- EMR tools
- Pre-visit planning eliminates waste



care BY design



• Electronic Medical Record

Epic U of U Production - HARTLAND - Hyperspace

Desktop Action Patient Care Reports Tools Admin Help Links

Back Forward Home Schedule In Basket Review Encounter Tel Enc Patient Files Send Msg Print

Home ZztestPatient3 Zzgal, Gal

Zzgal, Gal Age Sex DOB MRN Type PC
39 yea F 1/1/1967 22 Penicillin G, Sulfa Drugs, Milk* CASE#* DAY, JU

Activities

- Snapshot
- Chart Review
- Results Review
- Flowsheets
- Problem List
- History
- Letters
- Demographics
- Growth Chart
- Graphs
- Health Maintenance
- Open Orders
- Meds/Allergies
- Order Entry
- Enter/Edit Results
- Imms/Injections
- Level of Service
- Visit Navigator
- Forms
- Select SmartSet
- SmartSet - Ann...

SmartSet - Annual Gyn Exam

Association Primary Dx Edit Item Add to Favorites Pharmacy Questionnaire Health Maint Accept/Per

Encounter Documentation (The following section has been filtered out: Inactive Dx)

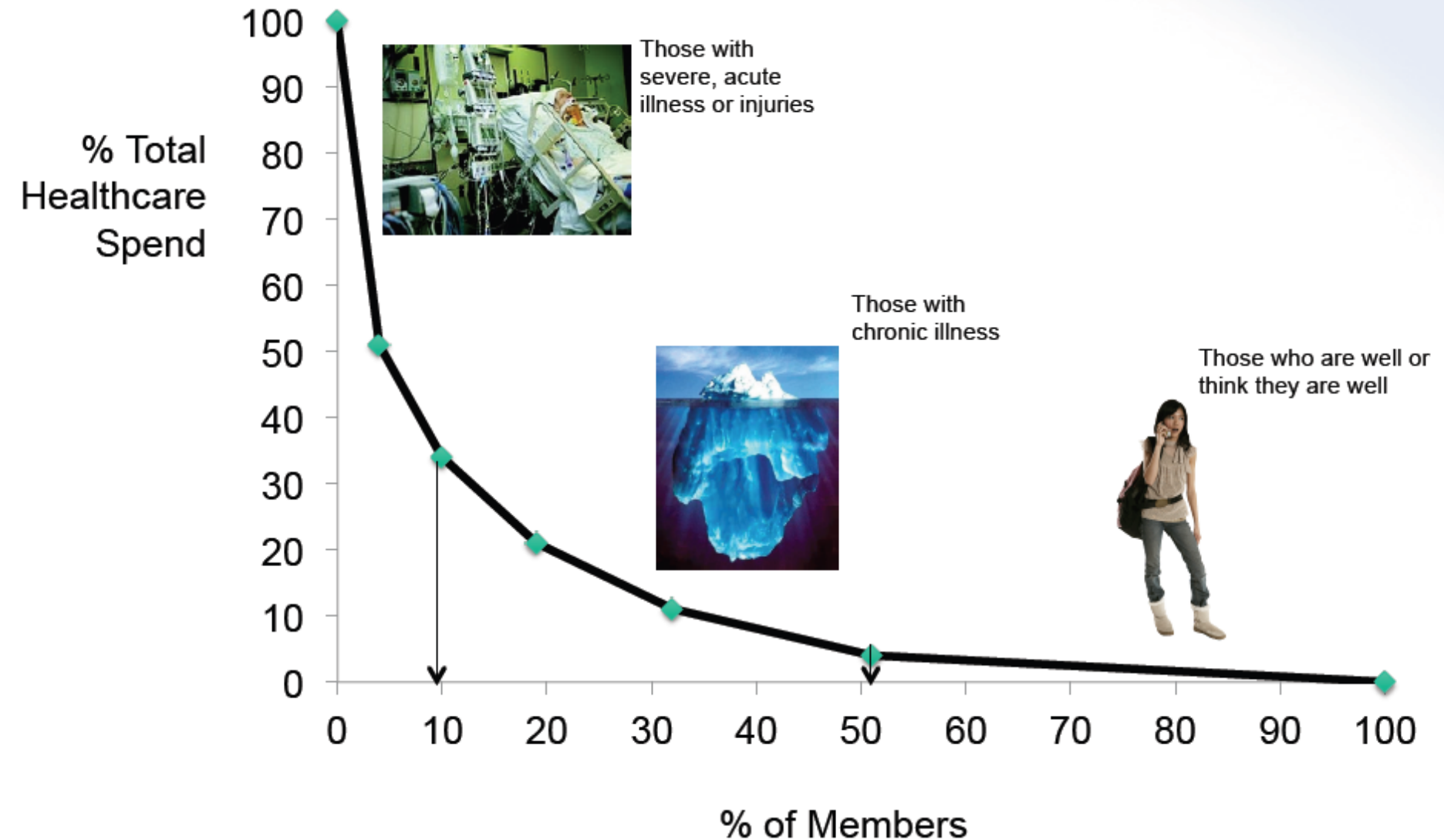
- Procedures (multiple)
 - ☐ Colonoscopy Referral [CN0131]
 - ☐ DEXA Bone Density Axial Skel [76075]
 - ☐ DEXA Bone Density Axial Skel [76075-GA] (Medicare Waiver Signed)
 - ☐ Mammogram - Screening [76092]
 - ☐ Obtaining and Conveyance, Screen Pap Smear [Q0091]
- Immunizations (multiple)
 - ☐ Flu Vaccine >3Yrs. [90658]
 - ☐ Pneumococcal Vaccine Adult SQ or IM [90732]
 - ☐ DTP Immunization [90701]
- Immunization Administration (multiple)
 - ☐ Immunization Admin, Single [90471]
 - ☐ Immunization Administration, Each Additional [90472]
 - ☐ Administration of Flu Vaccine [G0008] Medicare ONLY
 - ☐ Administration of Pneumococcal Vaccine [G0009] Medicare ONLY
- Lab Tests (multiple)
 - ☐ CBC [85025]
 - ☐ Chlamydia, DNA Probe [87491]
 - ☐ GC Screen [87081]
 - ☐ Hepatitis C AB (Screening) [86803]
 - ☐ Hepatitis B Surface Antigen [87340]
 - ☐ HIV Types 1 & 2 [86703]
 - ☐ Lipid Profile [80061]

