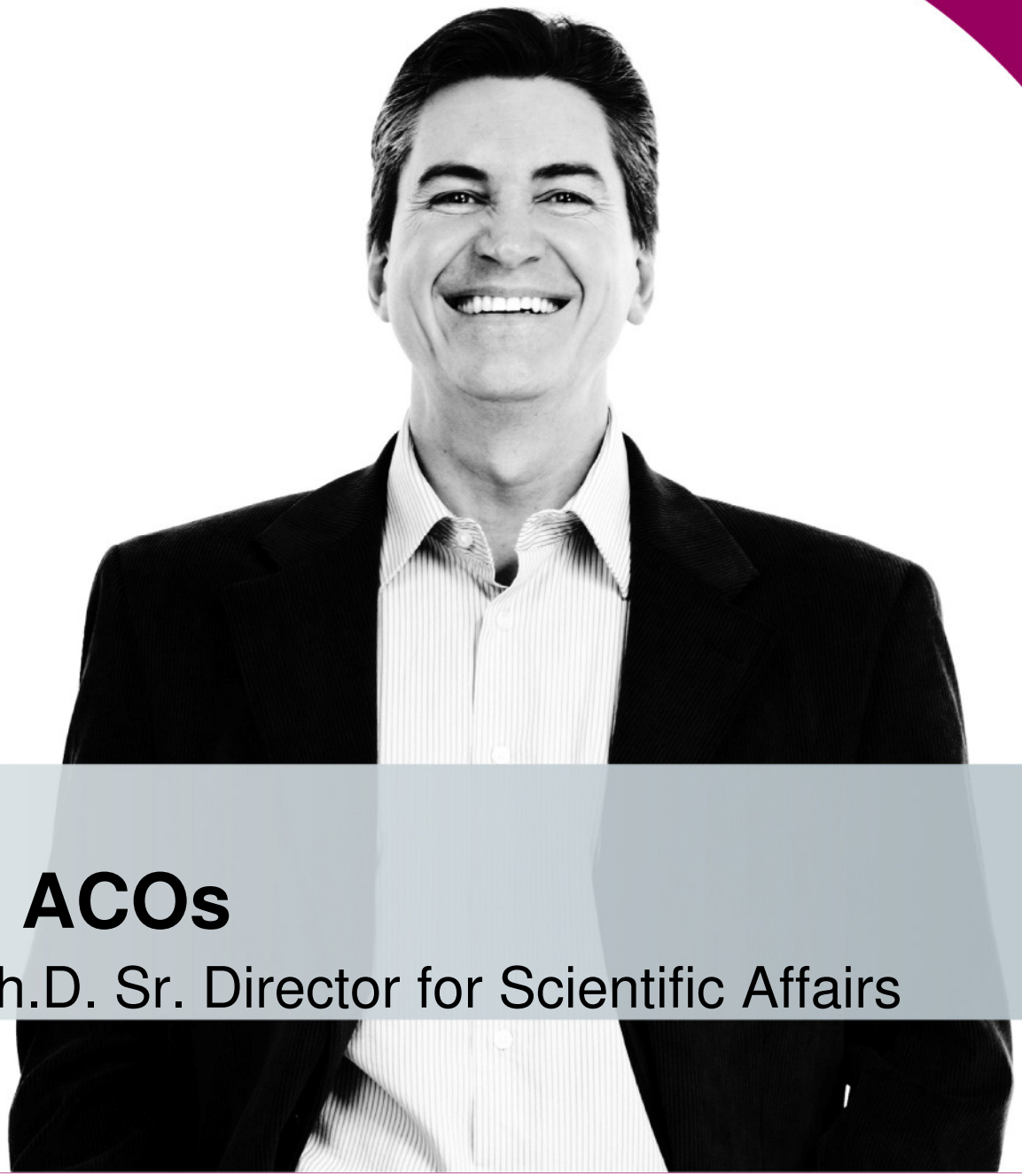


The ABCs of ACOs

Thomas Koshy, Ph.D. Sr. Director for Scientific Affairs

November 5, 2012

US Health Care = Bad Restaurant?

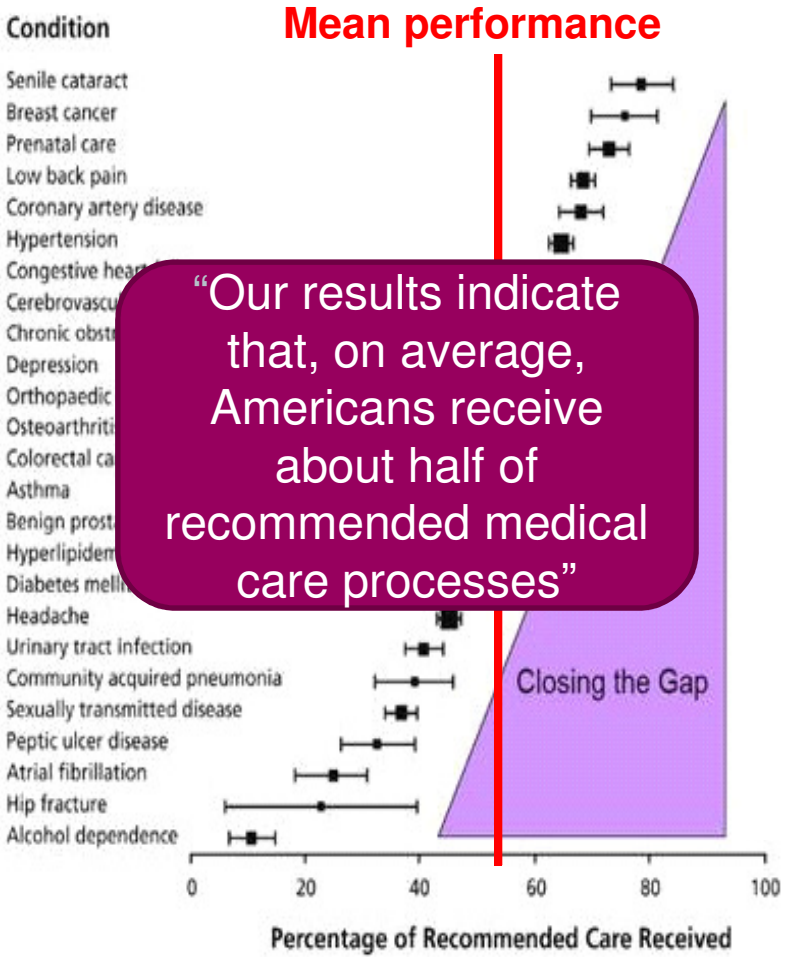
US Health Care = Auto Repair?

- Transactional, reactional care for a specific “repair”
  - FFS, not FFV
- Ironically, the same repair shop can provide the preventive services that would reduce high cost transactions

- We need to transition from transactional care to preventive care and coordination of care, especially for chronic conditions.

The Care We Get…

"Flip of the Coin" Health Care Quality, 6-6-03



Impediments

- Fee for service reimbursement rewards: volume>value, cure>care
- Scale, scope, complexity of health sector and political realities of change
- Technophilic society and MDs
- Slow adoption of innovation
- Selection and socialization of MDs as Lone Rangers
- Lack of systems thinking in design of health delivery
- Emphasis on treating organ systems, not whole organisms
- Poor application of behavior science into delievery system

McGlynn EA (2003) NEJM **348:** 2635-2645

The Care We Don't Get…

LA Times, 6-7-11

Sign In or Sign Up Like 77K Subscribe/Manage Account Place Ad LAT Store Jobs Cars

Los Angeles Times | BOOSTER SHC

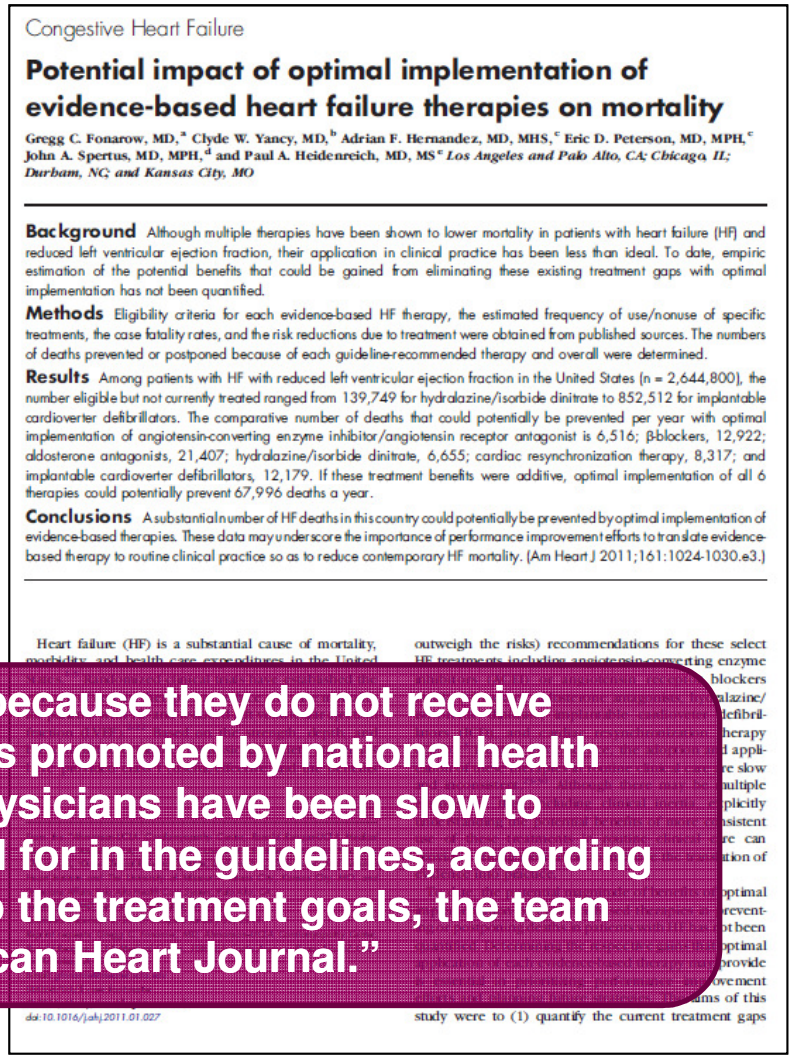
LOCAL U.S. WORLD BUSINESS SPORTS ENTERTAINMENT HEALTH LIVING TR

BOOSTER SHOTS MEDICINE FITNESS & NUTRITION MENTAL HEALTH HEALTH REFOR

BOOSTER SHOTS: ODDITIES, MUSINGS AND NEWS FROM THE HEALTH WORLD

Nearly 70,000 Americans die needlessly each year because they are not given optimal heart failure therapy

Recommend 8 Tweet 6 (1)



Congestive Heart Failure

Potential impact of optimal implementation of evidence-based heart failure therapies on mortality

Gregg C. Fonarow, MD,[a] Clyde W. Yancy, MD,[b] Adrian F. Hernandez, MD, MHS,[c] Eric D. Peterson, MD, MPH,[c] John A. Spertus, MD, MPH,[d] and Paul A. Heidenreich, MD, MS[c] *Los Angeles and Palo Alto, CA; Chicago, IL; Durham, NC; and Kansas City, MO*

Background Although multiple therapies have been shown to lower mortality in patients with heart failure (HF) and reduced left ventricular ejection fraction, their application in clinical practice has been less than ideal. To date, empiric estimation of the potential benefits that could be gained from eliminating these existing treatment gaps with optimal implementation has not been quantified.

Methods Eligibility criteria for each evidence-based HF therapy, the estimated frequency of use/nonuse of specific treatments, the case fatality rates, and the risk reductions due to treatment were obtained from published sources. The numbers of deaths prevented or postponed because of each guideline-recommended therapy and overall were determined.

Results Among patients with HF with reduced left ventricular ejection fraction in the United States (n = 2,644,800), the number eligible but not currently treated ranged from 139,749 for hydralazine/isorbide dinitrate to 852,512 for implantable cardioverter defibrillators. The comparative number of deaths that could potentially be prevented per year with optimal implementation of angiotensin-converting enzyme inhibitor/angiotensin receptor antagonist is 6,516; β-blockers, 12,922; aldosterone antagonists, 21,407; hydralazine/isorbide dinitrate, 6,655; cardiac resynchronization therapy, 8,317; and implantable cardioverter defibrillators, 12,179. If these treatment benefits were additive, optimal implementation of all 6 therapies could potentially prevent 67,996 deaths a year.

Conclusions A substantial number of HF deaths in this country could potentially be prevented by optimal implementation of evidence-based therapies. These data may underscore the importance of performance improvement efforts to translate evidence-based therapy to routine clinical practice so as to reduce contemporary HF mortality. (Am Heart J 2011;161:1024-1030.e3.)

Heart failure (HF) is a substantial cause of mortality, morbidity, and health care expenditures in the United

outweigh the risks) recommendations for these select HF treatments including angiotensin-converting enzyme

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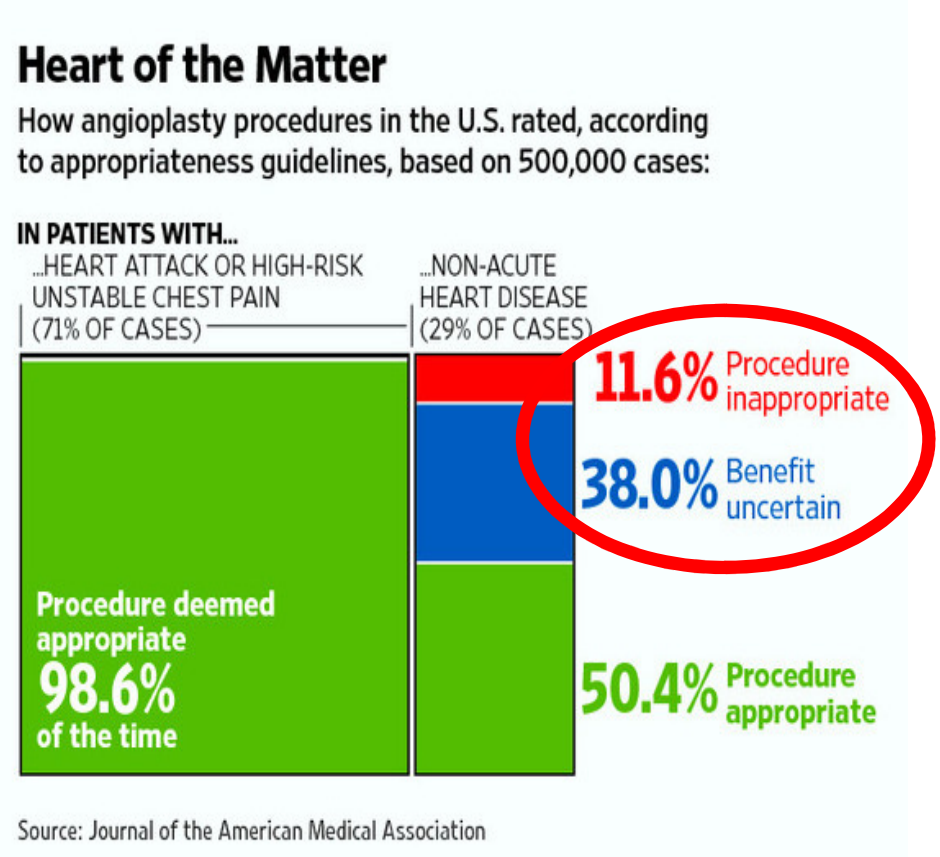
doi:10.1016/j.ahj.2011.01.027

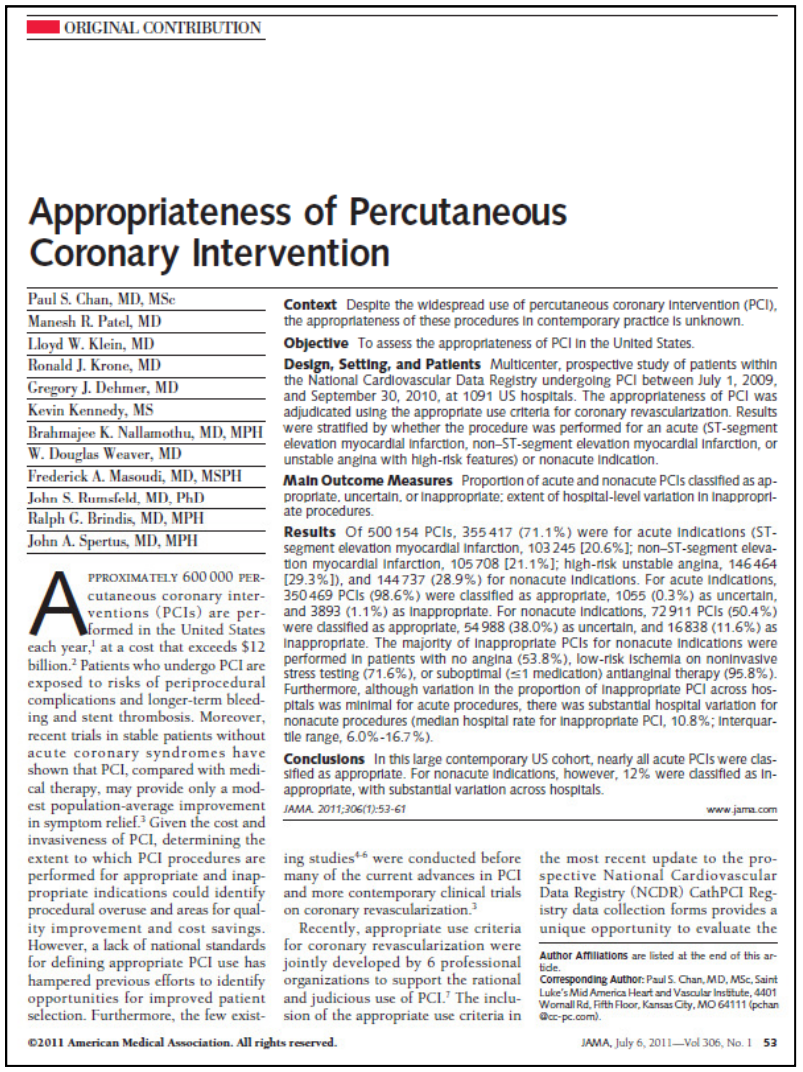
study were to (1) quantify the current treatment gaps

"Nearly 70,000 Americans die each year because they do not receive optimal therapy as called for in guidelines promoted by national health authorities, researchers said Monday. Physicians have been slow to implement many of the procedures called for in the guidelines, according to the first national study of adherence to the treatment goals, the team reported in the June edition of the American Heart Journal."

The Care We Shouldn't Get…

JAMA, 7-6-11





ORIGINAL CONTRIBUTION

Appropriateness of Percutaneous Coronary Intervention

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Gregory J. Dehmer, MD
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Context Despite the widespread use of percutaneous coronary intervention (PCI), the appropriateness of these procedures in contemporary practice is unknown.

Objective To assess the appropriateness of PCI in the United States.

Design, Setting, and Patients Multicenter, prospective study of patients within the National Cardiovascular Data Registry undergoing PCI between July 1, 2009, and September 30, 2010, at 1091 US hospitals. The appropriateness of PCI was adjudicated using the appropriate use criteria for coronary revascularization. Results were stratified by whether the procedure was performed for an acute (ST-segment elevation myocardial infarction, non–ST-segment elevation myocardial infarction, or unstable angina with high-risk features) or nonacute indication.

Main Outcome Measures Proportion of acute and nonacute PCIs classified as appropriate, uncertain, or inappropriate; extent of hospital-level variation in inappropriate procedures.

Results Of 500 154 PCIs, 355 417 (71.1%) were for acute indications (ST-segment elevation myocardial infarction, 103 245 [20.6%]; non–ST-segment elevation myocardial infarction, 105 708 [21.1%]; high-risk unstable angina, 146 464 [29.3%]), and 144 737 (28.9%) for nonacute indications. For acute indications, 350 469 PCIs (98.6%) were classified as appropriate, 1055 (0.3%) as uncertain, and 3893 (1.1%) as inappropriate. For nonacute indications, 72 911 PCIs (50.4%) were classified as appropriate, 54 988 (38.0%) as uncertain, and 16 838 (11.6%) as inappropriate. The majority of inappropriate PCIs for nonacute indications were performed in patients with no angina (53.8%), low-risk ischemia on noninvasive stress testing (71.6%), or suboptimal (≤1 medication) antianginal therapy (95.8%). Furthermore, although variation in the proportion of inappropriate PCI across hospitals was minimal for acute procedures, there was substantial hospital variation for nonacute procedures (median hospital rate for inappropriate PCI, 10.8%; interquartile range, 6.0%-16.7%).

Conclusions In this large contemporary US cohort, nearly all acute PCIs were classified as appropriate. For nonacute indications, however, 12% were classified as inappropriate, with substantial variation across hospitals.