Right click data row to edit Loading SmartSet succeeded.

Primary Care 3.0: Mass Customization to Create Healing Relationships

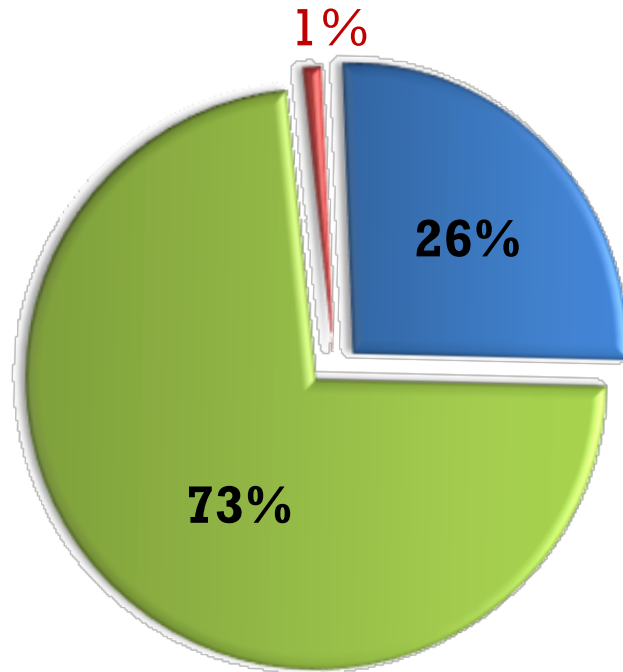


Different strategies for healthcare spending

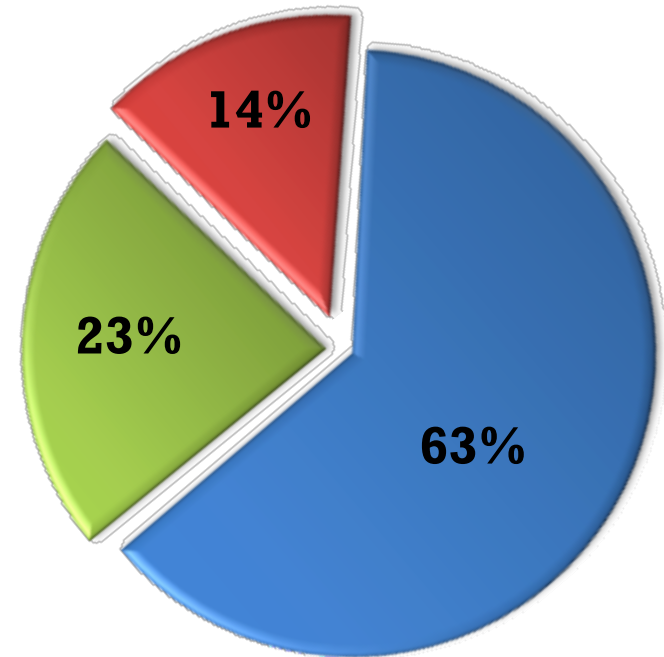


Healthy Spend Segments

Members



Costs



- High risk - Acute
- Chronic condition
- Healthy today



Patient and physician select personalized team to meet patient's individual needs



Psychiatrists to manage complex psychiatric medication needs



Clinical pharmacists to work with chronic disease medication management



Physician Assistants to augment and work in partnership with physicians to deliver medical care appropriate to need



Counselors (LCSWs, clinical psychologists) to address patients' mental health issues



Care Managers to assist managing multiple chronic diseases and transition care



Dieticians to create personalized diet plans



Health Coaches to help achieve healthy behaviors



Peer Support Specialists to work with patients with mental illness



Community Health Workers to assist with cultural or resource issues

Team for Advanced Primary Care

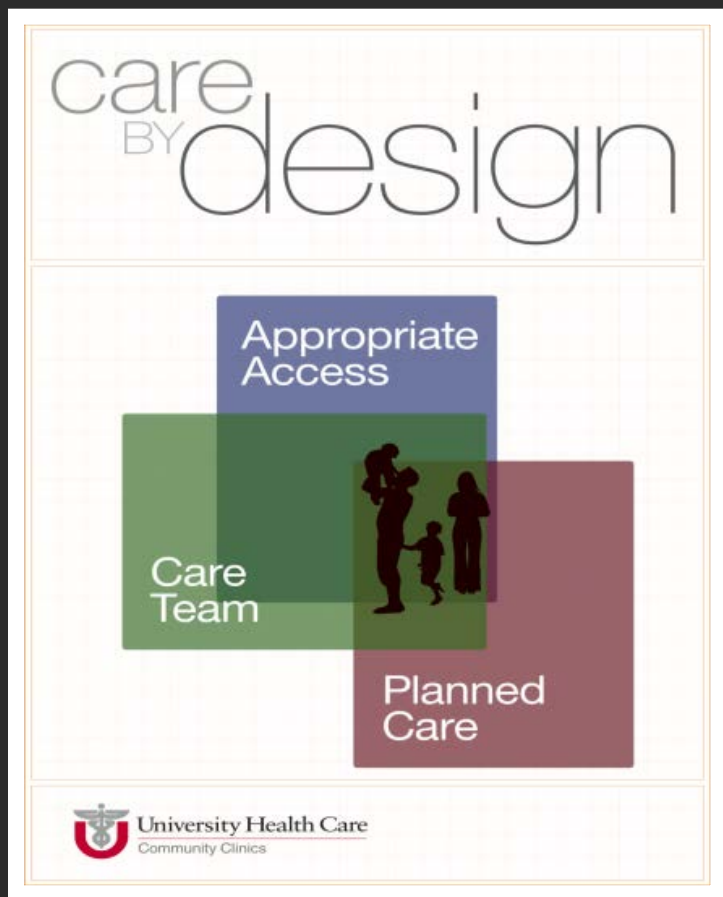


“We are your doctor”

John D. Matthew, MD, FACP
The Health Center
Plainfield, VT



Care by Design™



- **Appropriate Access – 2003**
 - Balance visit supply and demand
 - Standardized schedules
- **Care Team – 2004**
 - Expanded MA role
 - Providers and MAs working in teams
 - EMR tools (BPAs, Xfiles)
- **Planned Care – 2006**
 - Protocols, order sets
 - Pre-visit planning, labs
 - Registries