JAMA. 2011;306(1):53-61 www.jama.com

Approximately 600 000 percutaneous coronary interventions (PCIs) are performed in the United States each year,[1] at a cost that exceeds $12 billion.[2] Patients who undergo PCI are exposed to risks of periprocedural complications and longer-term bleeding and stent thrombosis. Moreover, recent trials in stable patients without acute coronary syndromes have shown that PCI, compared with medical therapy, may provide only a modest population-average improvement in symptom relief.[3] Given the cost and invasiveness of PCI, determining the extent to which PCI procedures are performed for appropriate and inappropriate indications could identify procedural overuse and areas for quality improvement and cost savings. However, a lack of national standards for defining appropriate PCI use has hampered previous efforts to identify opportunities for improved patient selection. Furthermore, the few existing studies[4-6] were conducted before many of the current advances in PCI and more contemporary clinical trials on coronary revascularization.[3]

Recently, appropriate use criteria for coronary revascularization were jointly developed by 6 professional organizations to support the rational and judicious use of PCI.[7] The inclusion of the appropriate use criteria in the most recent update to the prospective National Cardiovascular Data Registry (NCDR) CathPCI Registry data collection forms provides a unique opportunity to evaluate the

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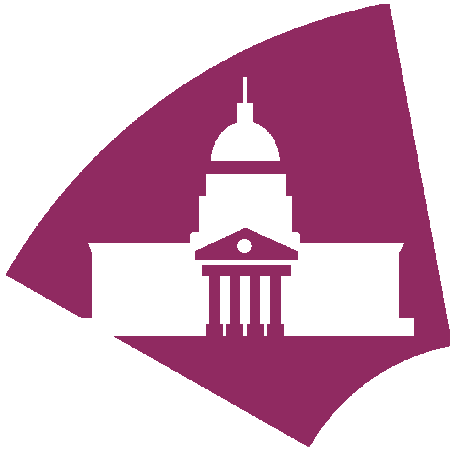
Something's Gotta Give

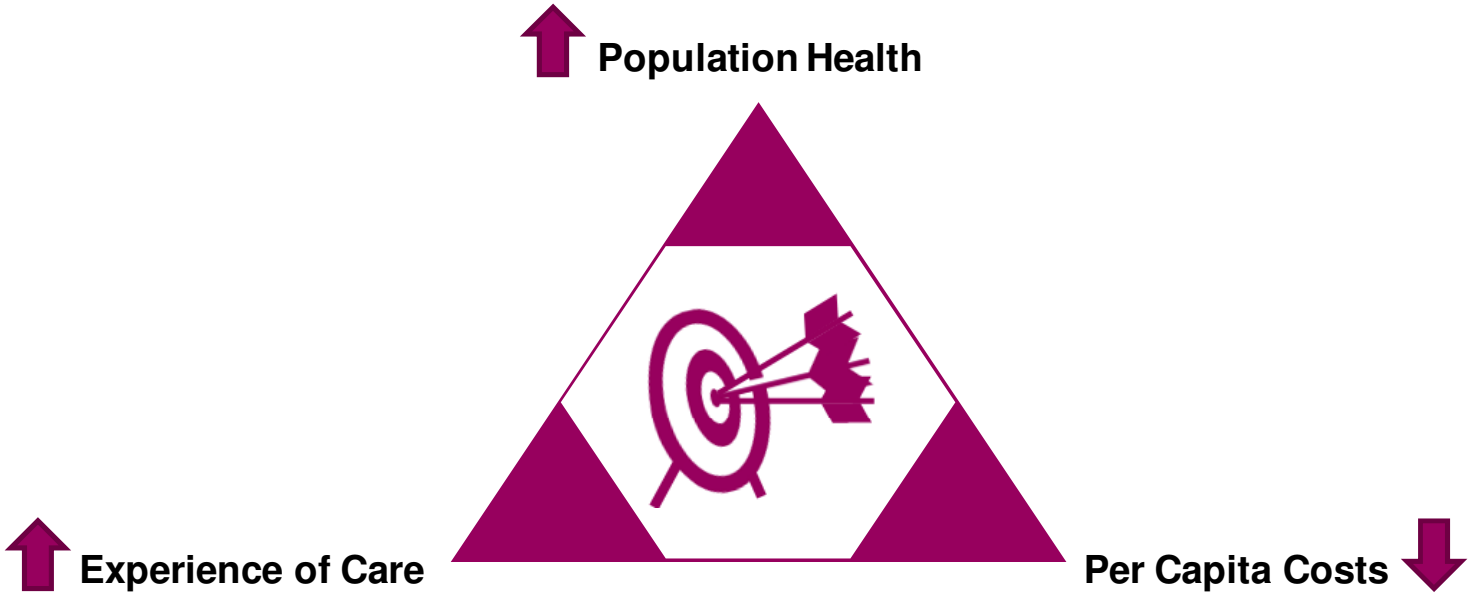
Because unaccountable care is no longer sustainable



It just comes down to who the accountable party is…

Accountability Defined

IHI's Triple Aim Describes Accountable Care's Trifecta



- Whether participating in Medicare's ACO program or collaborating with private payors, virtually all health systems are on some pathway to greater accountability
- This journey goes by many names: clinical integration, integrated care, collaborative patient-centered care, physician-hospital alignment, but their fundamental goals invariably include improving clinical outcomes, efficiency, and satisfaction with care

What Is Accountable Care About?

Moving away from FFS, volume-based reimbursement to value-based compensation (P4P, risk sharing, global budgets)

Proactive anticipation of individual patient needs, and plan to address these needs in coordinated, expeditious manner

Taking responsibility for care processes and care outcomes, including cost, quality, and experience of care

Built on a strong base of primary care, ideally arranged as "patient-centered medical homes" or similar forms using care teams to coordinate and deliver care

Connecting interoperable data from all care sites, providers, institutions into a longitudinal, personal health record with health decision guidance/support for patients, in addition to clinical decision support for providers

Stepwise Path to Accountable Health

Accountable Health Outcomes Management

Accountable Care Organization

- Collaboration Among Multiple Providers
- Shared Risk
- Reporting Against Quality, Cost, and Patient Experience

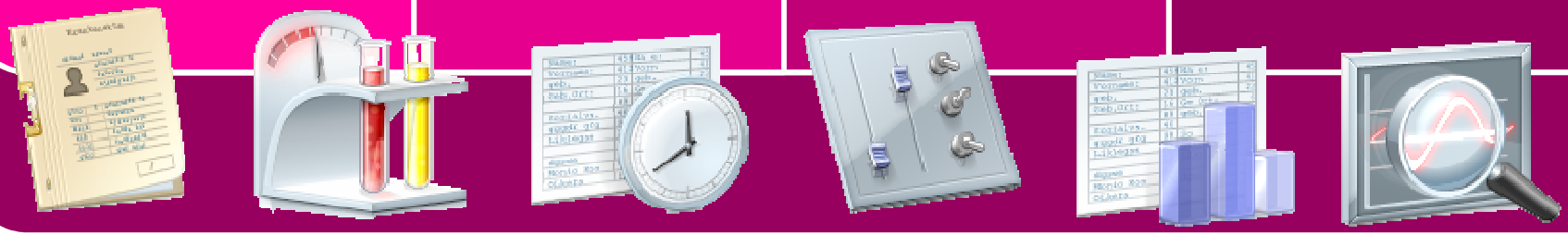
Patient-Centered Medical Home

- Team-Based Care
- Incentive Payments (P4P)
- Quality Reporting

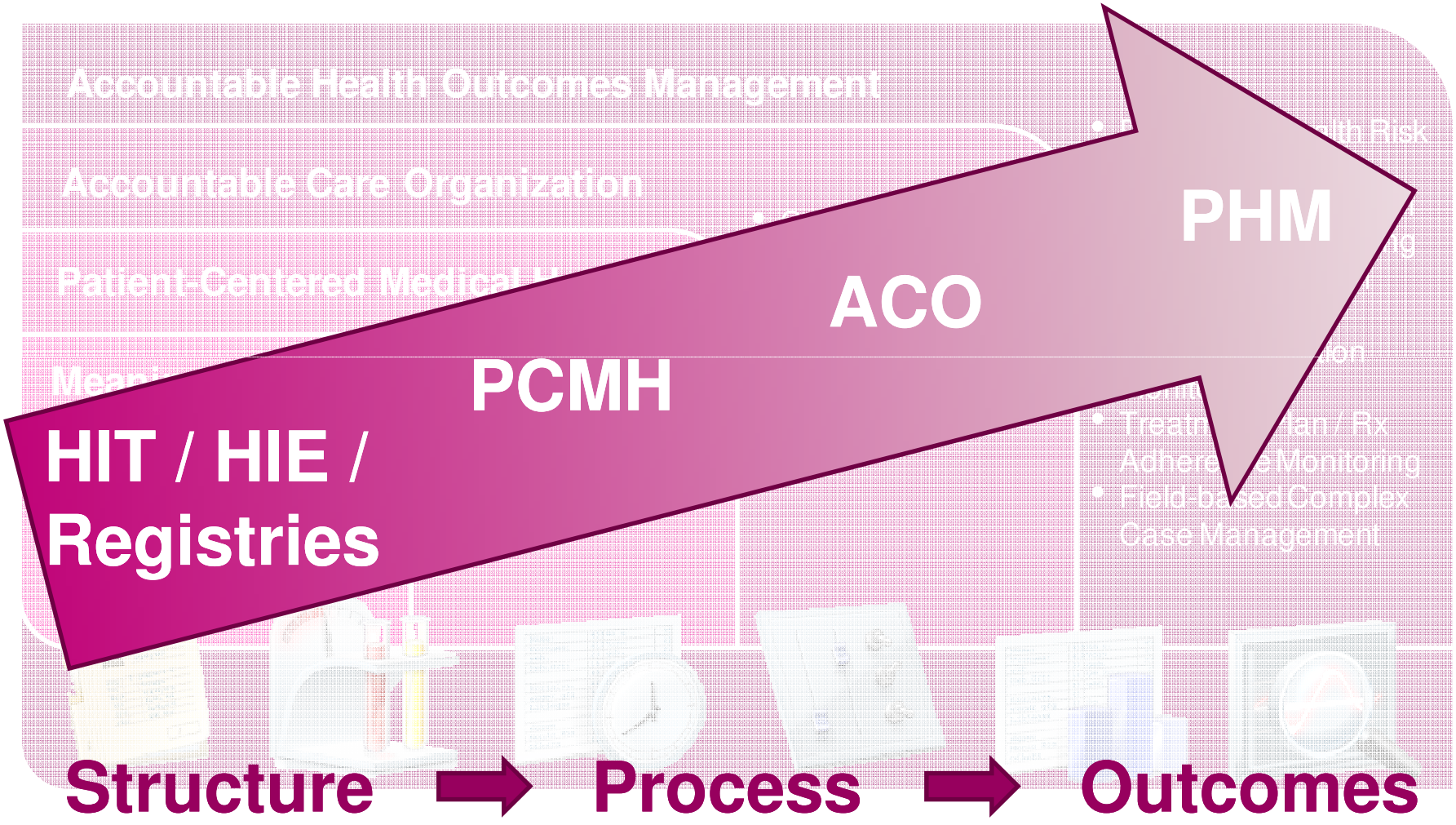
Meaningful Use

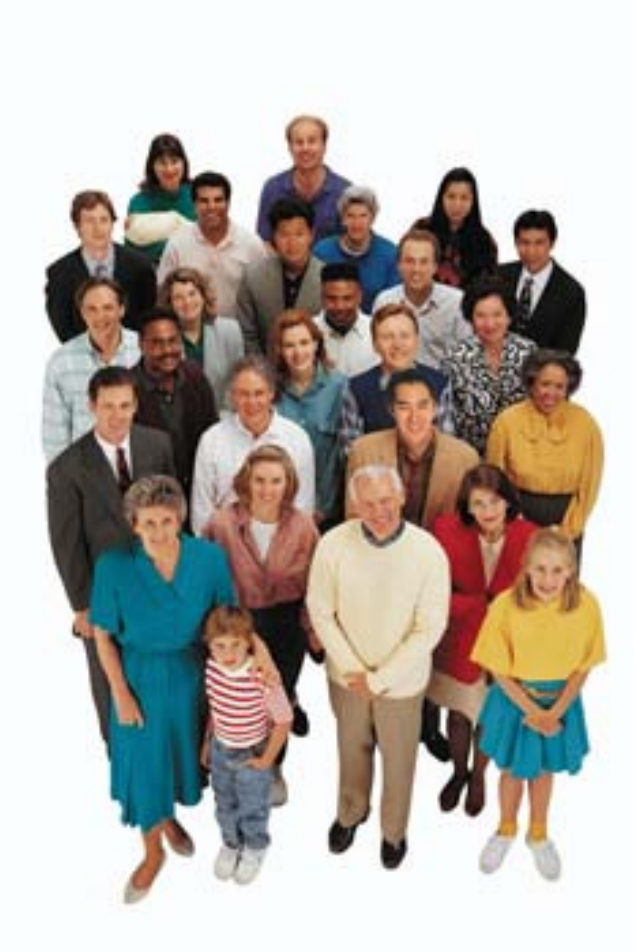
- Single Provider
- Office Transformation
- FFS + Bonus
- Data Capture

- Population Health Risk Assessment
- Health Risk Mitigation Workflows / Coaching
- Care Coordination Workflows
- Chronic Condition Monitoring
- Treatment Plan / Rx Adherence Monitoring
- Field-based Complex Case Management

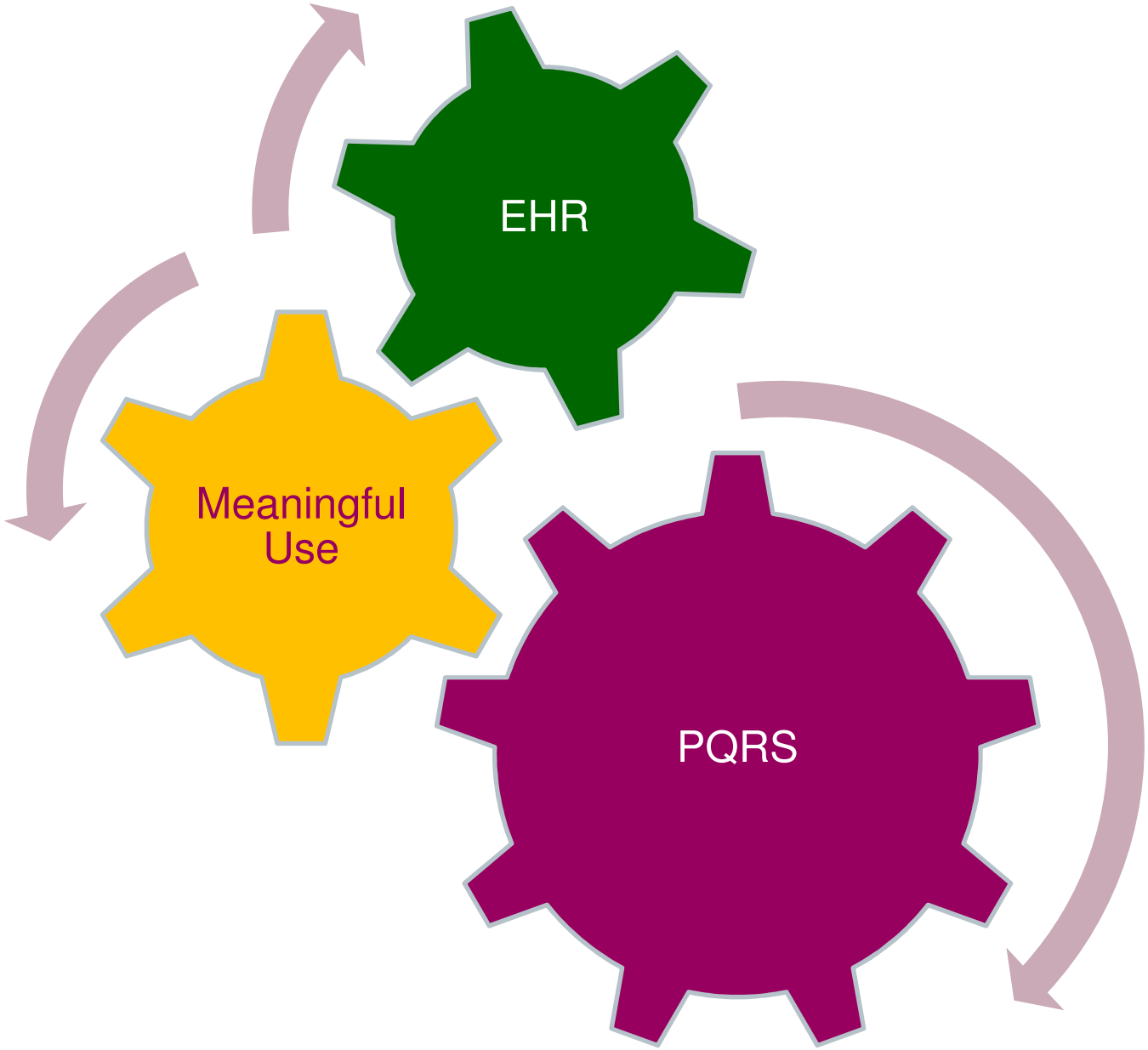


Stepwise Path to Accountable Health





Data → Information → Action


EHR
Meaningful Use
PQRS

The Physician Quality Reporting System (PQRS)

Incentive payments and payment adjustments to promote reporting of quality information by eligible healthcare professionals. The program provides incentive payments for reporting data on quality measures

Beginning in 2015, the program also applies a payment adjustment to professionals who do not satisfactorily report data on quality measures for covered professional services.

	Medicare PQRS Payment Adjustments
2011	1-1.5% bonus payment
2012	0.5-1% bonus payment
2013	0.5-1% bonus payment
2014	0.5-1% bonus payment
2015	1.5% cut of physcian unsuccessfully reports on PQRS measures No bonus payment for physicians who successfully report on PQRS measures
2016	2% cut of physcian unsuccessfully reports on PQRS measures No bonus payment for physicians who successfully report on PQRS measures
2017	2% cut of physcian unsuccessfully reports on PQRS measures No bonus payment for physicians who successfully report on PQRS measures

Clinical Registry and Guidelines

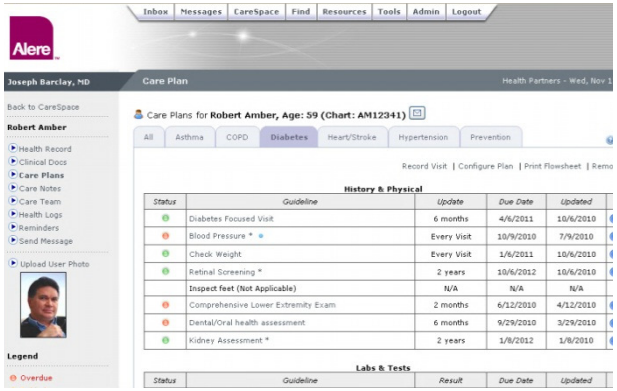
Connected registries facilitate the creation of coordinated care teams, who all have access to care plans and status

Customizable evidence-based guidelines suggest recommended care

Integration with EMRs/EHRs and HIEs through connectivity capability

Supports and provides extensive reporting and analytics

Facilitates development and deployment of Patient-Centered Medical Homes and ACOs



Adult and pediatric prevention

Adult and pediatric asthma

Diabetes

Heart / stroke

Heart failure

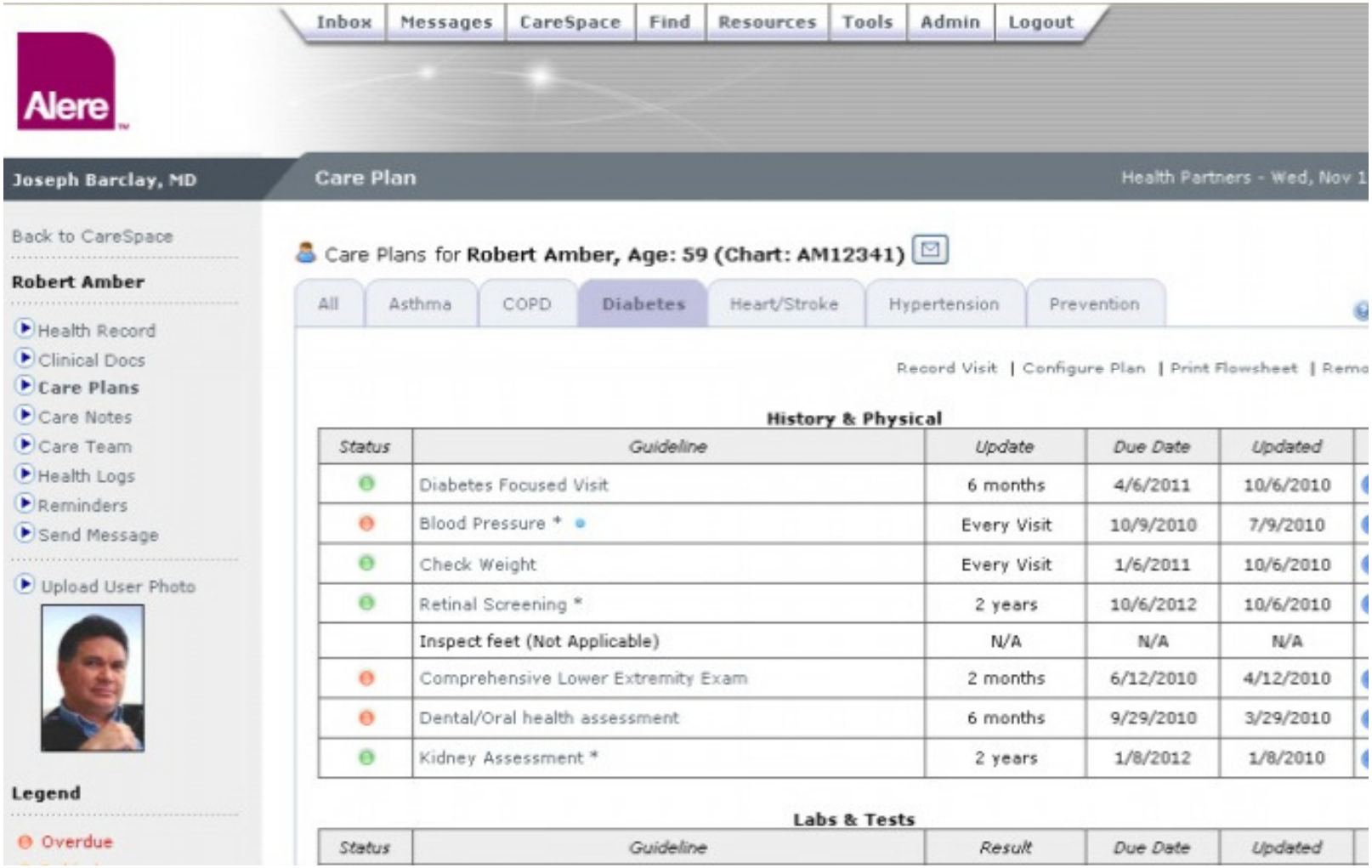
Pediatric obesity

Hypertension

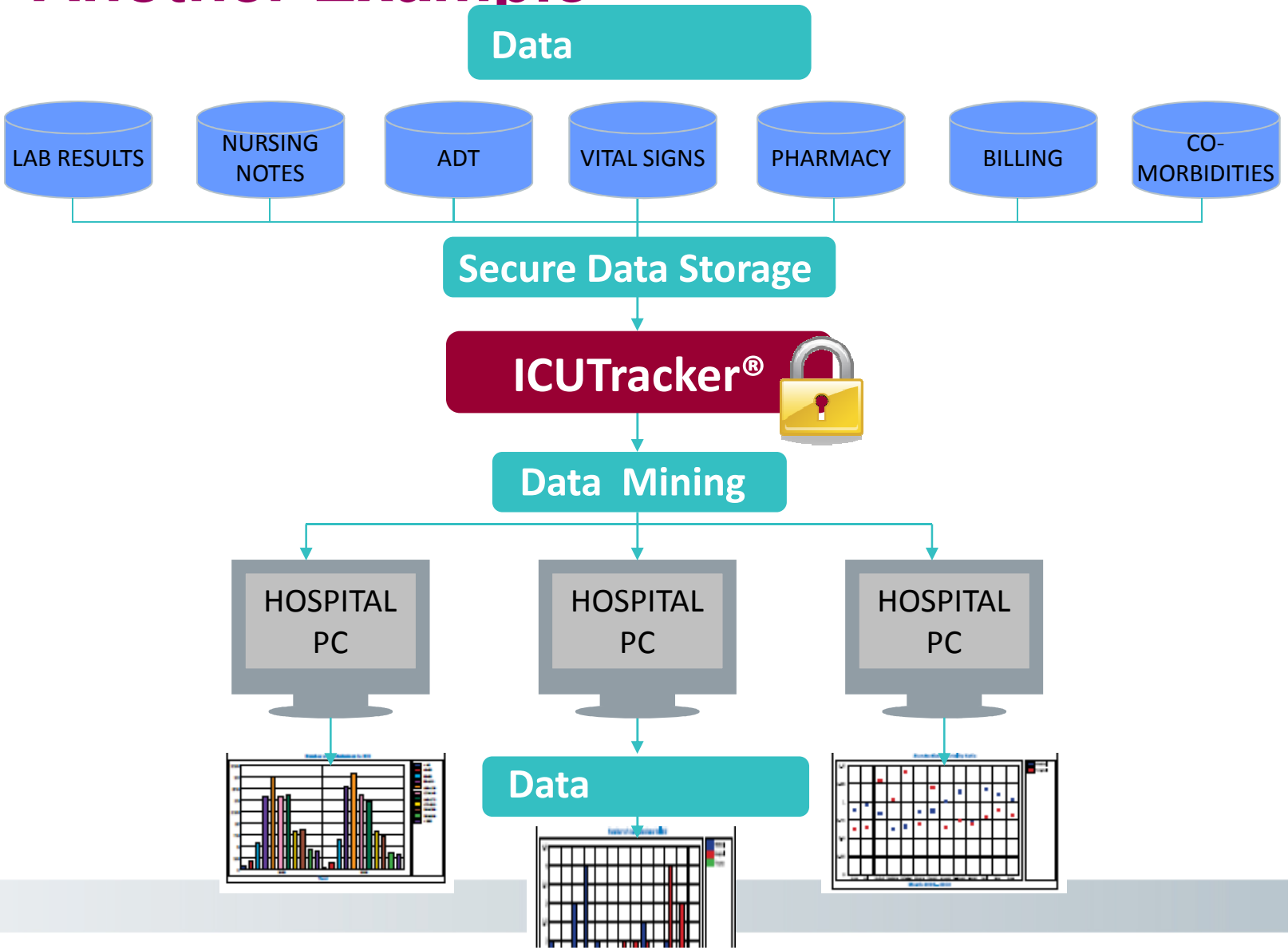
COPD

Pediatric ADHD

Collaborative Care Platform® (CCP)

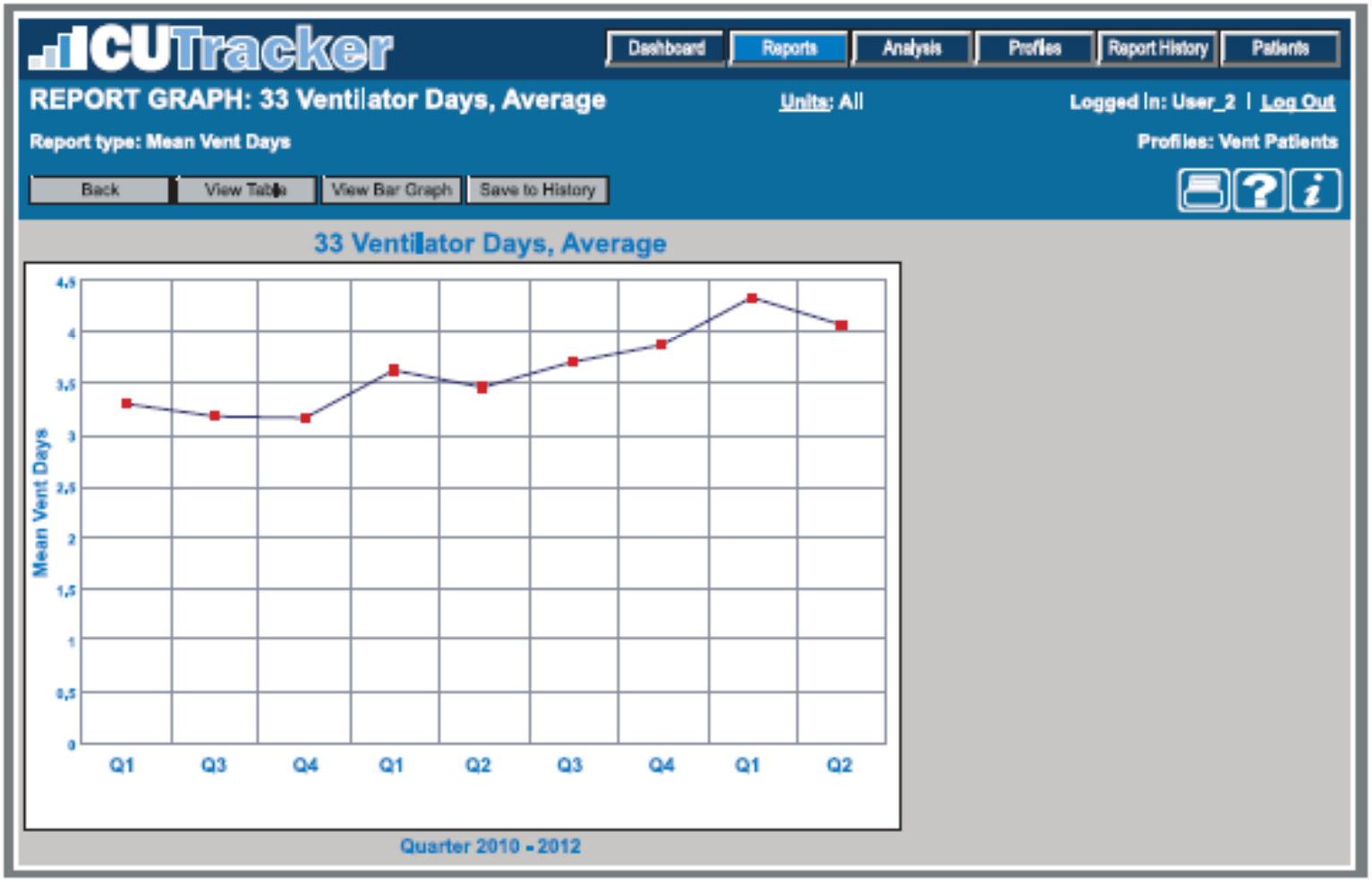


Another Example



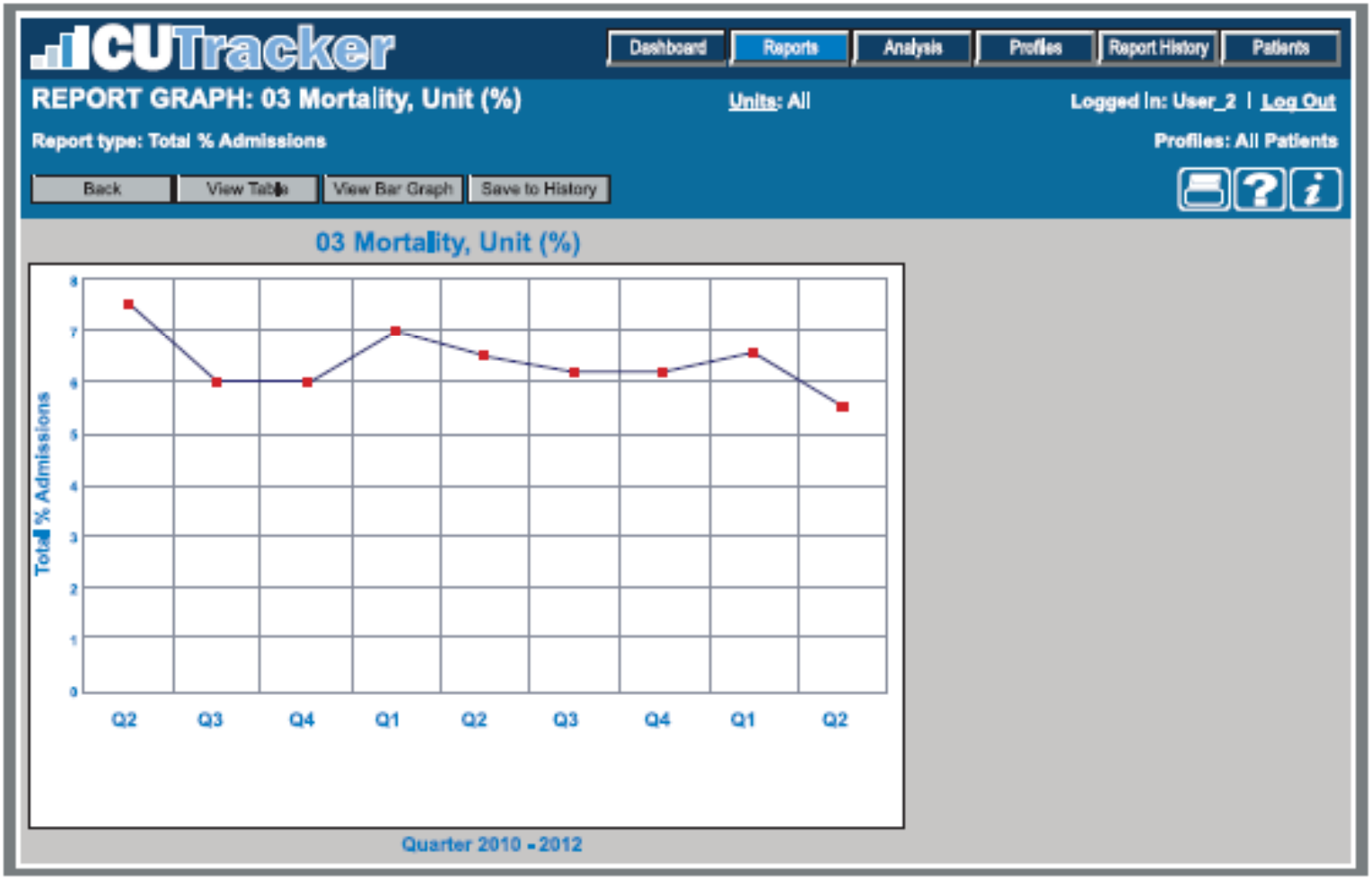
Report Examples

Ventilator Days Over Time



Report Examples

Unit Mortality (%) Over Time

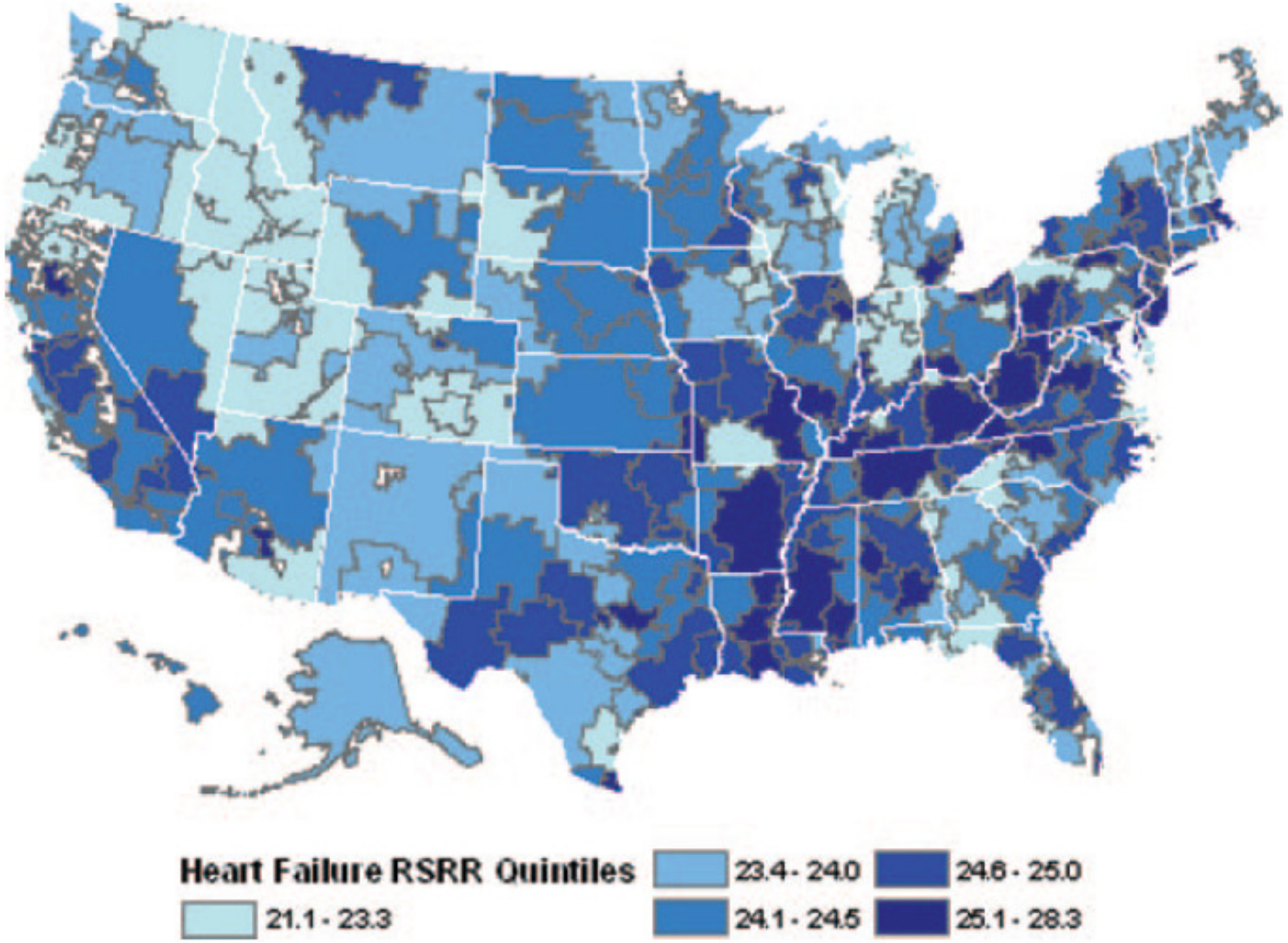


Success Takes More Than EHRs

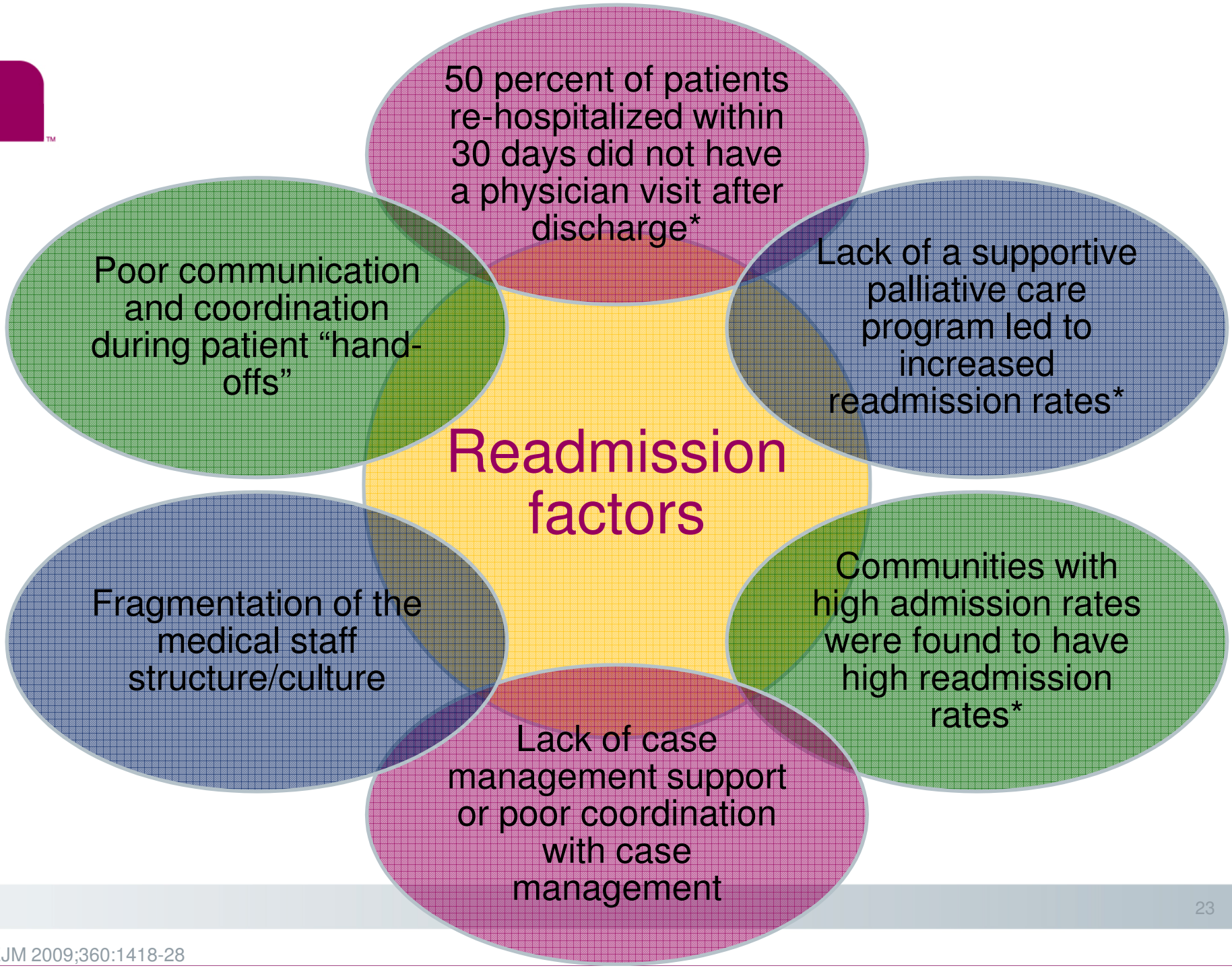
Installing EHRs and exchanging data is not enough; ACOs must have the right information at the point of care to support care decisions and to properly intervene in ways that address patients holistically

- Predictive modeling to define risk strata
- Evidence-based gaps in care information
- Real-time data access across care settings
- Care coordination among providers, staff, patients
- Patient-facing care plans, education, motivation, skills
- Remote telemedicine for monitoring high risk populations
- Primary care extenders, tools to manage select subpopulations
- Analytic tools for managing operational, clinical, financial metrics
- Tracking and managing quality metrics for operations, reporting, CQI

Heart Failure Readmission Rates



Bernheim SM et al. National patterns of risk-standardized mortality and readmission for acute myocardial infarction and heart failure: Update on publicly reported outcomes measures based on 2010 release. *Circ Cardiovasc Qual Outcomes* 2010;3:459-467.