Extending the Medical Home into the Medical Neighborhood

- Appropriate Access
- Care Teams
- Planned Care



- Employed by CC
- Embedded w/in University Hospital

Care
Management

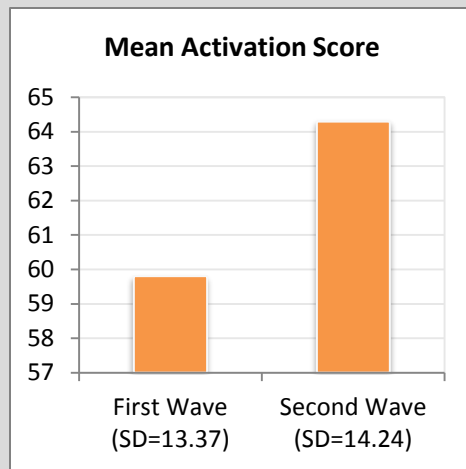
Transition
Navigator

- Care Manager
- Behavior change & Self-mgmt coaching
- Care Coordination
- Transitions Management

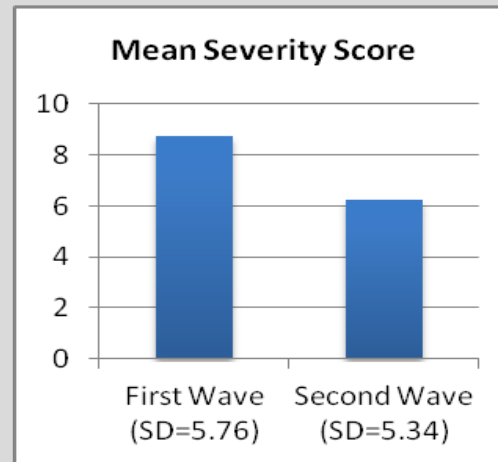


Patient Reported Outcomes:

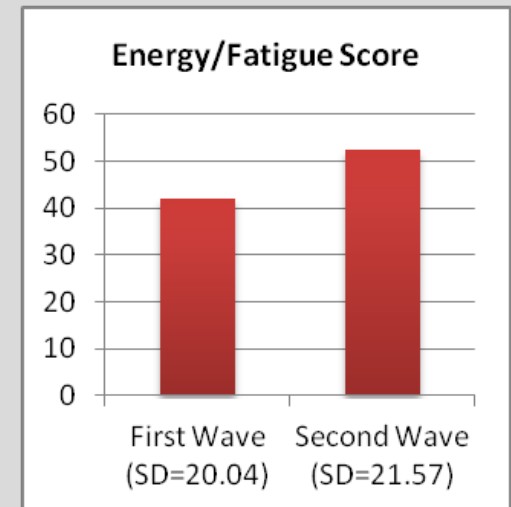
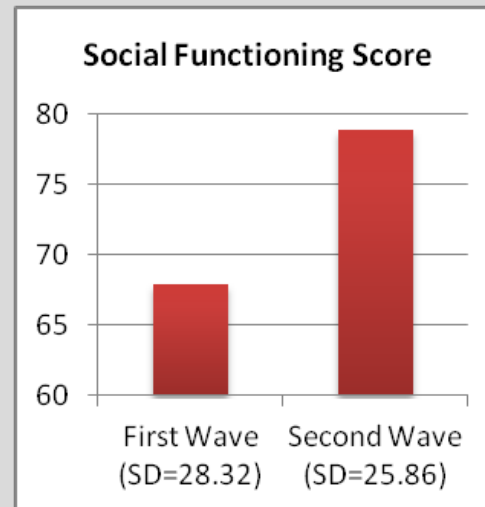
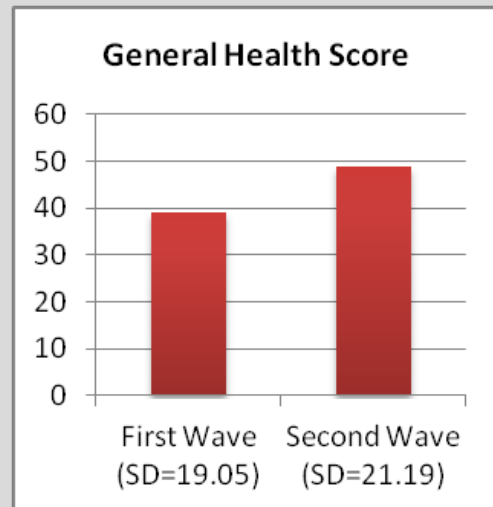
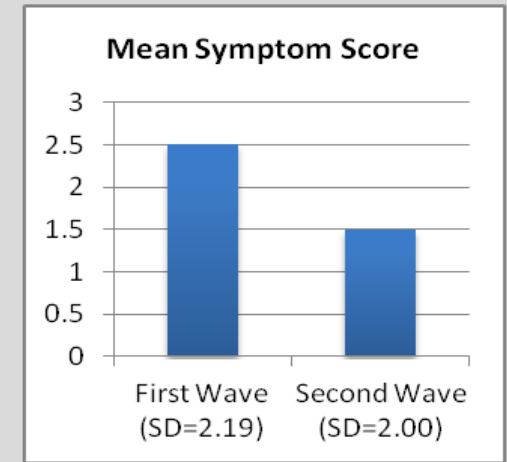
Change between 1st & 2nd administration