*NEJM 2009;360:1418-28

AHFS Patient on Discharge…

Often discharged without complete resolution of the "deranged physiology" causing decompensation

Signs and symptoms lag behind worsening physiology

- Weight, shortness of breath, edema

"…the post-acute care period is one of great risk; this is specially true in the very first days following hospital discharge"

Circulation (2012) **18(5 Suppl. 1):** S14-S16

Hospital Readmission Avoidance

Identify at-risk patients and manage their comorbidities to avoid preventable hospital readmissions

Assist patients to optimize care transition post discharge

Provide data-driven technology / services for better care handoffs & coordination

Care management workflow platform

Array of telehealth monitoring devices for chronic care

Multimodal communication with patients per their choice

Seamless electronic data transfer

Training, support of, and collaboration with hospital discharge staff

Readmissions avoidance lowers costs & CMS penalties for hospitals

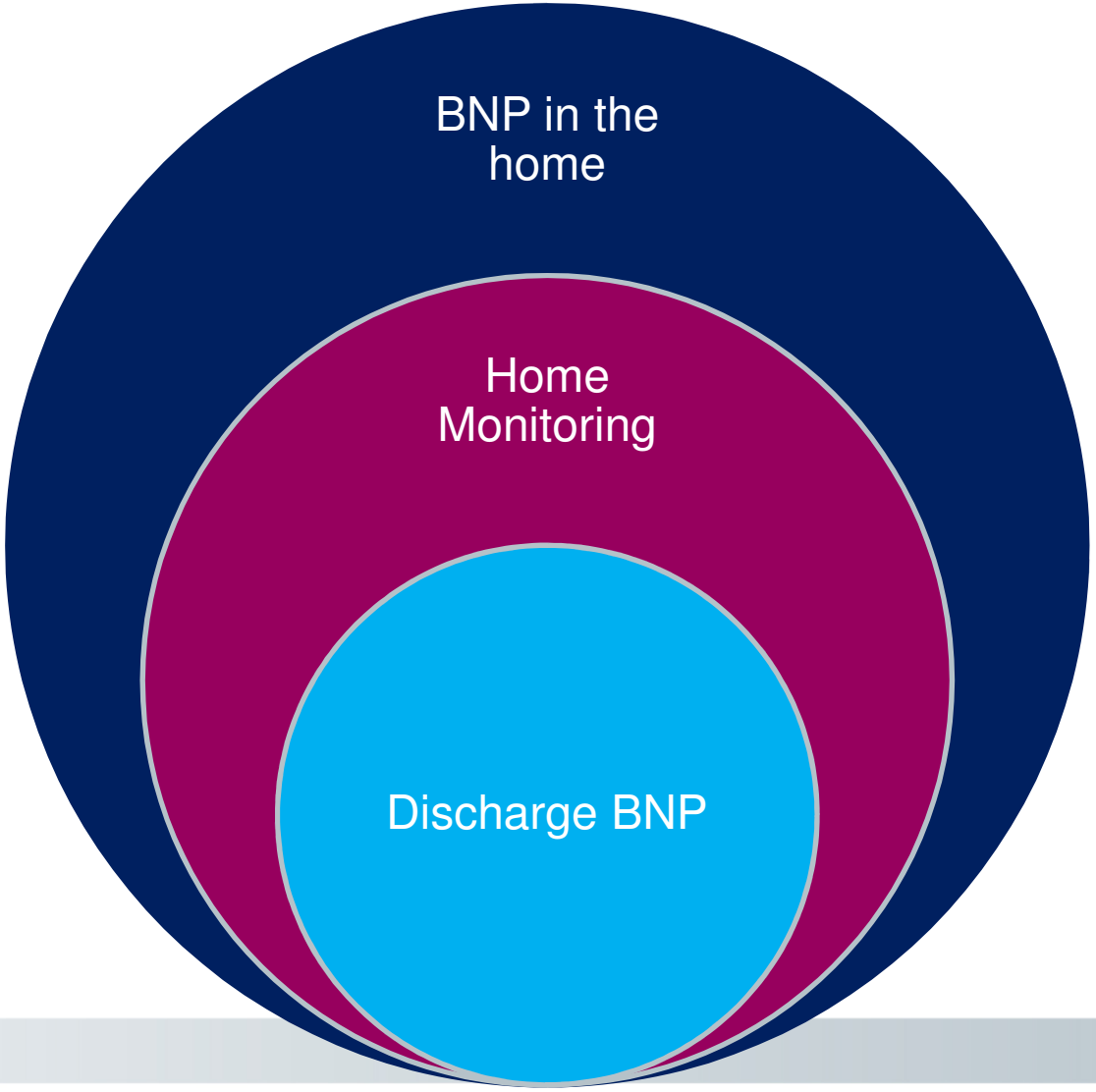
Strengthens hospital-provider, patient-provider relationships

Reduces patient hardship and morbidity from avoidable hospitalizations

Incorporates BNP level as acuity marker for individualizing follow-up services

Optional onsite and telephonic nurse coaching, monitoring, coordination

Alere/ACO-like HF Readmission Avoidance studies

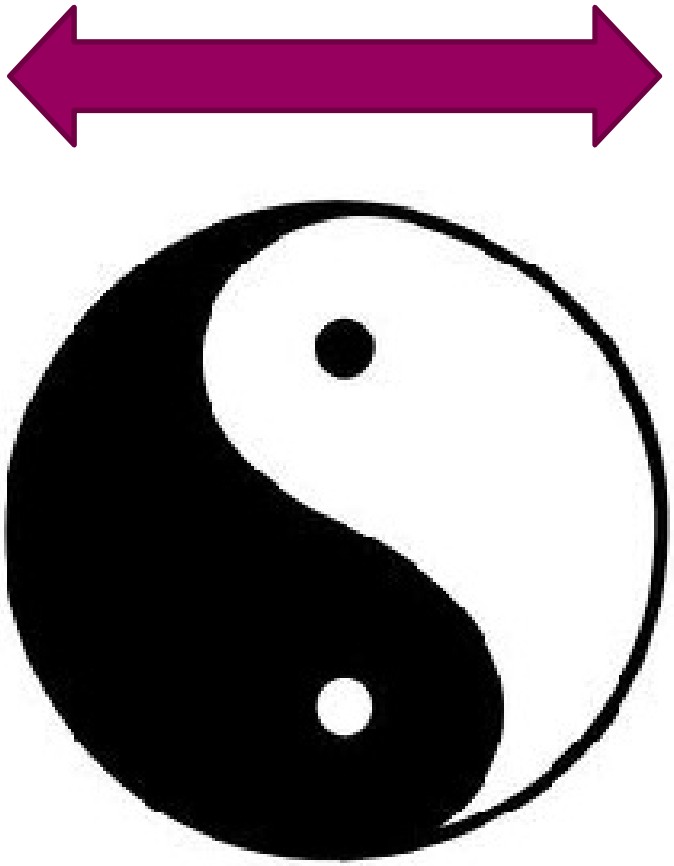


Yin & Yang of an Optimal Care System

How Opposing Forces are Interdependent & Balanced

Specialization

- Reductionist
- Cartesian view
- Essence defined by parts (machine)
- Scientific method
- Chemistry, physics
- Organ-centered care
- Disease focus
- Curing orientation
- Fragmenting



Integration

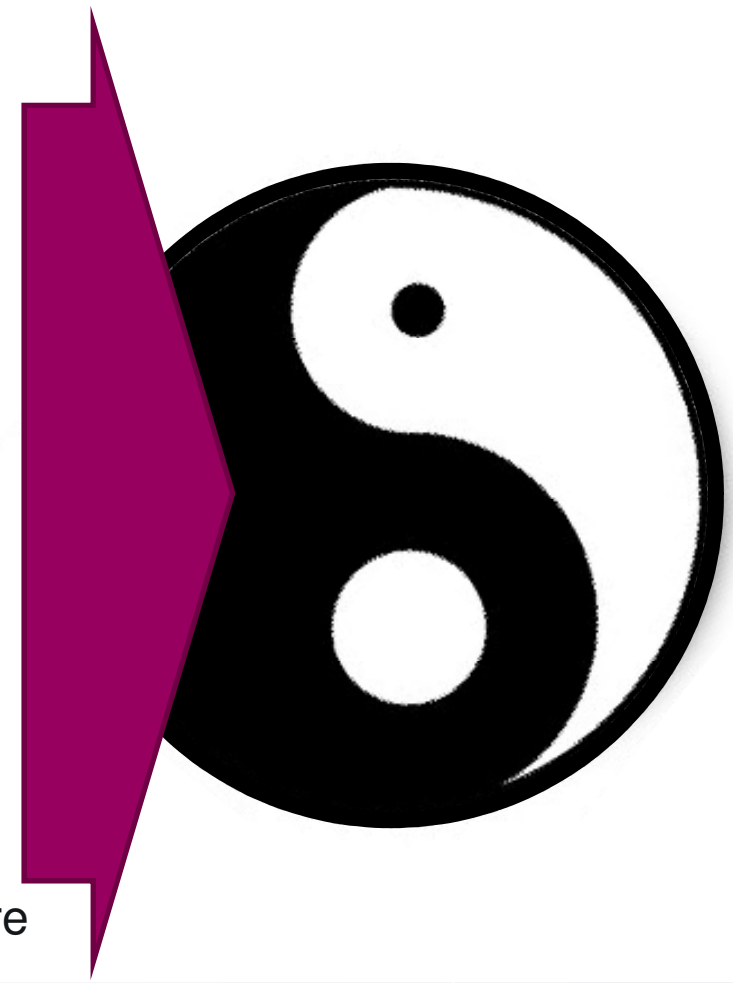
- Holistic
- Aristotelian view
- Whole is greater than sum of its parts
- Systems theory
- Complexity, chaos
- Patient-centered care
- Health focus
- Prevention orientation
- Defragmenting

Our Unbalanced Health Care System

Specialization Without Better Integration is Unsustainable

Specialization

- Uncoordinated care
- Process focus
- Poor handoffs
- Navigation hard
- Continuity lacking
- Little data exchange
- Waste, duplication
- Curing vs. caring
- Volume-based pay
- Incentives to do more



Integration

- Teamwork
- Triple Aim
- Care transitions
- EMR, PHR, HIE
- Accountable care
- Medical homes
- Participatory care
- Cost-effectiveness
- Value-based pay
- Incentives to do better

Support Across Continuum of Health

Comprehensive, Integrated Approach to Improving Population Health

Health & Wellness
- Health Portal
- HRA
- Online Education
- Telephonic Coaching
- Tobacco Cessation
- Screenings
- Wt/Fitness

Condition Mgmt
- Asthma
- Diabetes
- CAD
- Anticoag Mgmt
- Heart Failure
- COPD
- Chronic Pain
- Depression
- Nurse 24

Diagnostics
- Lipids
- Glucose, A1C
- Coagulation
- Blood gases

Biometrics
- Wt, activity
- Pulse oximetry
- Blood pressure
- Glucose
- Symptoms

Case Mgmt
- Complex Care
- Oncology
- Catastrophic Cases
- Intensive Care
- Transitional Care
- Readmission Avoidance
- Home visits

Women's & Children's
- Preconception
- OB Risk Assmt /Education
- OB Case Mgmt /Homecare
- Perinatal Screening
- NICU Case Mgmt

Healthcare Technology
- Communication
- Data Exchange
- Clinical Registry
- Care Plans
- Physician Tools
- Patient Tools
- Telemonitoring
- Decision Support

Integration → **Personal Data** → **Health Support** → **Technology**

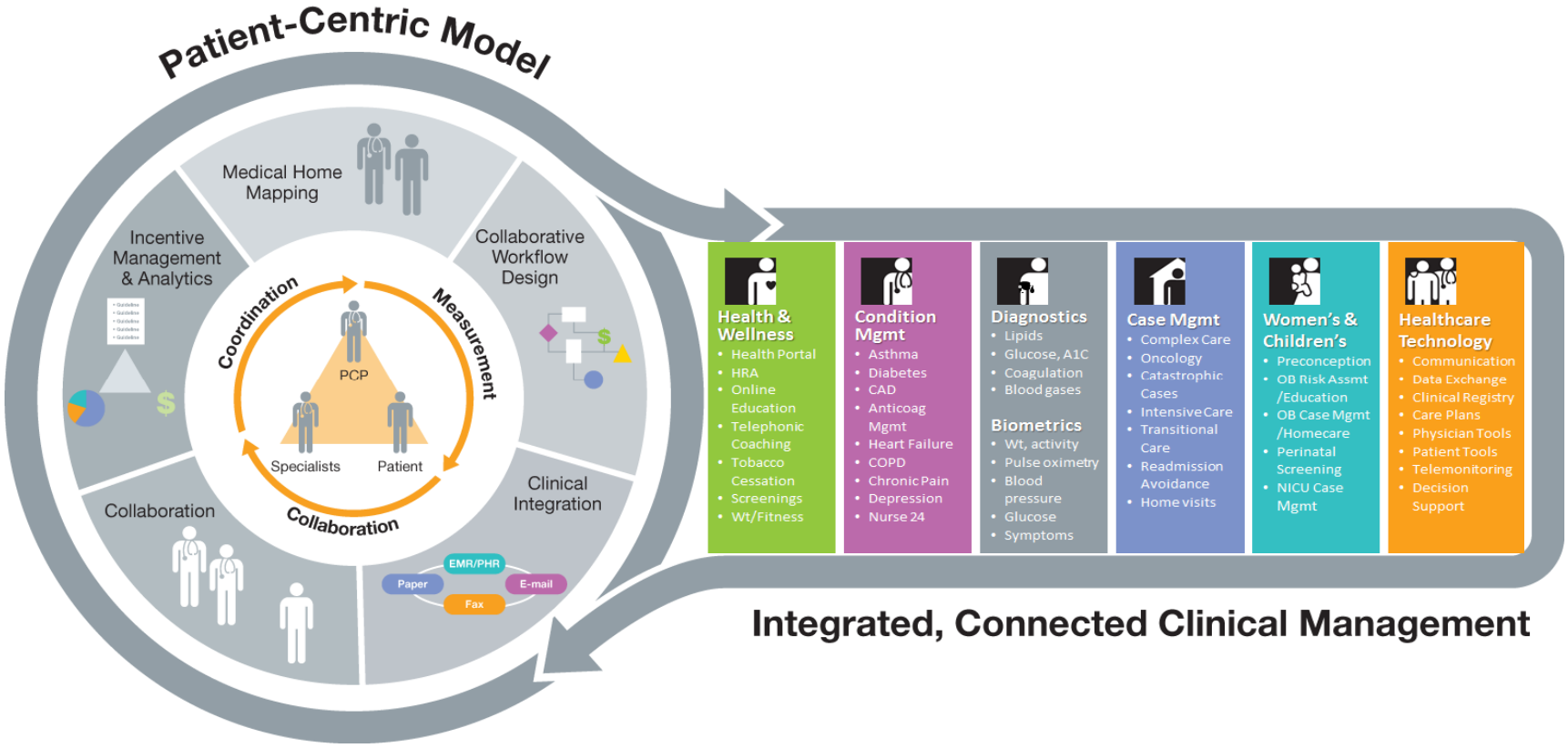
Connected Health Ecosystem → **Point of Care Health Decision Support** → **Personal Health Support Services**





Personal Health Support Model

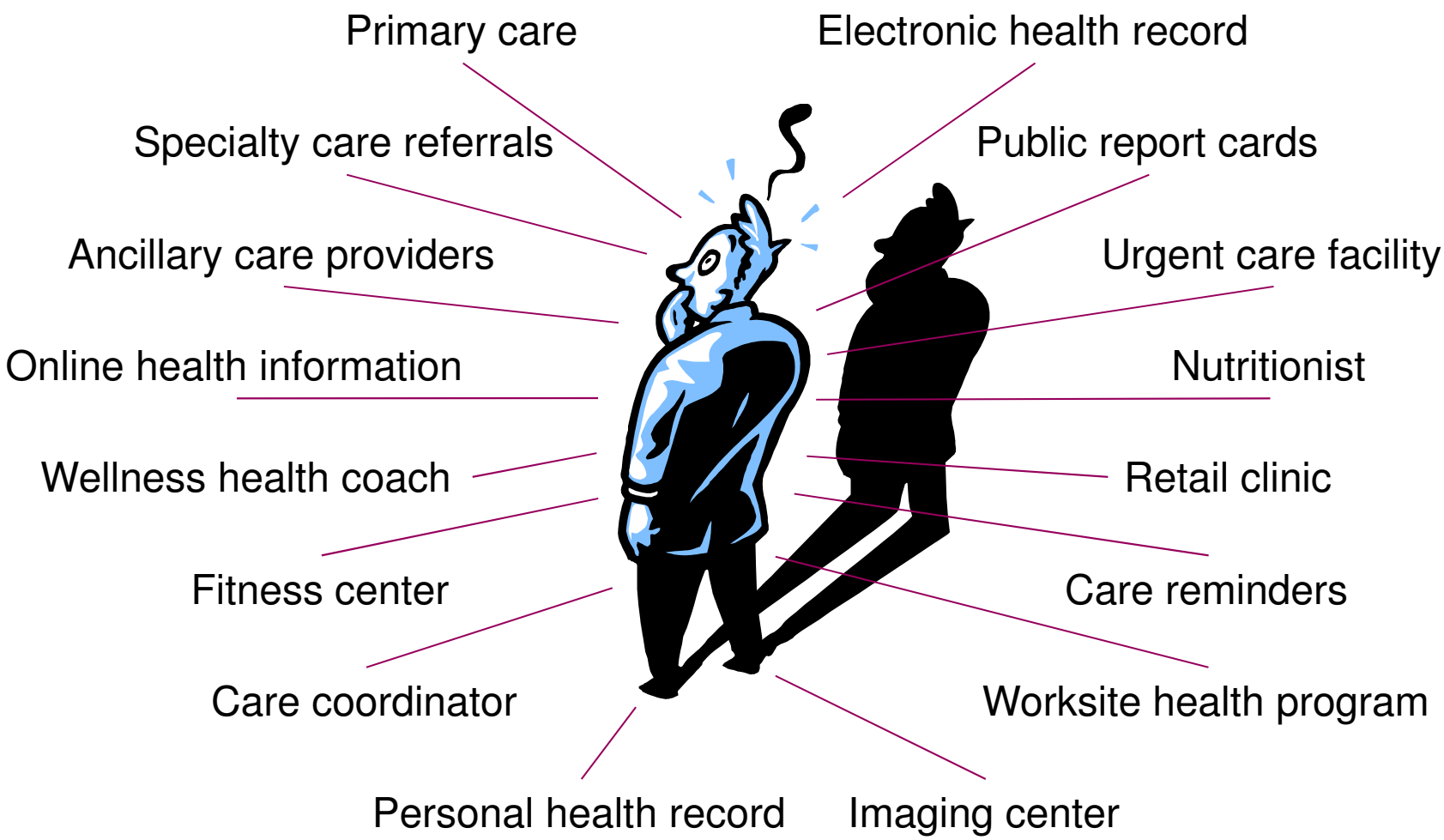
Our Patient-Centric Approach Adapts to Needs of Individuals



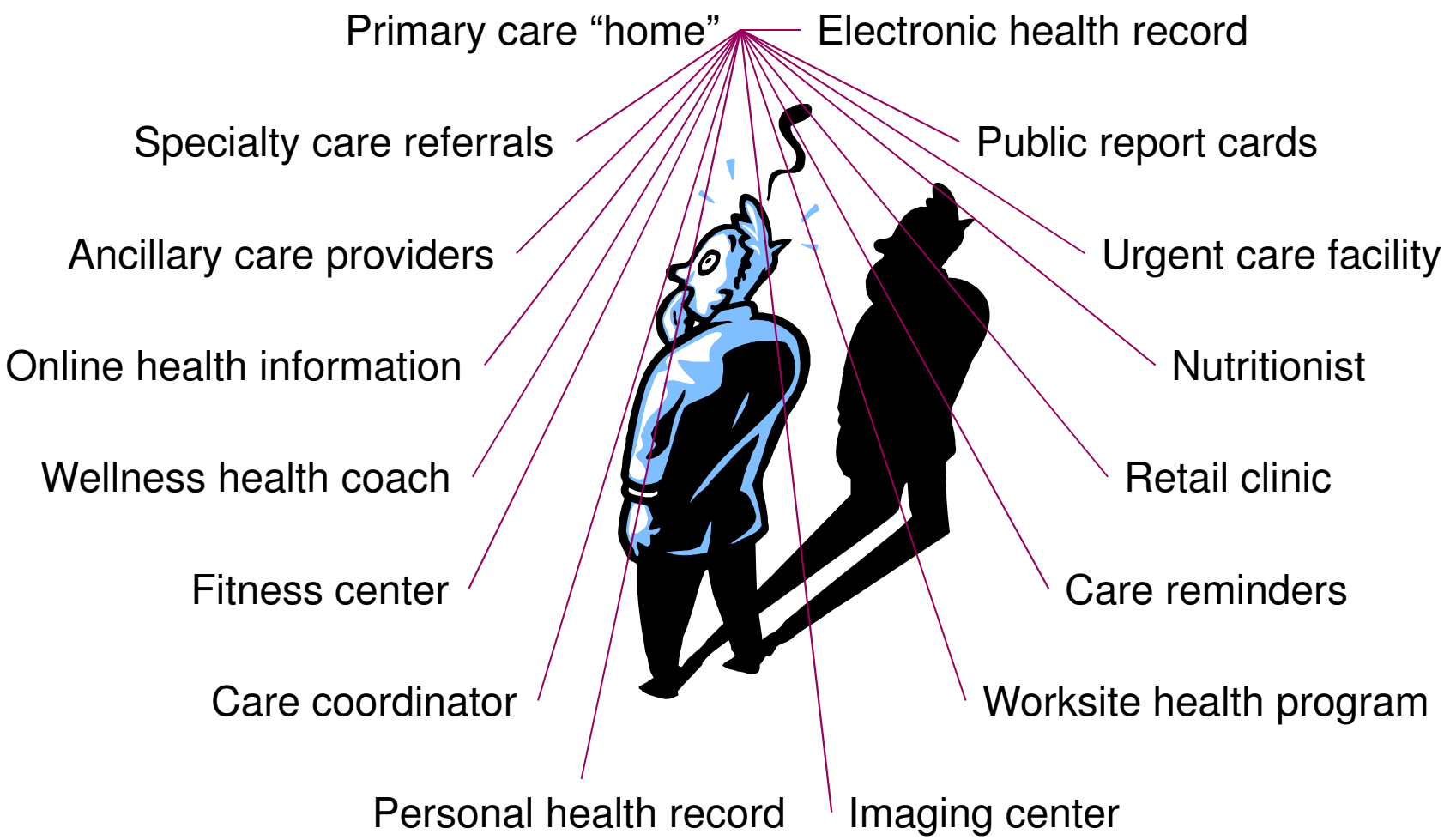
Collaborative consumer-centric model delivers care and measurable value across the health care continuum

It's Not Easy Being Patient-Centric

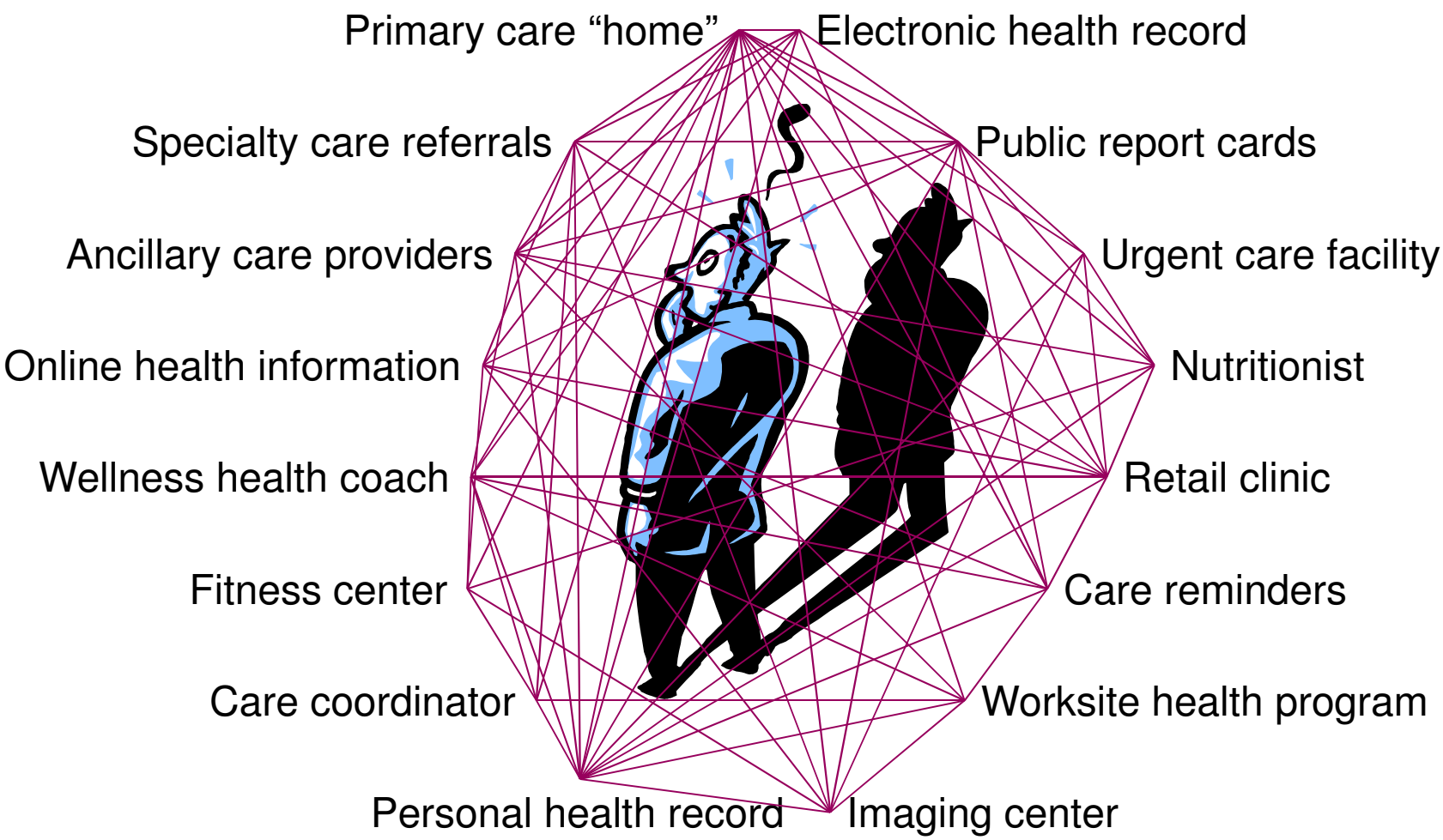
Even For Patients Who Are Striving for Optimal Health



This Would Be Nice

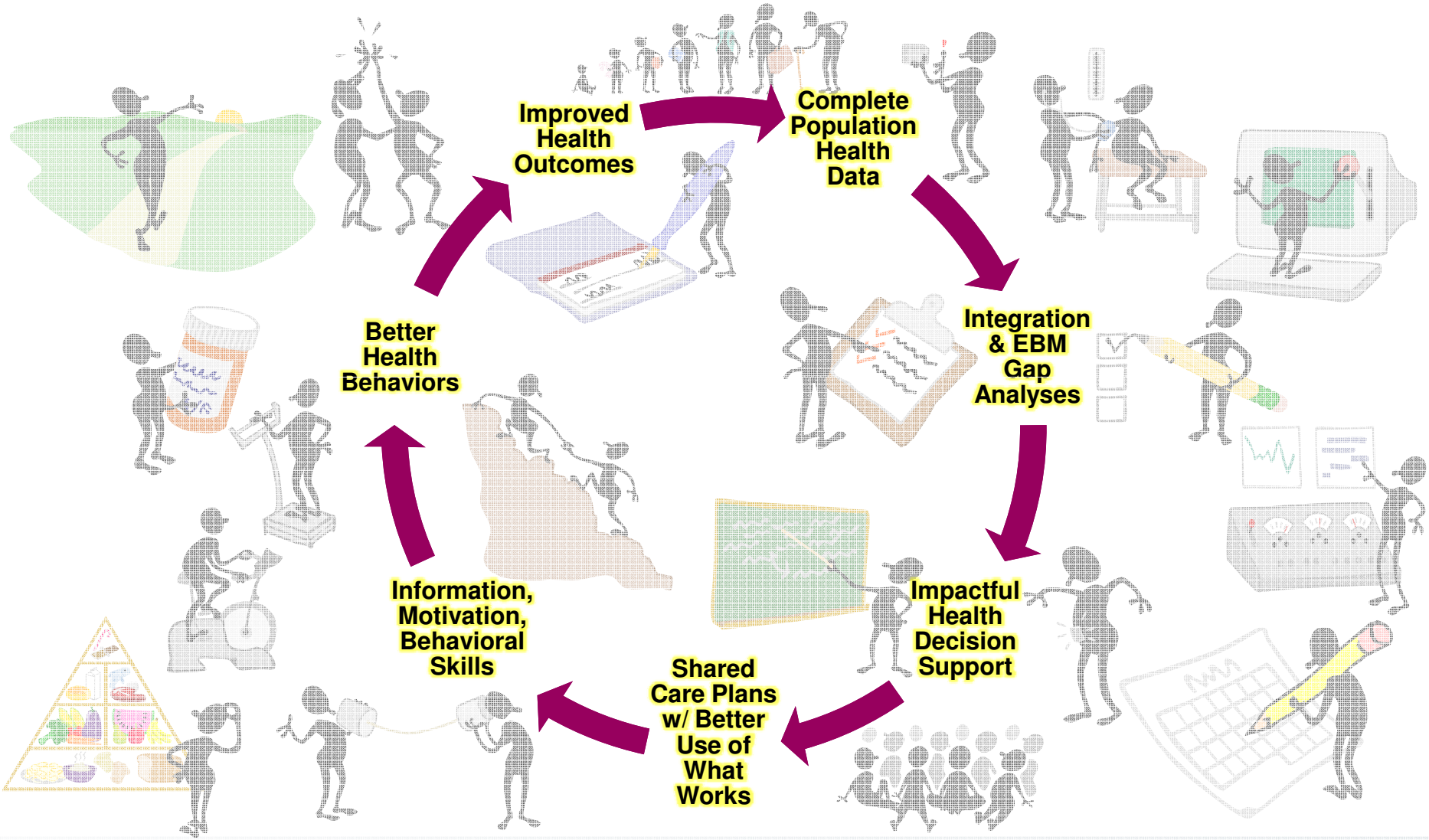


This is What We Want!



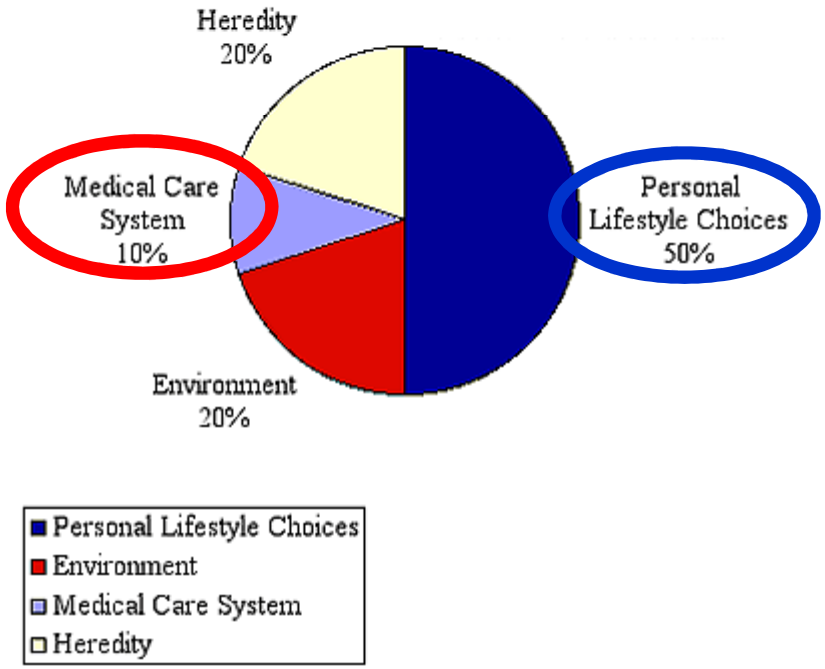
Value Chain For Accountable Care

A Virtuous Cycle of Population Health Management

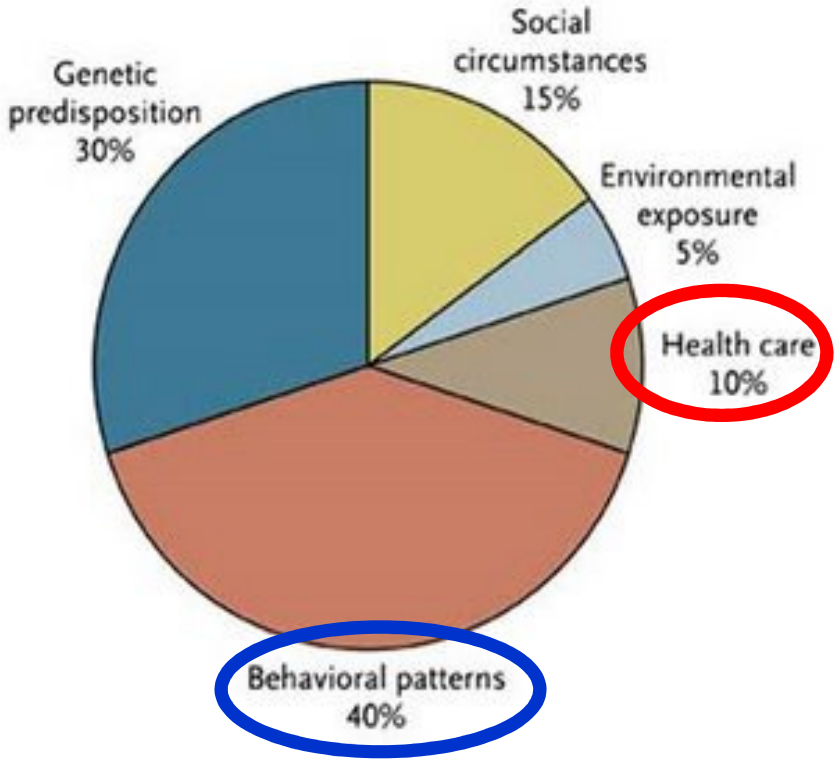


It Takes More than Health Care Providers

Factors Contributing to Health
Based on figures from the National Center for Health Services, Centers for Disease Control and National Institutes for Health.

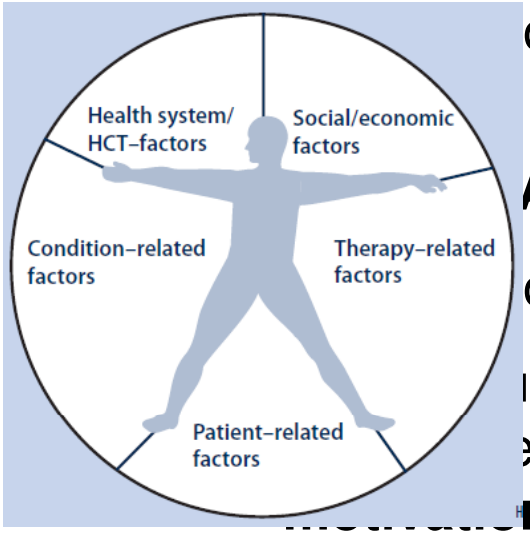


Proportional Contribution to Premature Death
Schroeder S. N Engl J Med 2007;357:1221-1228



Why Do We Behave As We Do?

Health Behaviors Are Multifactorial and Resistant to Change

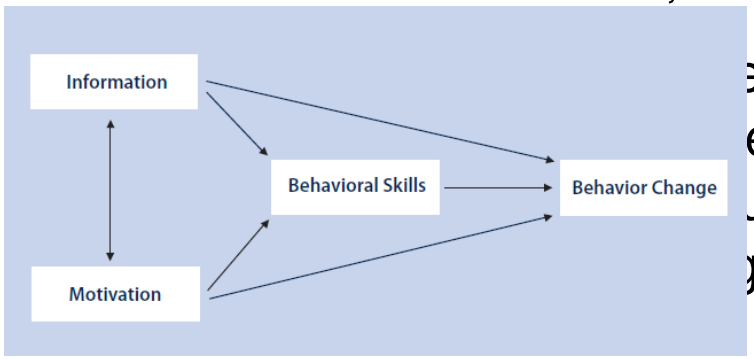


ow **WHAT** to change and

ANT to change?

ow **HOW** to change?

l health behavior change
equires **information**,
n, and **behavioral skills**



e health system must
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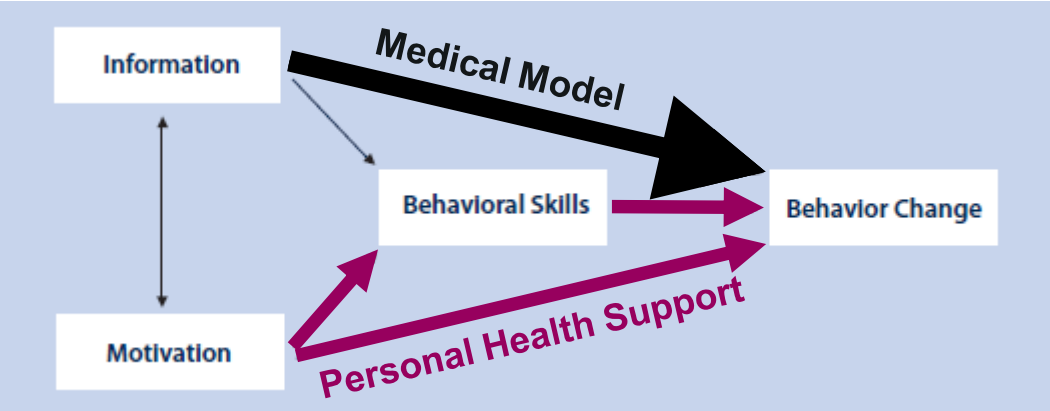
ge over time

Sabaté et al. Adherence to Long-term Therapies: Evidence for Action. World Health Organization 2003

Why Doesn't Care Change Behavior?

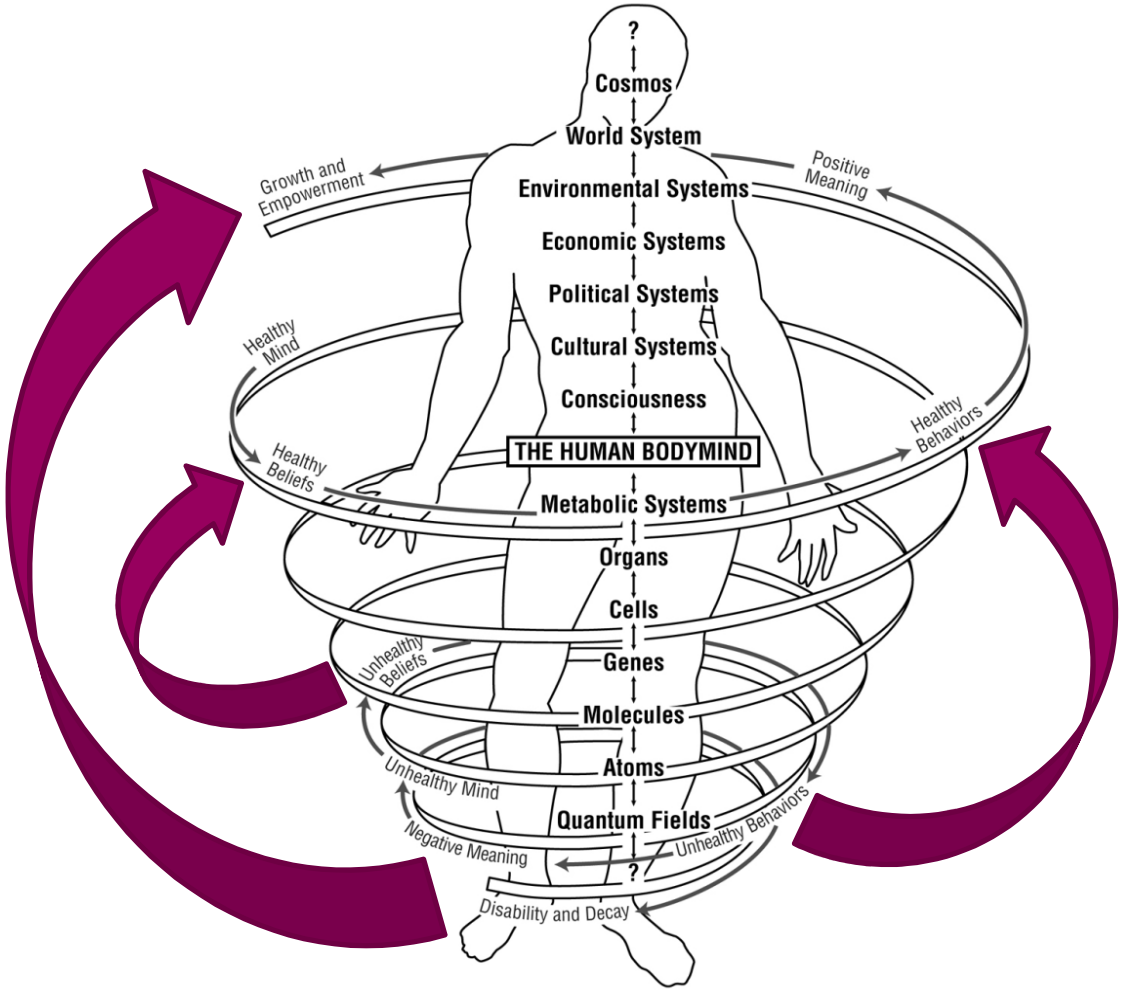


- Information is a prerequisite for changing behavior, but itself is insufficient; sustained motivation and appropriate behavioral skills are also necessary
- The classic "medical model" focuses on providing information via hierarchical authority and expertise, with little attention to motivation and requisite skills
- When unsuccessful, clinicians tend to add shame, guilt, &/or intimidation to the message, further demotivating patients and defeating our original purpose

Most physicians and nurses are not ideally socialized, trained, or supported to provide sustained motivation and good behavioral skills

Needed: "Care As If Health Matters"

That Is, Care That Is Accountable for Determinants of Health



- Treating people as the human, fallible, habit-prone, adaptable, stubborn, resilient, irrational, complex creatures that we are
- Shaping unhealthy beliefs into healthy ones
- Supporting change of unhealthy behaviors into healthy behaviors
- Mitigating morbidity & disability while supporting growth and empowerment