PAM (t-test $p=.057$)

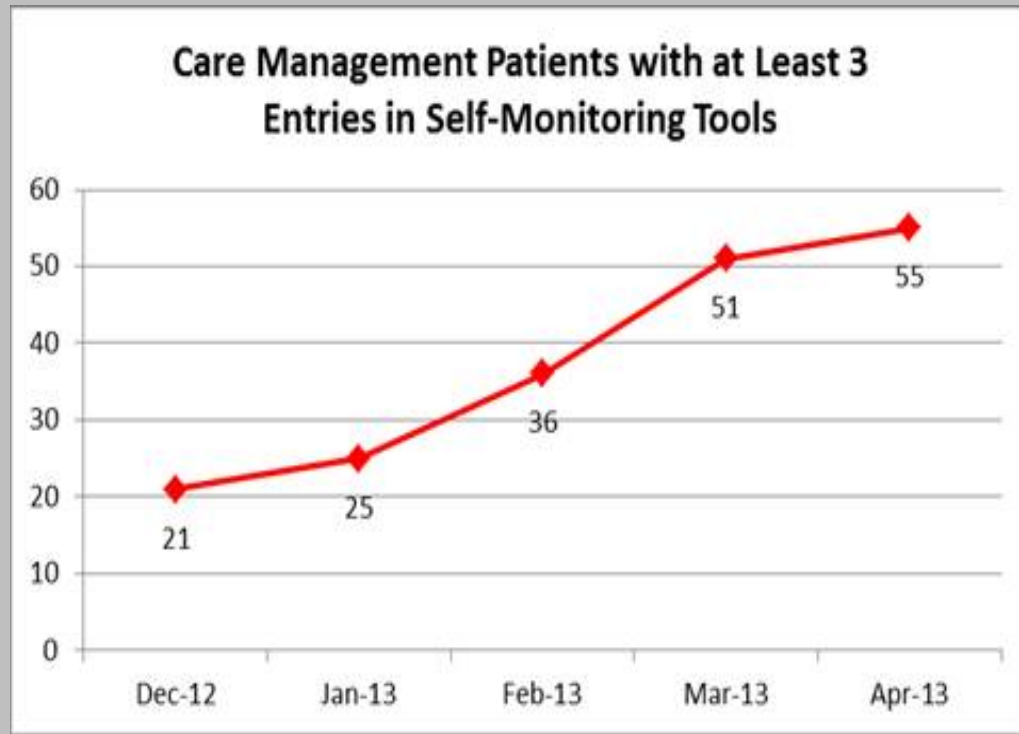


PHQ9 (t-test $p<0.01$)



RAND 36 (t-test $p<0.01$)

Self-Monitoring Tools



Self Monitoring Tools: weight, BP, glucose,
exercise




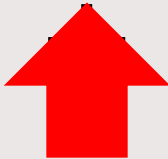


Patient Experience

with PCMH Domains

CBD Element	PCMH Domain	Question Items	Overall Mean
Appropriate Access	Access	5	3.25
Care Teams	Communication	6	3.74
	Whole person orientation	3	4.86
	Care Coordination	3	3.53
	Shared decision-making	3	3.33
Planned Care	Comprehensive care	2	1.50
	Continuity of Care	2	1.54
	Self-management support	2	1.94

Patient Experience



and Level of Implementation of CBD

CBD Element	Patient Experience		
	Access to Care	Communication	Comprehensiveness of Care
Appropriate Access		NS	
Care Team	NS		