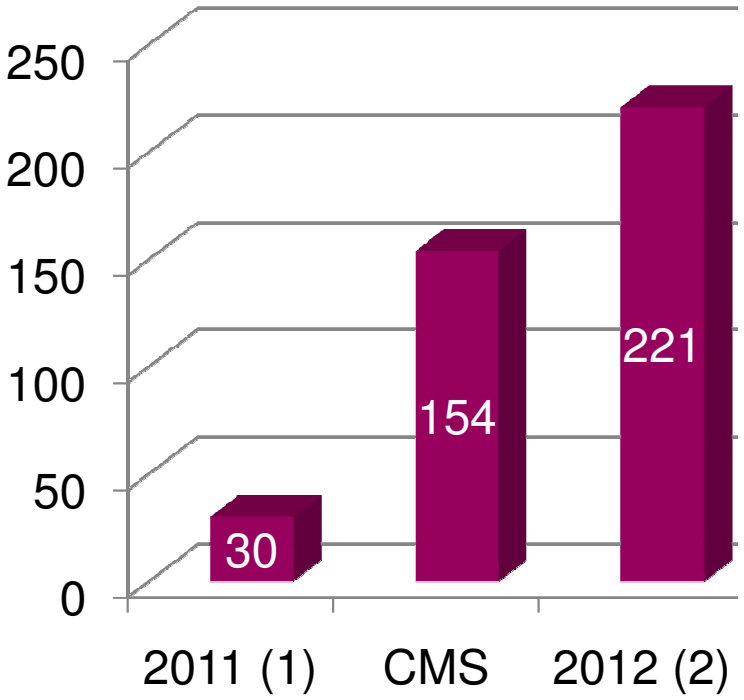
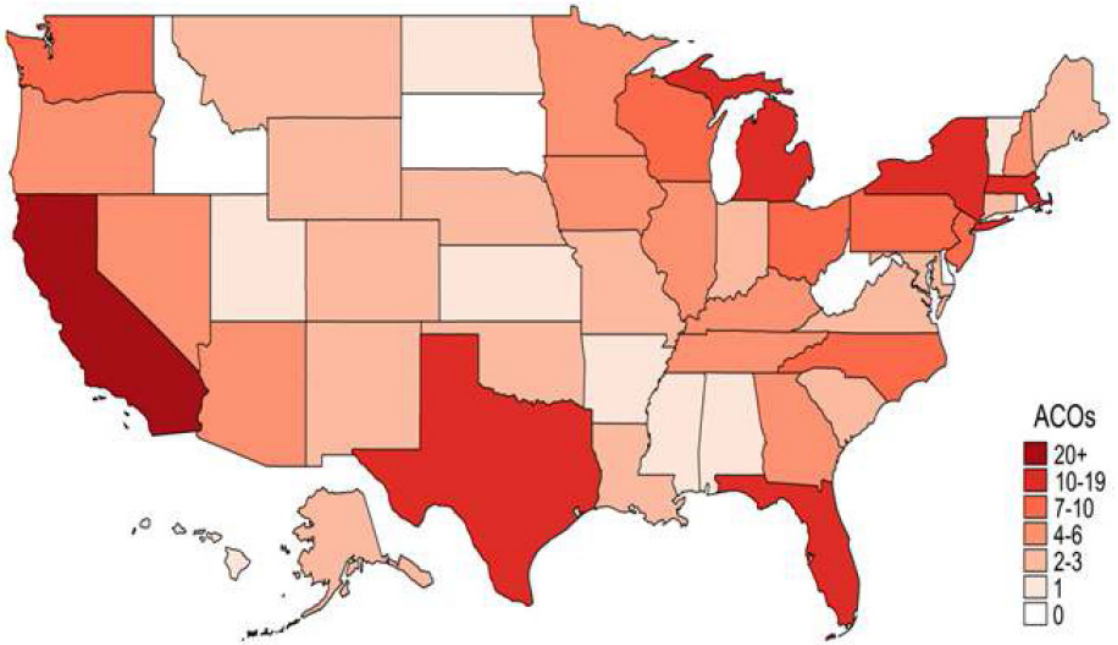


FIGURE 1. ACO DISTRIBUTION BY STATE



(1) Higgins A et al (2011) Health Affairs **30:** 1718-1727
(2) Leavitt Partners ACO report, June 2012

Who Is Leading the Way?

PPACA suggested that CMS would take national lead on defining the evolution to accountable care through MSSP

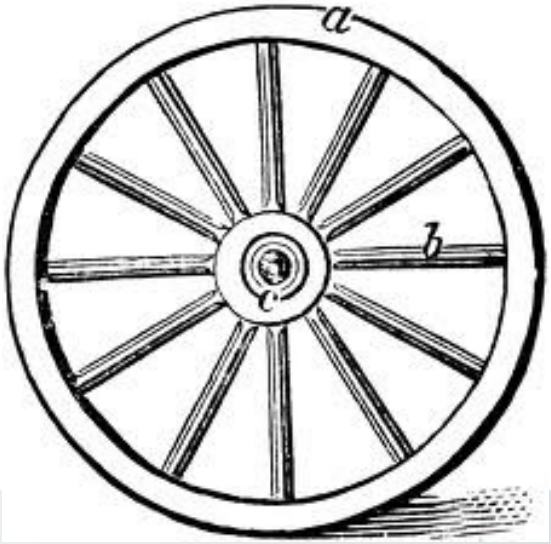
Early provider response to CMS ACO program was tepid, now warming up with addition of other CMMI approaches such as Bundled Payment Model, Pioneer ACO, Advanced Primary Care model, etc.

Commercial health plans are already participating in many ACO “pilots” and “demonstrations” testing value-based contract structures, P4P, new collaborations and technologies

It appears that national payors are amassing the requisite resources to be key strategic partners with ACOs

It seems likely that commercial plans will lead the way for the next few years, even if it still requires CMS’s offering of a viable ACO pathway to achieve “critical mass” on national scale

What are ACOs Gonna Look Like?



What are ACOs Gonna Look Like?

Group of independent physicians together through an independent practice association in affiliation with other providers

Group practice (primary care or multispecialty)

Physician/hospital organization

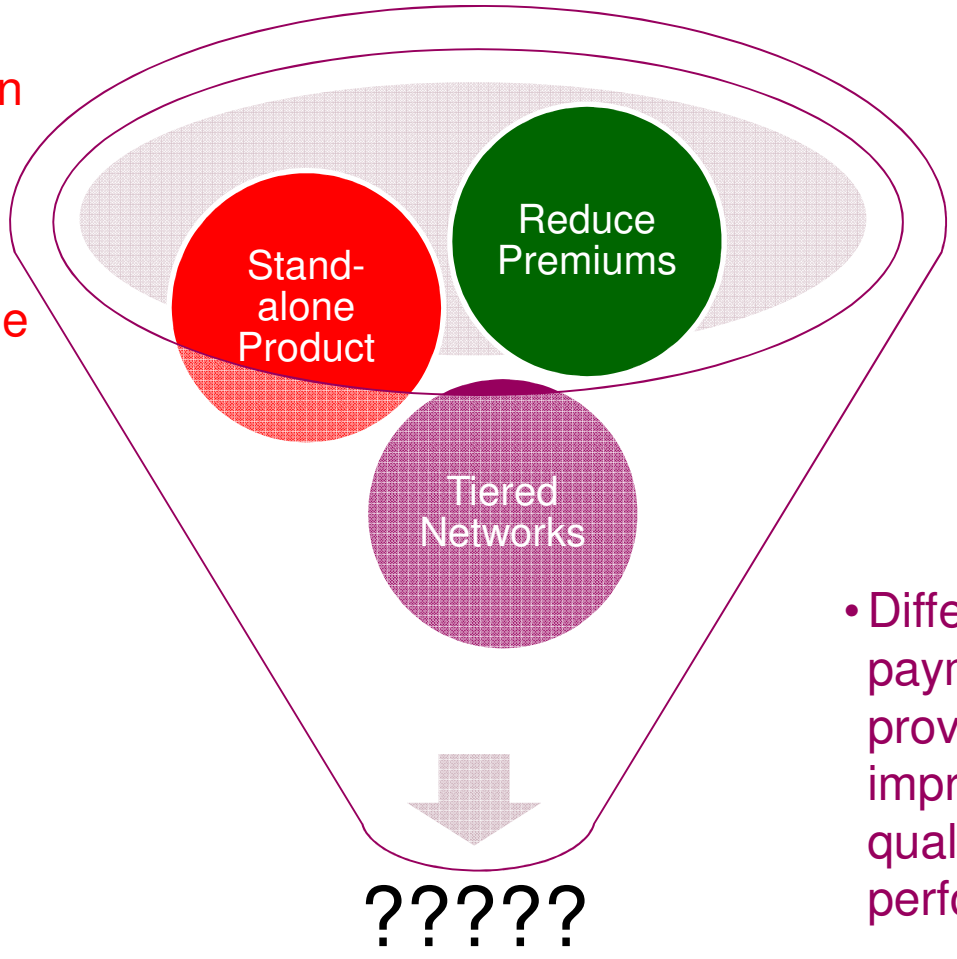
Health system where the physicians are employees

IDNs with hospital owned practices, physican employees, etc.

TBD

How Might Payors Structure This?

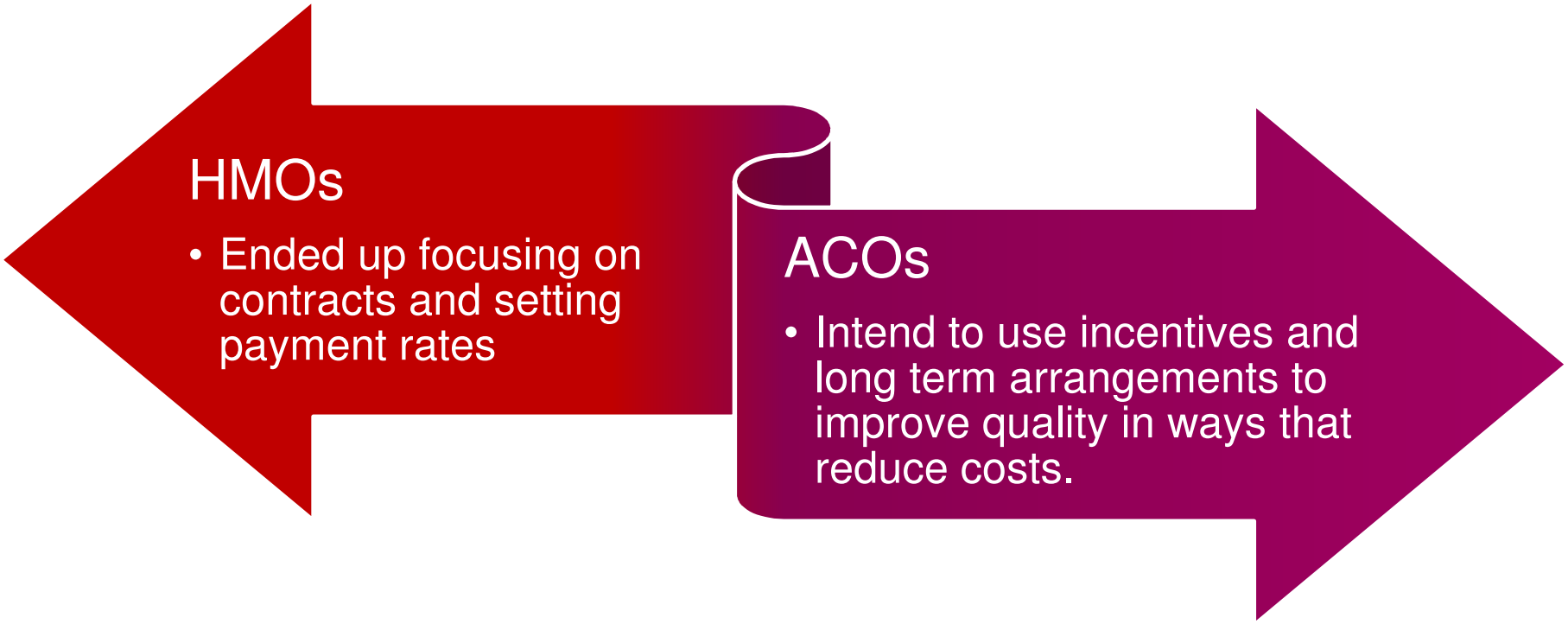
- Separate health plan option offered alongside the traditional benefits
- Lower premiums due to coordinated care
- Narrower list of providers
- Better benefits? Lower co-pays?



- Reductions derived from lower HC costs
- For members who opt into the program

- Different co-payments with ACO providers that show improved quality/cost performance

Higgins A et al (2011) Health Affairs **30:** 1718-1727



Higgins A et al (2011) Health Affairs **30:** 1718-1727

HMOs vs. ACOs: Another Difference

Quality/Patient Experience Required Measures

Preventive Health

- Influenza immunization
- Pneumococcal vaccination
- Adult weight screening/Follow up
- Tobacco use assessment and cessation
- Depression screening
- Colorectal cancer screening
- Mammography screening
- Proportion of adults with blood pressure screen in past two years

At-Risk Populations

- Diabetes
  - A1c control
  - Low density lipoprotein
  - Blood pressure
  - Tobacco non-use
  - Aspirin use
  - Hemoglobin A1c
- Hypertension
  - Blood pressure control
- IVD
  - Complete lipid profile and LDL control
  - Use of aspirin/antithrombotic
- Heart Failure – Beta Blocker for LVSD
- CAD
  - Drug Therapy for Cholesterol
  - ACE and ARB Therapies

Care Coordination/Safety

- COPD (PQI#5)
- Congestive heart failure (PQI#8)
- Risk standardized, all condition readmission
- % of PCP qualify for EHR incentive payment
- Med reconciliation after inpatient discharge
- Screening for fall risk

Patient Experience (CAHPS)

- Timely care, appointments & info
- Doctor communication
- Patient rating of doctor
- Access to specialists
- Health promotion & education
- Shared decision making
- Health status/Functional status

Early Report: Blue Shield, CA

Dignity Health, Blue Shield of CA and Hill Physicians ACO collaboration begun in Jan 2010

Each organization shares clinical and case management information in order to tightly coordinate care.

They agreed to contribute to cost savings and bear the financial risk for any variance from the project's cost reduction goals.

Success depends on taking cost out of the delivery system, not by shifting risk to other partners.

Cost-saving strategies

- Manage utilization through coordinated operational infrastructure and clinical processes.
- Personalize care and disease management to eliminate unnecessary utilization and noncompliance with evidence-based care.
- Reduce physician clinical and resource variation through quantitative analysis and targeted interventions.
- Reduce pharmacy costs through directed member outreach, drug purchasing and contracting strategies.
- Facilitate communication of patient medical information through integrated electronic health information.

- In patient readmissions: 15%
- Inpatient days: 15%
- Inpatient stays of 20+ days: 50%
- Half day reduction in average LOS

$15.5 Million saved

In 2010-2011 the parties shared a savings pot of $8 Million

Another Success Story

- Reduce LDL targets for high risk patients.
- 100 mg/dL → 70 mg/mL

NCEP

However

- Several studies show only 15-30% reach this goal

- 7427 patients managed by nurses, pharmacy and MDs
- Meds, diet and lifestyle
- EHR and disease registries were key to coordinate patient care

Kaiser (Denver) project

Results

43% achieved target goal

87% could use generic drugs

Credit

Authors credit the integrated care delivery model, supported by electronic medical records and health information technology

Kaufman, et al (2010) J. Clin. Lip. **4:**173-180

ACE Bundle Demonstration

CMS project

Acute Care Episodes

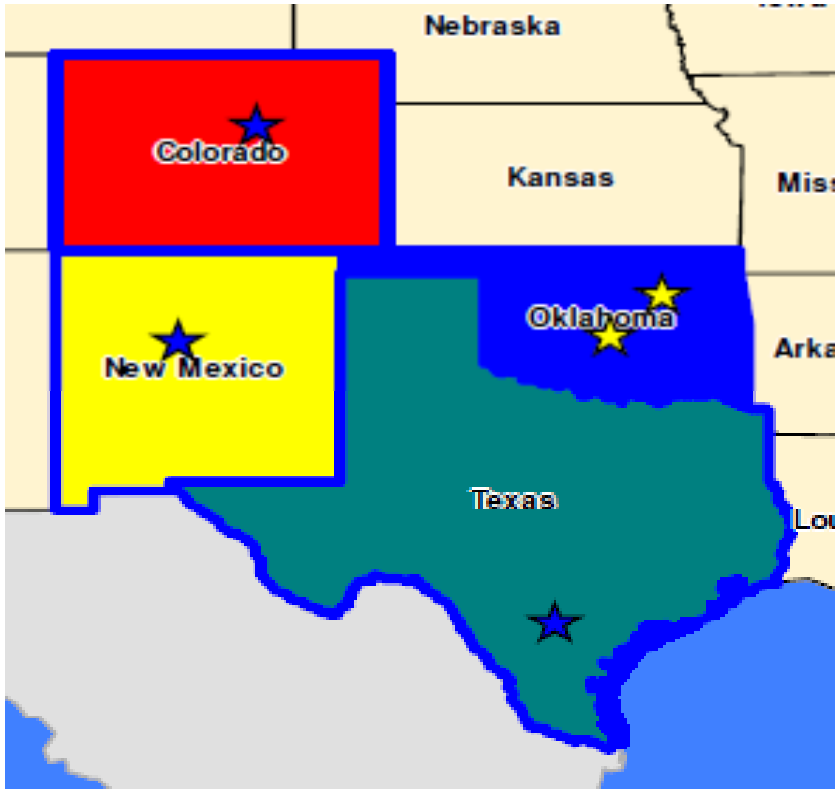
Jan 2009

5 health systems

Specific DRGs (cardiac and orthopaedic)

Inpatient costs only

Bundle Demonstration Sites

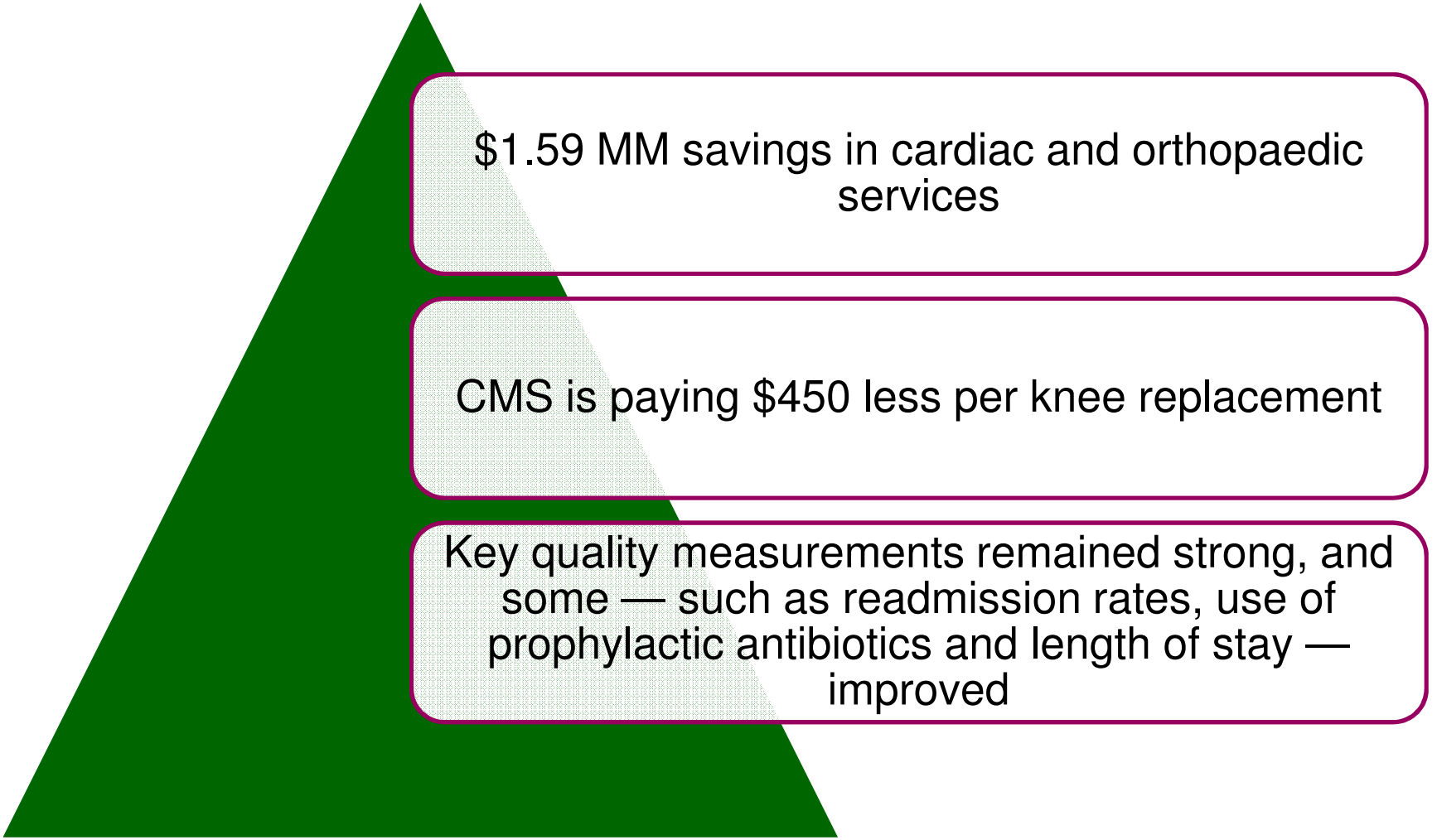


- Baptist Health System
  San Antonio
- Oklahoma Heart Hospital
  Oklahoma City
- Exempla Saint Joseph Hospital
  Denver
- Hillcrest Medical Center
  Tulsa
- Lovelace Health System
  Albuquerque,

ACE Bundle Demo Scope

# DRGs	Acute Care Episode
6	Cardiac Valve and other Major Cardiothoracic Procedures
2	Cardiac Defibrillator Implant
6	Coronary Bypass
8	Pacemaker Procedures
6	Percutaneous Cardiovascular Procedure
2	Bilateral or multiple major joint procedures of lower extremity
2	Revision of hip or knee replacement
2	Major joint replacement
2	Knee procedures

ACE Bundle Results-Hillcrest



Becker's Hospital Review, http://www.beckershospitalreview.com/hospital-physician-relationships/2-major-lessons-from-cms-bundled-payment-ace-demonstration.html

ACE Bundle Results-Hillcrest and Lovelace

Becker's Hospital Review, http://www.beckershospitalreview.com/hospital-physician-relationships/2-major-lessons-from-cms-bundled-payment-ace-demonstration.html

Observations

Bundled payments create a tighter connection to physicians

- "Probably the most significant area of [success] was physician involvement,"
- When physicians see the costs and ramifications of the entire episode of care, they are more likely to be more economical and efficient in their choice of implants, testing and other areas of clinical decision making

Cost Savings without rationing of care

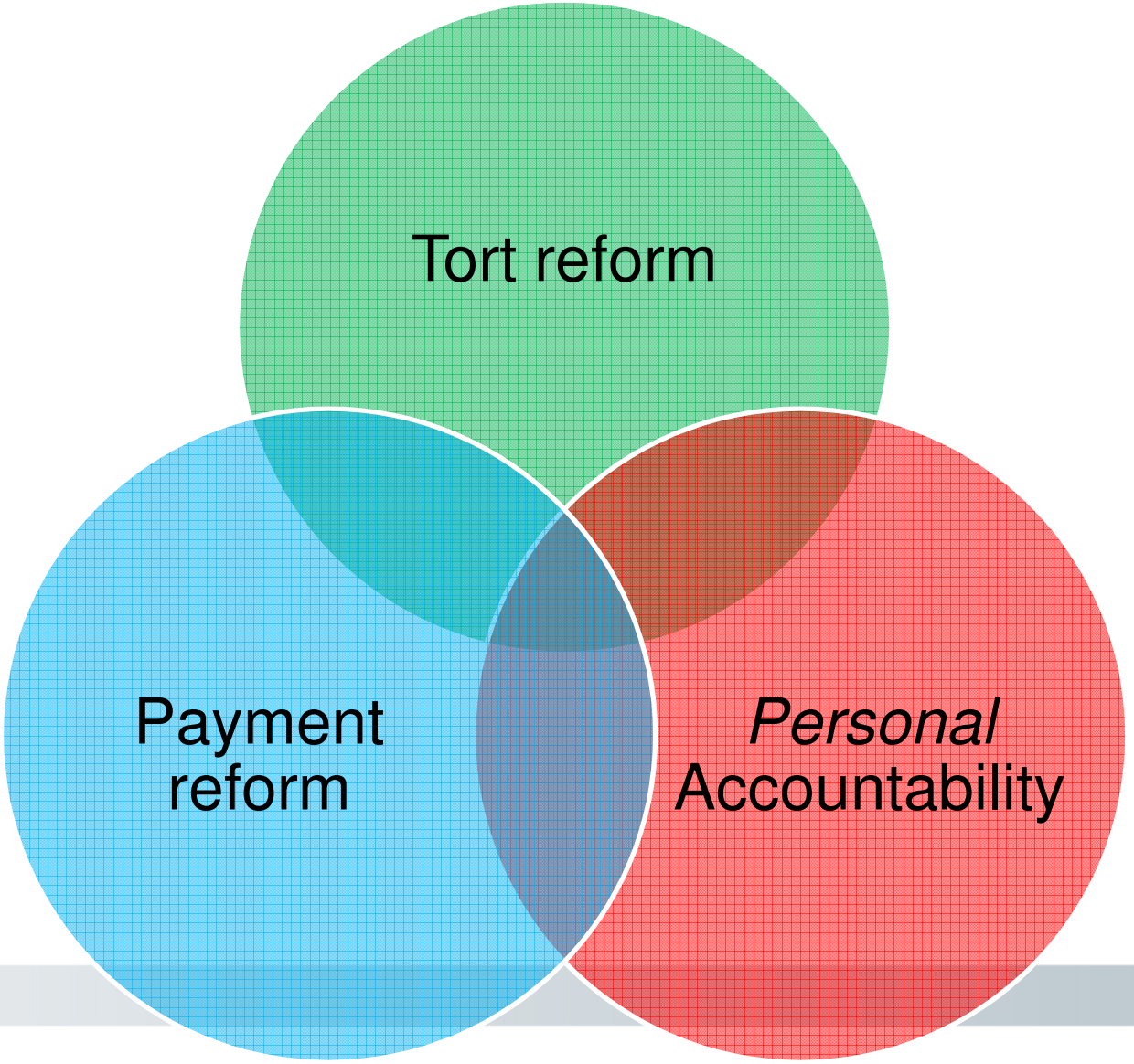
- Level of treatment and quality measures were unaffected.
- Outcomes metrics are unchanged
- Standardizing processes reduces variability in outcomes and improves quality

The ROI for standardization has its limits

- Bundling will be a greater challenge for complex medical cases such as diabetes, congestive heart failure and other chronic conditions

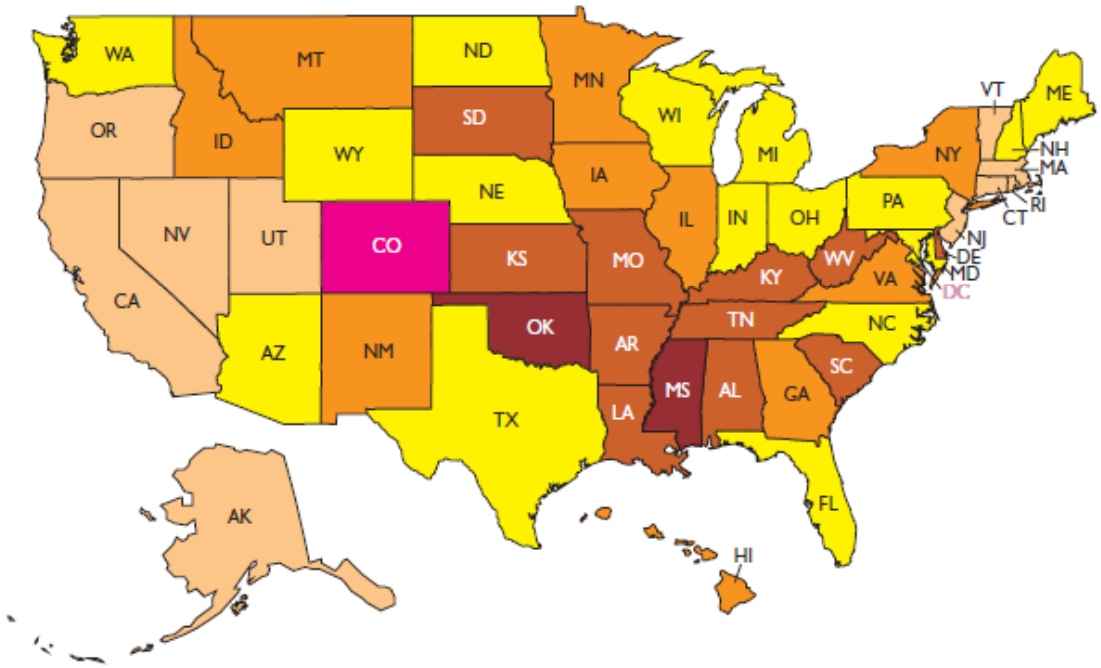
Becker's Hospital Review, http://www.beckershospitalreview.com/hospital-physician-relationships/2-major-lessons-from-cms-bundled-payment-ace-demonstration.html

What Else Might we Need?



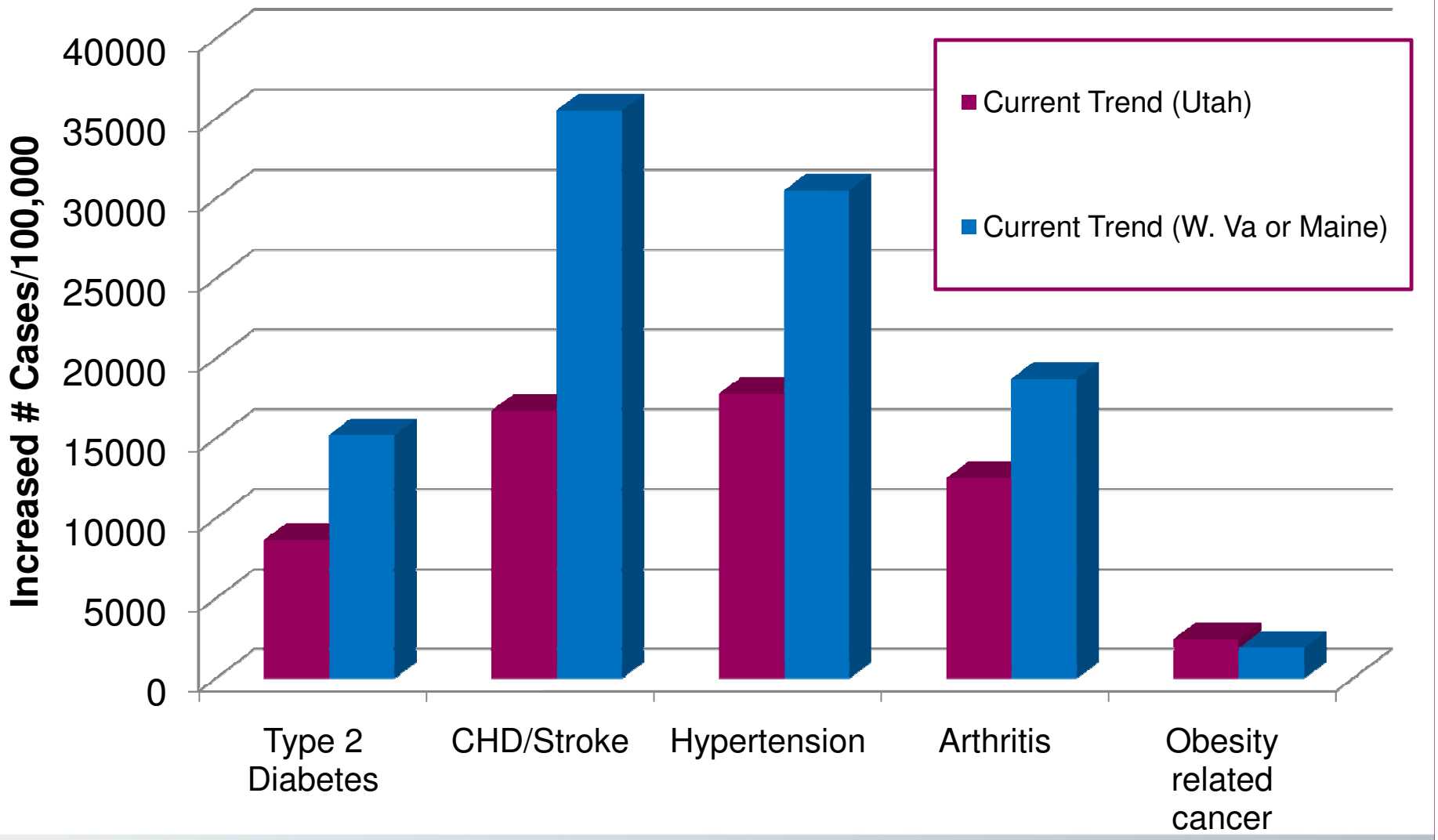
The Obesity Epidemic

2030: Adult Obesity Rates if the Current Trajectory Continues



- ≤35%
- <35% & <40%
- ≥40% & <45%
- ≥45% & <50%
- ≥50% & <55%
- ≥55% & <60%
- ≥60% & <65%
- ≥65%

F as in Fat. 2012 report from the Trust for America's Health. http://healthyamericans.org/report/100/



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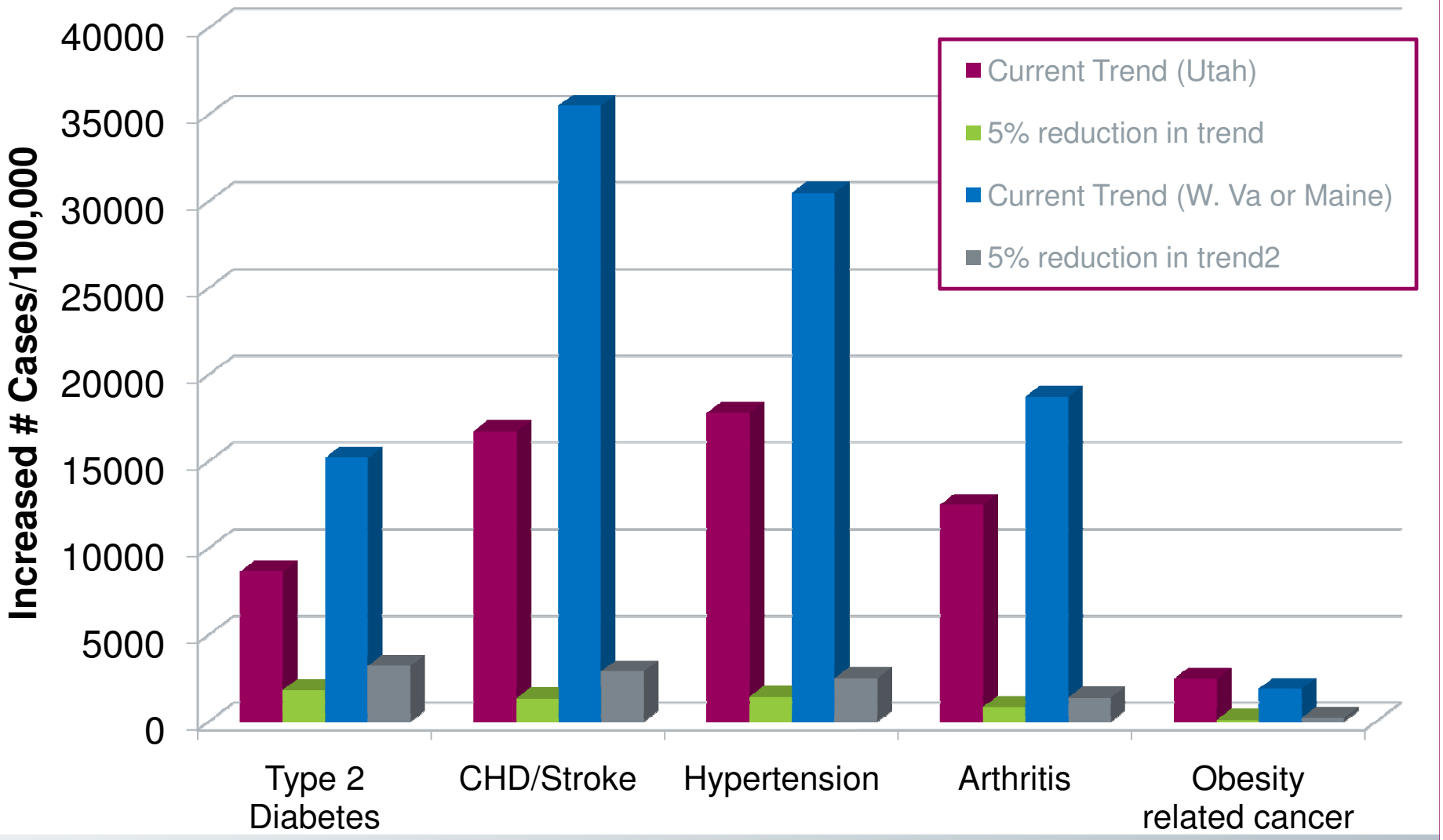

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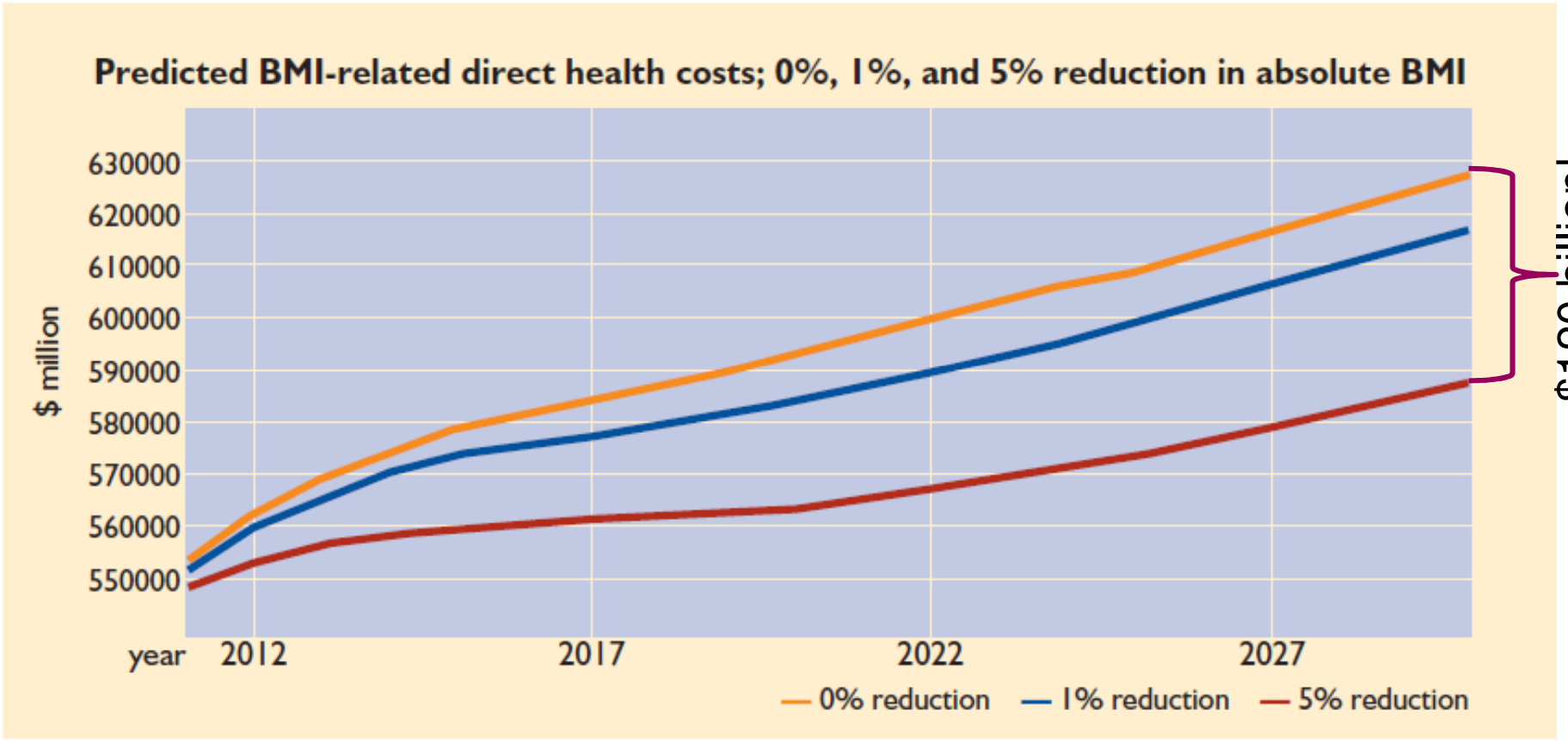
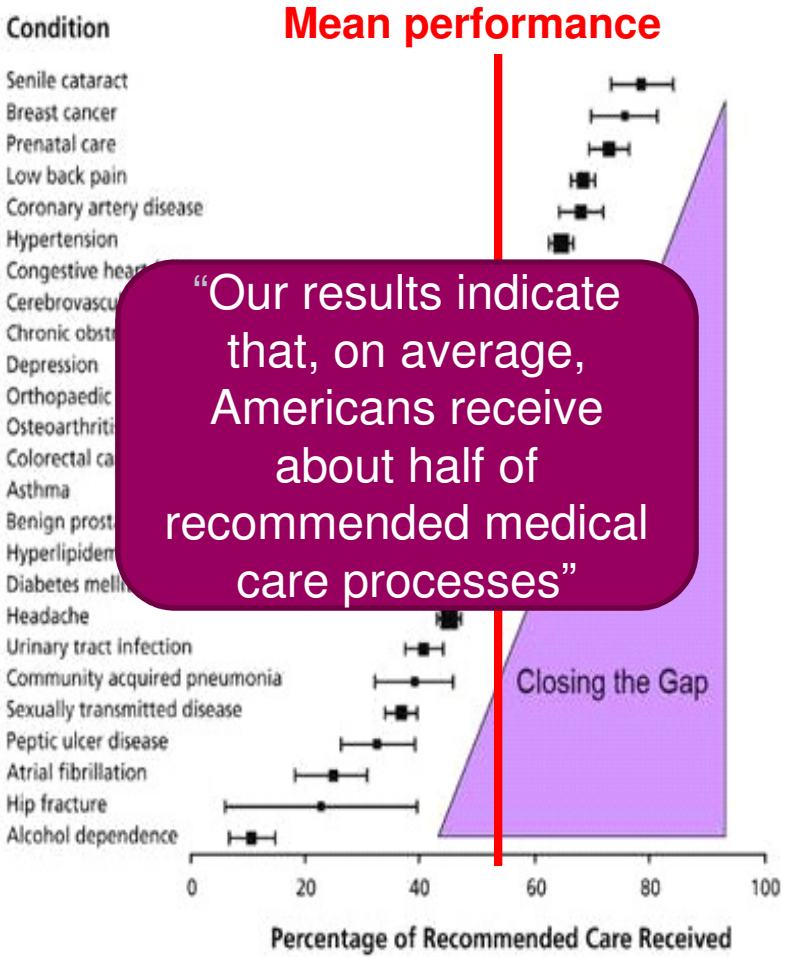
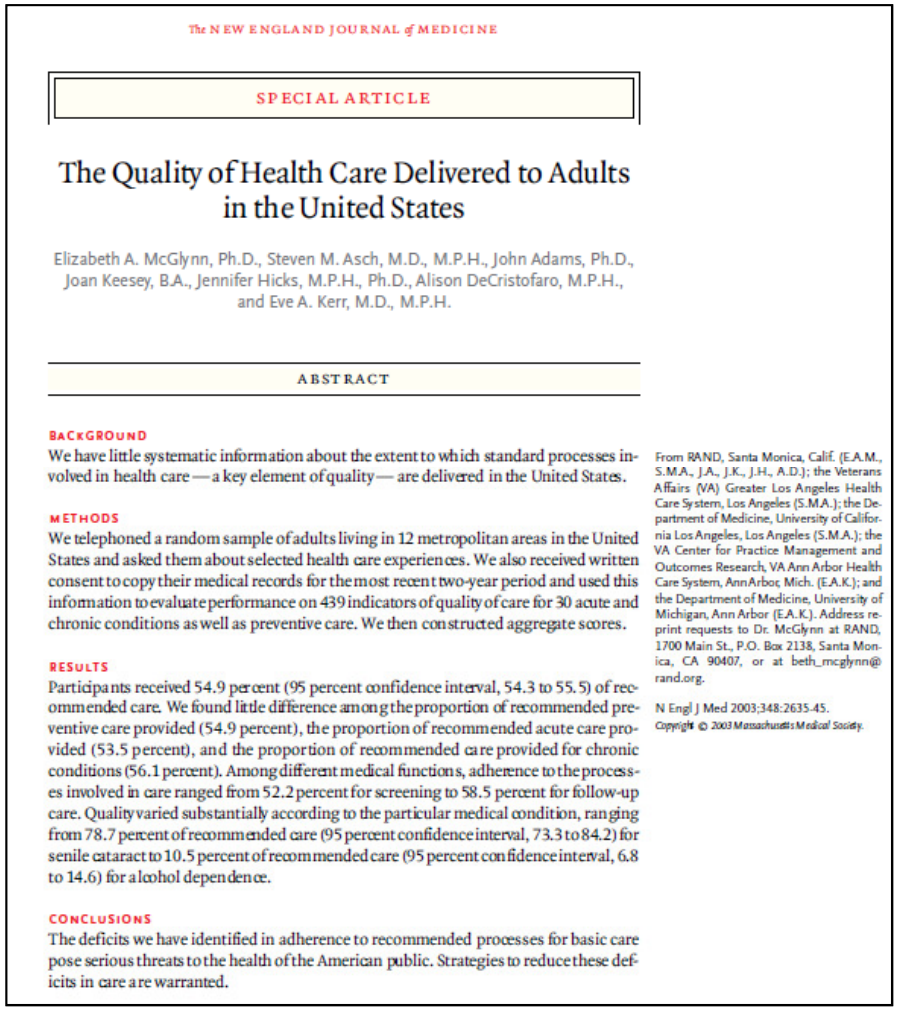