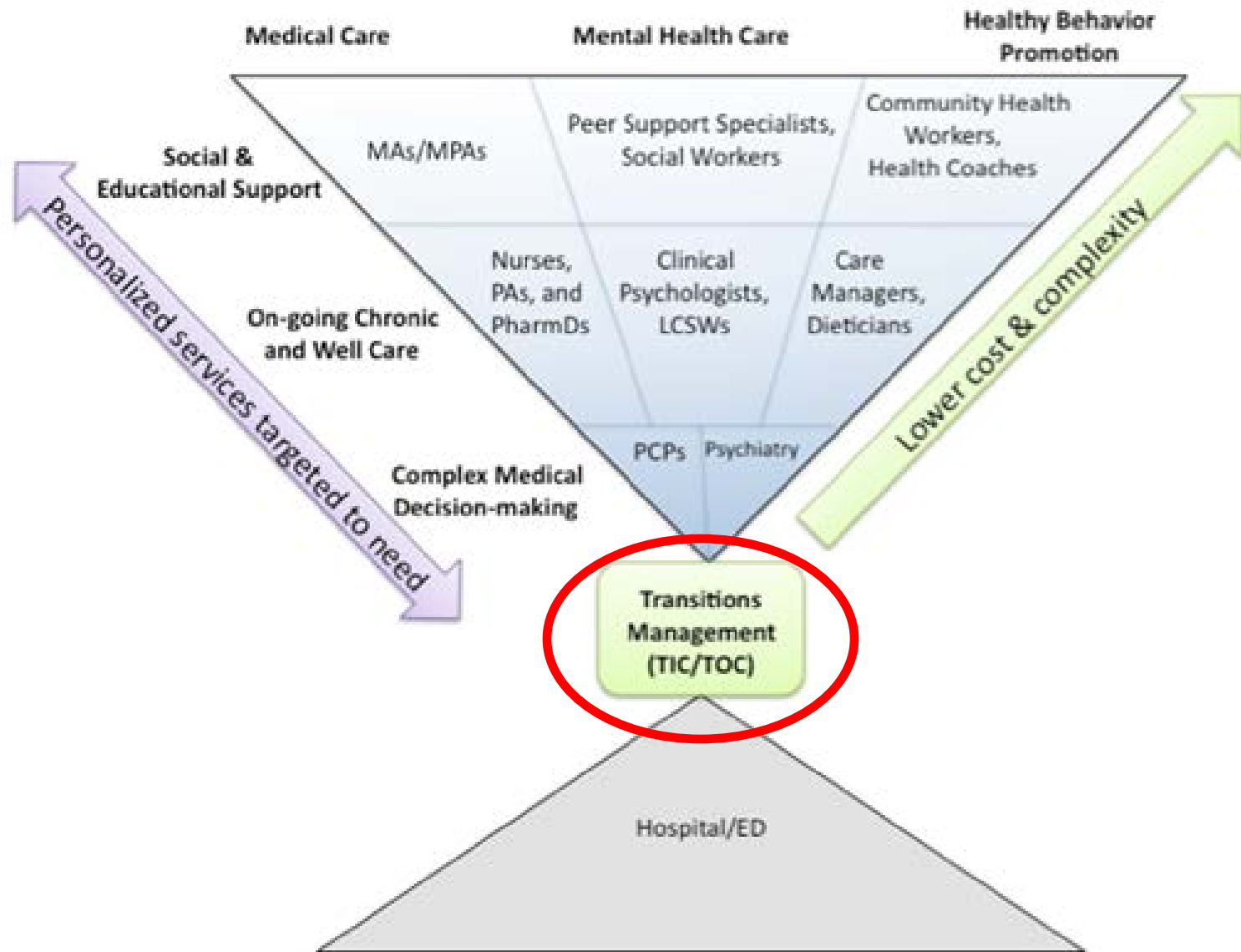
- Extent of implementation is not related to all domains of experience
- Transformation may not be readily visible to patients (“behind the scenes”)



Continuity of Care Reduces Cost

- Intervention: CBD through 2009
- Patients: Nonelderly
Diabetes, Coronary Artery Disease,
Heart Failure
- Continuity (by site) = $\frac{\text{Visits to One Community Clinic}}{\text{Total Visits}}$
-  Continuity 10% \longrightarrow  Charges \$350/year
- Conclusion: PCMH may control cost, especially for patients with chronic conditions

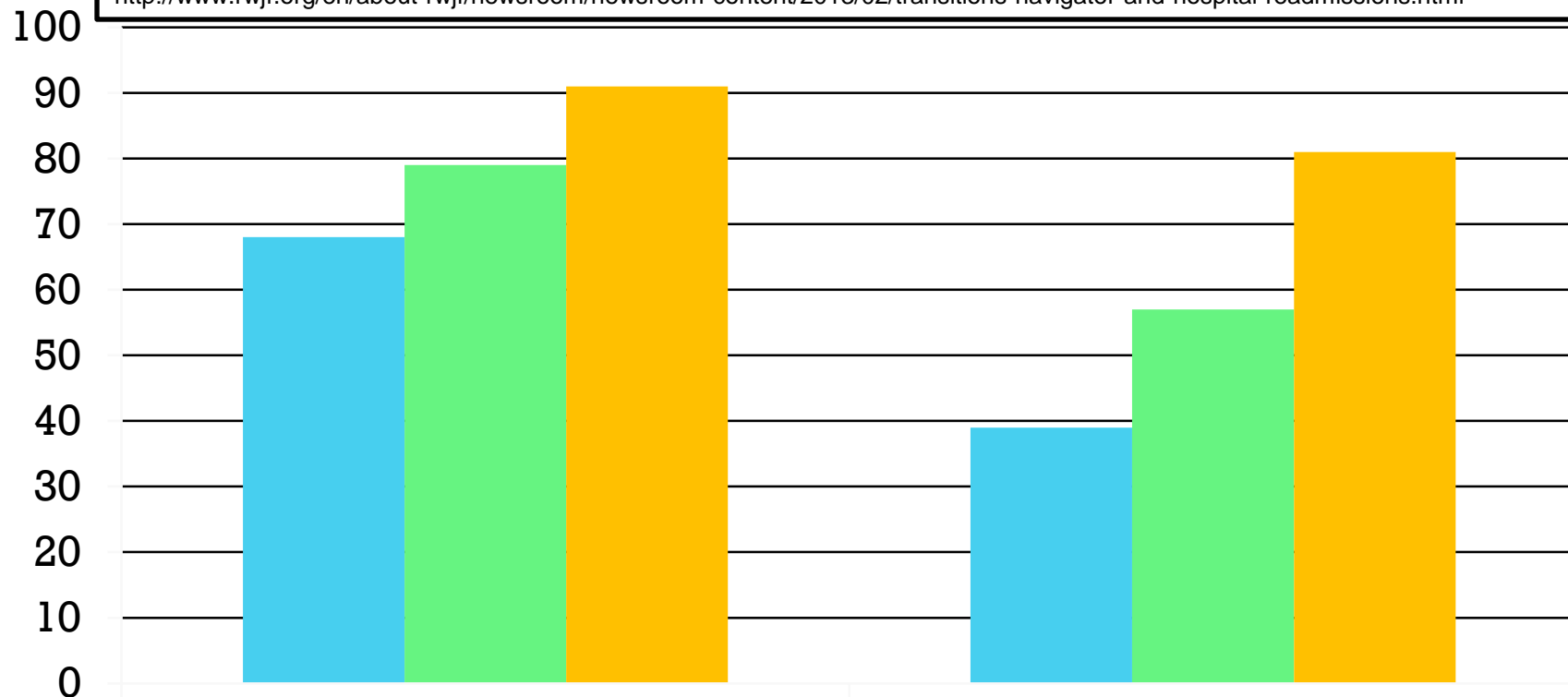
“Primary Care 3.0”



Impact of TN on Care Coordination

23% preliminary, unadjusted relative reduction in 30-day readmissions among patients receiving transitions navigator services.

<http://www.rwjf.org/en/about-rwjf/newsroom/newsroom-content/2013/02/transitions-navigator-and-hospital-readmissions.html>



- % with coordinated plan of care upon hospital discharge
- % scheduling post-hospital follow-up appointment
- % completing post-hospital follow-up appointment

(July 2012 – March 2013)

Overall Conclusions

- **Positive patient experience in PCMH domains**
 - Access
 - Communication
 - Care coordination
- **Transitions navigation** as part of PCMH improves
 - Primary care follow-up
 - Readmission rates
- **Continuity by site** was associated with **lower total health care costs** in patients with multiple chronic diseases