F as in Fat. 2012 report from the Trust for America's Health. http://healthyamericans.org/report/100/

The Care We Get…

"Flip of the Coin" Health Care Quality, 6-6-03





The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

The Quality of Health Care Delivered to Adults in the United States

Elizabeth A. McGlynn, Ph.D., Steven M. Asch, M.D., M.P.H., John Adams, Ph.D., Joan Keesey, B.A., Jennifer Hicks, M.P.H., Ph.D., Alison DeCristofaro, M.P.H., and Eve A. Kerr, M.D., M.P.H.

ABSTRACT

BACKGROUND
We have little systematic information about the extent to which standard processes involved in health care — 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 asked them about selected health care experiences. We also received written consent to copy their medical records for the most recent two-year period and used this information to evaluate performance on 439 indicators of quality of care for 30 acute and chronic conditions as well as preventive care. We then constructed aggregate scores.

RESULTS
Participants received 54.9 percent (95 percent confidence interval, 54.3 to 55.5) of recommended care. We found little difference among the proportion of recommended preventive care provided (54.9 percent), the proportion of recommended acute care provided (53.5 percent), and the proportion of recommended care provided for chronic conditions (56.1 percent). Among different medical functions, adherence to the processes involved in care ranged from 52.2 percent for screening to 58.5 percent for follow-up care. Quality varied substantially according to the particular medical condition, ranging from 78.7 percent of recommended care (95 percent confidence interval, 73.3 to 84.2) for senile cataract to 10.5 percent of recommended care (95 percent confidence interval, 6.8 to 14.6) for alcohol dependence.

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 in care are warranted.

From RAND, Santa Monica, Calif. (E.A.M., S.M.A., J.A., J.K., J.H., A.D.); the Veterans Affairs (VA) Greater Los Angeles Health Care System, Los Angeles (S.M.A.); the Department of Medicine, University of California Los Angeles, Los Angeles (S.M.A.); the VA Center for Practice Management and Outcomes Research, VA Ann Arbor Health Care System, Ann Arbor, Mich. (E.A.K.); and the Department of Medicine, University of Michigan, Ann Arbor (E.A.K.). Address reprint requests to Dr. McGlynn at RAND, 1700 Main St., P.O. Box 2138, Santa Monica, CA 90407, or at beth_mcglynn@rand.org.

N Engl J Med 2003;348:2635-45.

McGlynn EA (2003) NEJM **348:** 2635-2645

The Care We Don't Get…

LA Times, 6-7-11

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Los Angeles Times | BOOSTER SHC

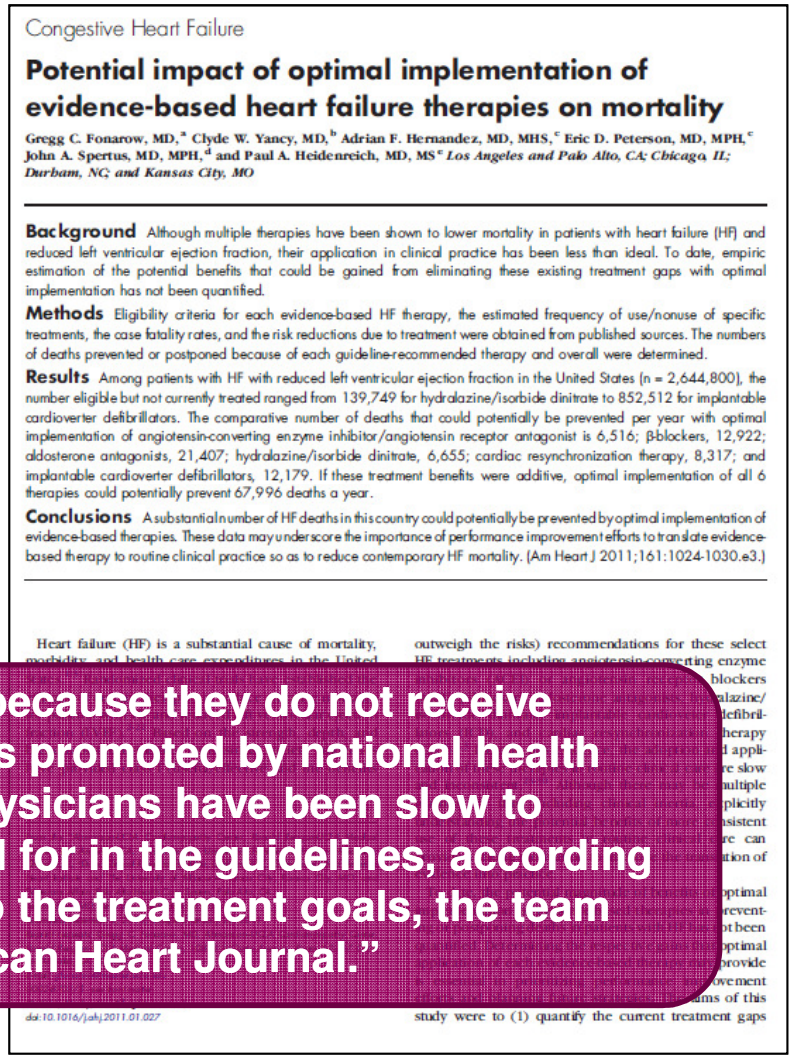
LOCAL U.S. WORLD BUSINESS SPORTS ENTERTAINMENT HEALTH LIVING TR

BOOSTER SHOTS MEDICINE FITNESS & NUTRITION MENTAL HEALTH HEALTH REFOR

BOOSTER SHOTS: ODDITIES, MUSINGS AND NEWS FROM THE HEALTH WORLD

Nearly 70,000 Americans die needlessly each year because they are not given optimal heart failure therapy

Recommend 8 Tweet 6 (1)



Congestive Heart Failure

Potential impact of optimal implementation of evidence-based heart failure therapies on mortality

Gregg C. Fonarow, MD,[a] Clyde W. Yancy, MD,[b] Adrian F. Hernandez, MD, MHS,[c] Eric D. Peterson, MD, MPH,[c] John A. Spertus, MD, MPH,[d] and Paul A. Heidenreich, MD, MS[e] *Los Angeles and Palo Alto, CA; Chicago, IL; Durham, NC; and Kansas City, MO*

Background Although multiple therapies have been shown to lower mortality in patients with heart failure (HF) and reduced left ventricular ejection fraction, their application in clinical practice has been less than ideal. To date, empiric estimation of the potential benefits that could be gained from eliminating these existing treatment gaps with optimal implementation has not been quantified.

Methods Eligibility criteria for each evidence-based HF therapy, the estimated frequency of use/nonuse of specific treatments, the case fatality rates, and the risk reductions due to treatment were obtained from published sources. The numbers of deaths prevented or postponed because of each guideline-recommended therapy and overall were determined.

Results Among patients with HF with reduced left ventricular ejection fraction in the United States (n = 2,644,800), the number eligible but not currently treated ranged from 139,749 for hydralazine/isorbide dinitrate to 852,512 for implantable cardioverter defibrillators. The comparative number of deaths that could potentially be prevented per year with optimal implementation of angiotensin-converting enzyme inhibitor/angiotensin receptor antagonist is 6,516; β-blockers, 12,922; aldosterone antagonists, 21,407; hydralazine/isorbide dinitrate, 6,655; cardiac resynchronization therapy, 8,317; and implantable cardioverter defibrillators, 12,179. If these treatment benefits were additive, optimal implementation of all 6 therapies could potentially prevent 67,996 deaths a year.

Conclusions A substantial number of HF deaths in this country could potentially be prevented by optimal implementation of evidence-based therapies. These data may underscore the importance of performance improvement efforts to translate evidence-based therapy to routine clinical practice so as to reduce contemporary HF mortality. (Am Heart J 2011;161:1024-1030.e3.)

Heart failure (HF) is a substantial cause of mortality, morbidity, and health care expenditures in the United

outweigh the risks) recommendations for these select HF treatments including angiotensin-converting enzyme

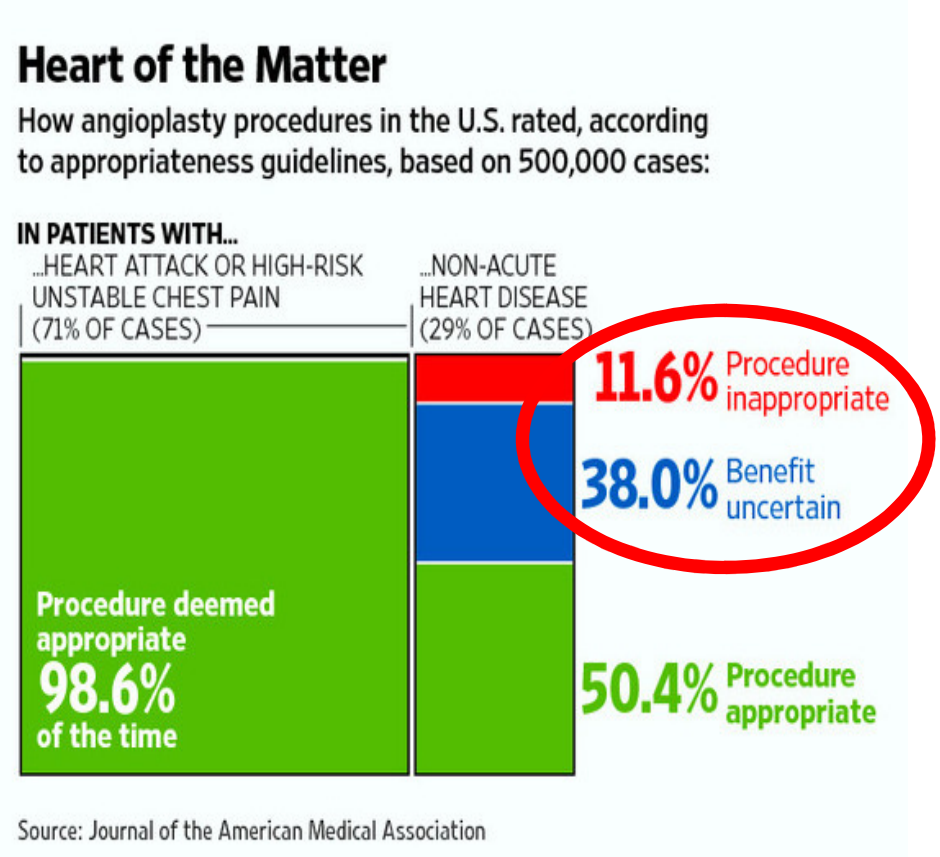
doi:10.1016/j.ahj.2011.01.027

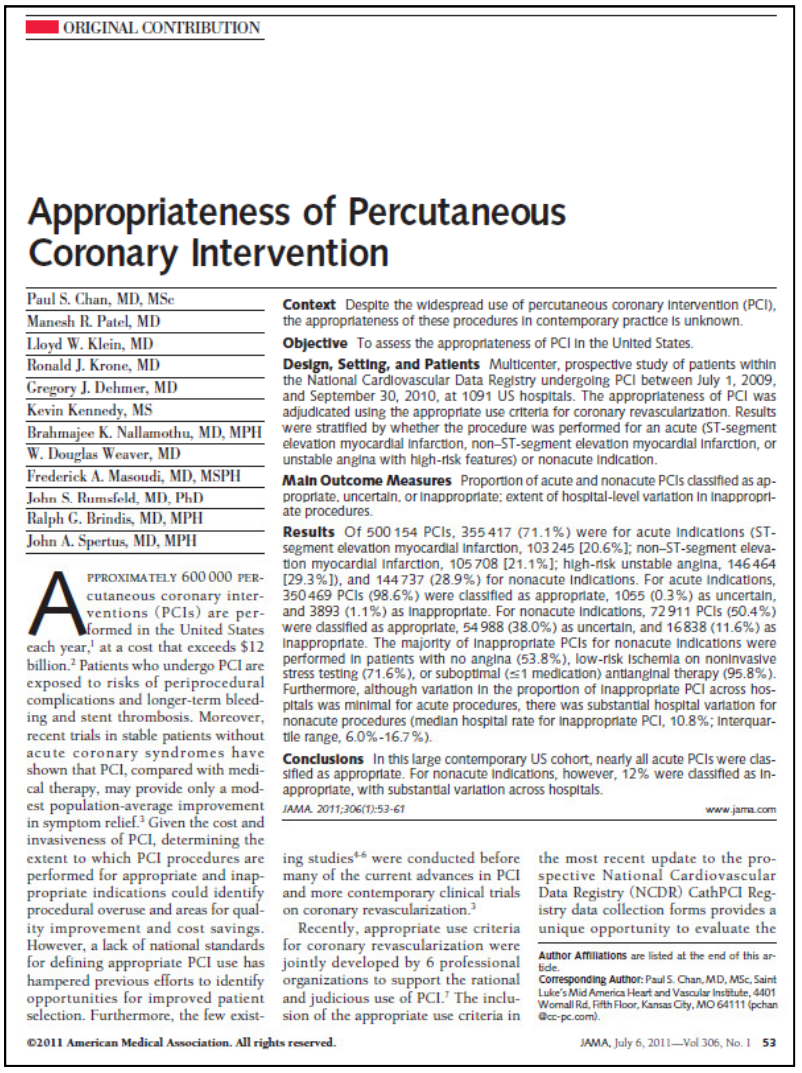
study were to (1) quantify the current treatment gaps

"Nearly 70,000 Americans die each year because they do not receive optimal therapy as called for in guidelines promoted by national health authorities, researchers said Monday. Physicians have been slow to implement many of the procedures called for in the guidelines, according to the first national study of adherence to the treatment goals, the team reported in the June edition of the American Heart Journal."

The Care We Shouldn't Get…

JAMA, 7-6-11





ORIGINAL CONTRIBUTION

Appropriateness of Percutaneous Coronary Intervention

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Context Despite the widespread use of percutaneous coronary intervention (PCI), the appropriateness of these procedures in contemporary practice is unknown.

Objective To assess the appropriateness of PCI in the United States.

Design, Setting, and Patients Multicenter, prospective study of patients within the National Cardiovascular Data Registry undergoing PCI between July 1, 2009, and September 30, 2010, at 1091 US hospitals. The appropriateness of PCI was adjudicated using the appropriate use criteria for coronary revascularization. Results were stratified by whether the procedure was performed for an acute (ST-segment elevation myocardial infarction, non–ST-segment elevation myocardial infarction, or unstable angina with high-risk features) or nonacute indication.

Main Outcome Measures Proportion of acute and nonacute PCIs classified as appropriate, uncertain, or inappropriate; extent of hospital-level variation in inappropriate procedures.

Results Of 500 154 PCIs, 355 417 (71.1%) were for acute indications (ST-segment elevation myocardial infarction, 103 245 [20.6%]; non–ST-segment elevation myocardial infarction, 105 708 [21.1%]; high-risk unstable angina, 146 464 [29.3%]), and 144 737 (28.9%) for nonacute indications. For acute indications, 350 469 PCIs (98.6%) were classified as appropriate, 1055 (0.3%) as uncertain, and 3893 (1.1%) as inappropriate. For nonacute indications, 72 911 PCIs (50.4%) were classified as appropriate, 54 988 (38.0%) as uncertain, and 16 838 (11.6%) as inappropriate. The majority of inappropriate PCIs for nonacute indications were performed in patients with no angina (53.8%), low-risk ischemia on noninvasive stress testing (71.6%), or suboptimal (≤1 medication) antianginal therapy (95.8%). Furthermore, although variation in the proportion of inappropriate PCI across hospitals was minimal for acute procedures, there was substantial hospital variation for nonacute procedures (median hospital rate for inappropriate PCI, 10.8%; interquartile range, 6.0%-16.7%).

Conclusions In this large contemporary US cohort, nearly all acute PCIs were classified as appropriate. For nonacute indications, however, 12% were classified as inappropriate, with substantial variation across hospitals.

JAMA. 2011;306(1):53-61 www.jama.com

Approximately 600 000 percutaneous coronary interventions (PCIs) are performed in the United States each year,[1] at a cost that exceeds $12 billion.[2] Patients who undergo PCI are exposed to risks of periprocedural complications and longer-term bleeding and stent thrombosis. Moreover, recent trials in stable patients without acute coronary syndromes have shown that PCI, compared with medical therapy, may provide only a modest population-average improvement in symptom relief.[3] Given the cost and invasiveness of PCI, determining the extent to which PCI procedures are performed for appropriate and inappropriate indications could identify procedural overuse and areas for quality improvement and cost savings. However, a lack of national standards for defining appropriate PCI use has hampered previous efforts to identify opportunities for improved patient selection. Furthermore, the few existing studies[4-6] were conducted before many of the current advances in PCI and more contemporary clinical trials on coronary revascularization.[3]

Recently, appropriate use criteria for coronary revascularization were jointly developed by 6 professional organizations to support the rational and judicious use of PCI.[7] The inclusion of the appropriate use criteria in the most recent update to the prospective National Cardiovascular Data Registry (NCDR) CathPCI Registry data collection forms provides a unique opportunity to evaluate the

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The Care We Want…

Organized Around a Person-Centric Health Ecosystem

- **Aligns** care services/providers by being person-centered
- **Defragments** health silos
- **Personalizes** health decision support for each individual
- **Links**
  - Sites of care, all care over time
  - Integrated care plans via PHRs
- **Delivers**
  - Ease of use, clear navigation
  - Effective information, motivation, health skills support
  - Shared accountability between delivery system and patients
- **Provides**
  - High value, sustainable system to optimize individual / societal health

"We can't sustain a system that rewards how much is done to patients instead of how much is accomplished for patients.

The Affordable Care Act will help us pay for quality and outcomes, not volume, with innovative tools such as bundled payments, incentives for hospitals that prevent readmissions, and accountable care organizations in which health-care providers who work in teams deliver better care with lower costs."

Donald M. Berwick
CMS Administrator
September 3, 2010
Op-Ed in The Washington Post

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Questions?

Thank You!

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