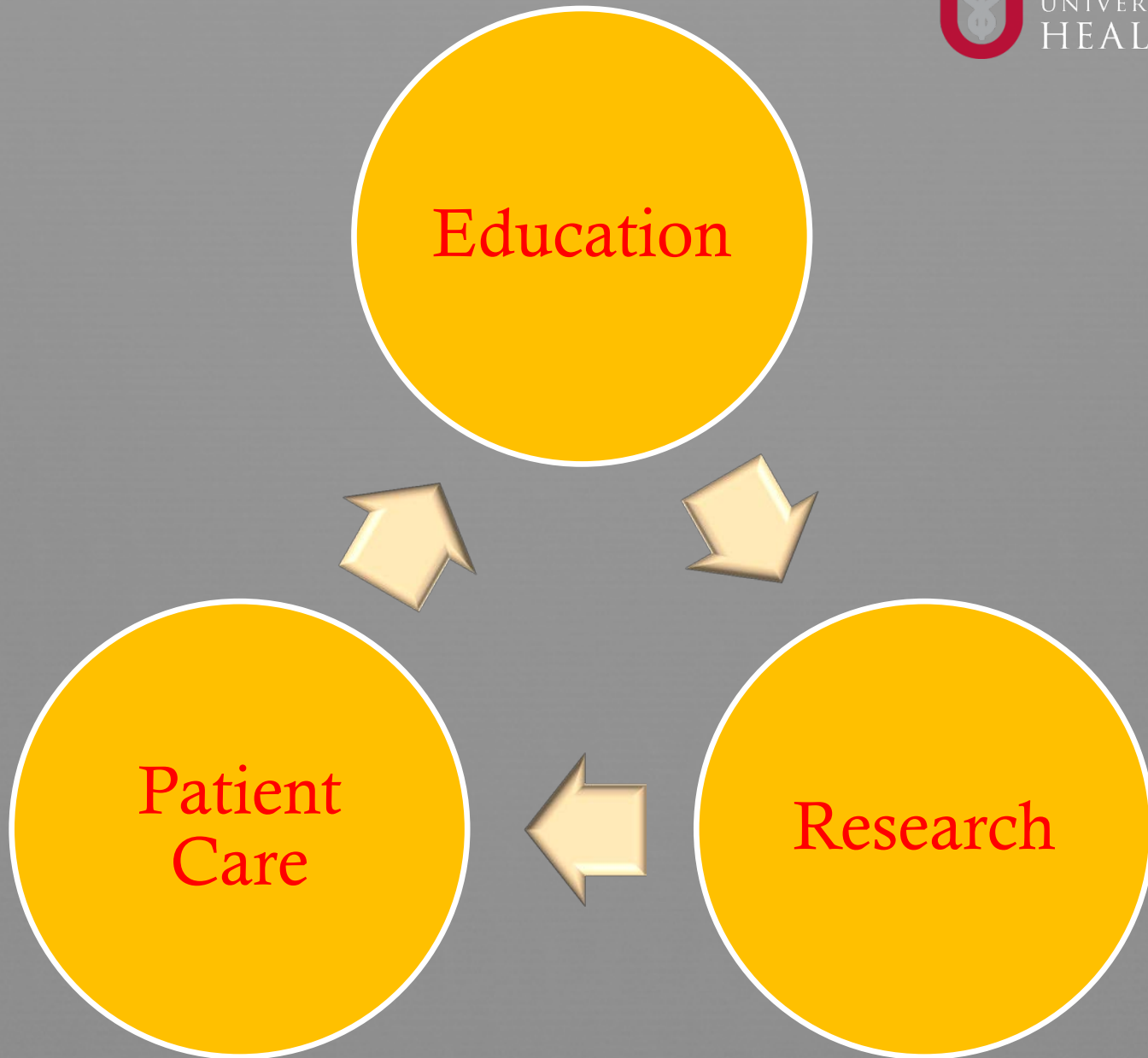
Essential Ingredients

Primary Care 1.0 and 3.0

- Continuity
- Comprehensiveness
- Coordination
- Relationships
 - Patient – provider
 - Team

In Search of... Primary Care 3.0

- Medical Education
- Health System Change



- Practice what we teach
- Teach what we practice
- Research how to do better

*J. Lloyd Michener, MD
AAMC Annual Meeting
November 7, 2009*

Curriculum: University of Utah School of Medicine



Clinics: Continuity & Subspecialty

Clinical Clerkships:
Medicine
Surgery
Pediatrics
Obstetrics/Gynecology
Family Medicine

Acute Care
Applied Anatomy
Medical Science
Primary Care
MPH/MBA/MEd



Residency

- Train in PCMH
- Quality Improvement



Improving patient satisfaction

Recording influenza vaccination

Addressing BMI

Improving HBA1C testing rate in Diabetic Clinics

Improving Documentation of CHF education

Improving Primary Care provider designation



“For many, many years, we've been working under the fantasy that if we come up with new drugs and new treatments, we're done. The rest of the system will take care of itself. In my view, the rocket science in health and health care is how we deliver it.”

Jim Yong Kim, MD, President
Dartmouth College