Pittsburgh Regional Health Initiative Advancing Quality via Evolving Strategies: We Follow Where Data Lead



Karen Wolk Feinstein, PhD

President and Chief Executive Officer Pittsburgh Regional Health Initiative

The Ninth National Pay for Performance Summit March 24, 2014

What and Why: Pittsburgh Regional Health Initiative

- Pittsburgh Regional Health Initiative (PRHI)
 - A not-for-profit, regional, multi-stakeholder collaborative formed in 1997 by Karen Feinstein and Paul O'Neill
 - An initiative of a business group, the Allegheny Conference on Community Development





PRHI'S MESSAGE

Dramatic quality improvement (approaching zero deficiencies) is the best cost-containment strategy for health care

Popping the

Red Balloon



Value Reform From Now to Future



42 Staff, Includes Significant Clinical Depth

- MDs
- Nursing (RNs, MSNs, FNP-BCs)
- Social Work (MSWs, LSWs)
- Occupational Therapy (MOTs, OTR/LS)
- Pathology (SCT (ASCP))

Plus Staff Expertise in Additional Areas of Health Care, Project Management, and Administration

- Research and Epidemiology (PhDs)
- Health Policy, Public Health, Economics (MPHs, MPMs, PhDs)
- Health Information Technology
- Quality Improvement
- Administration (MBAs, JDs, CPAs, MSs)
- Finance, including Fiscal Agency
- Project Management
- Communications and Event Planning
- Grantmaking, Grant Seeking, Grants Management

In the Beginning (circa 1997): Evocative Data Drive the Initial Journey

- Lucian Leape's "Error in Medicine"
 - Avoidable in-hospital deaths equivalent to three jumbo jet crashes every two days
 - 180,000 in-hospital deaths partly as a result of iatrogenic injury





We Went Sleuthing: Health Care is Not Wired for High Value

W. Edwards Deming, PhD: "Where Art Thou?"

- Chaos
- Uncertainty
- Random Behaviors
- Work-Arounds
- Confusion
- Disorder
- Errors
- High Turnover
- Secrecy



High-Value Organizations Adopt Toyota/Lean Production Thinking

- Problems identified and solved immediately
- Rapid root cause analysis
- Organized work areas
- Concise communication
- Active involvement of managers
 - "Go and see"
 - On the floor
- Intense respect for the employee
 - Every employee has what they need, when they need it, to succeed
 - Career development
- Team problem solving to meet customer need





We brought Lean QI to Health Care



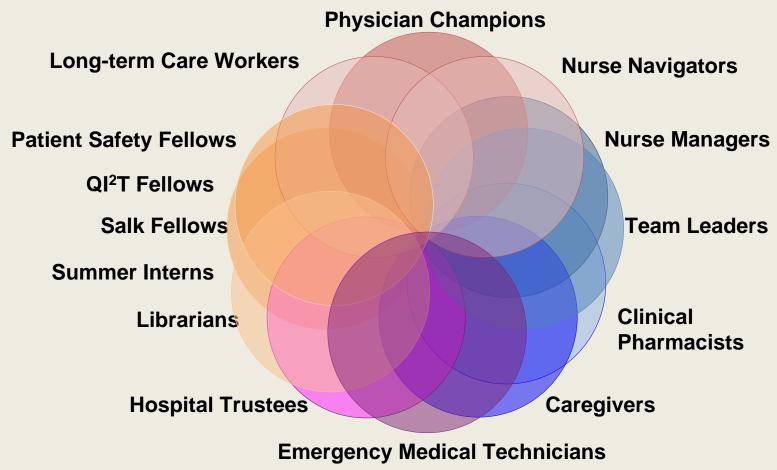
JHF, PRHI and HCF are in the Training and Education Business

- Salk and Patient Safety Fellowships
- Perfecting Patient CareSM Universities (open and project-specific)
- Champions Programs
- Closure sessions
- Board and Committee meetings
- REACH extension services
- HIV/AIDS Quality Improvement
- Grant Related: AHRQ/PIC; CMMI (1) and (2) and SNMHI
- Tomorrow's HealthCare™
- Motivational Interviewing
- I-Wise
- Caregiver Training
- Summer Interns
- QI²T Health Innovators Fellowships



We Created Change Agents





PRHI's Footprint





Early PRHI Successes Demonstrated the Value of Lean



17% Drop

in pediatric clinic wait times

180 to Zero!

Lost patient hours per month due to ambulance diversions

100% Reduction

in nurse turnover

35 to Zero! *defective charts*

MOVING
BEYOND REPAIR:
Perfecting Health Care

Karen Wolk Feinstein, PhD.

68% Drop
in CLABs in 34 regional hospitals

50% Reduction

in pap smear sampling defects

50% Fewer Readmissions *w/ COPD focus*





Efficiency Increased 100%

in pathology lab



>20% Decline

Nosocomial
C. difficile
infections

100% Compliance

w/guidelines & aspirin use in a diabetes clinic

4.

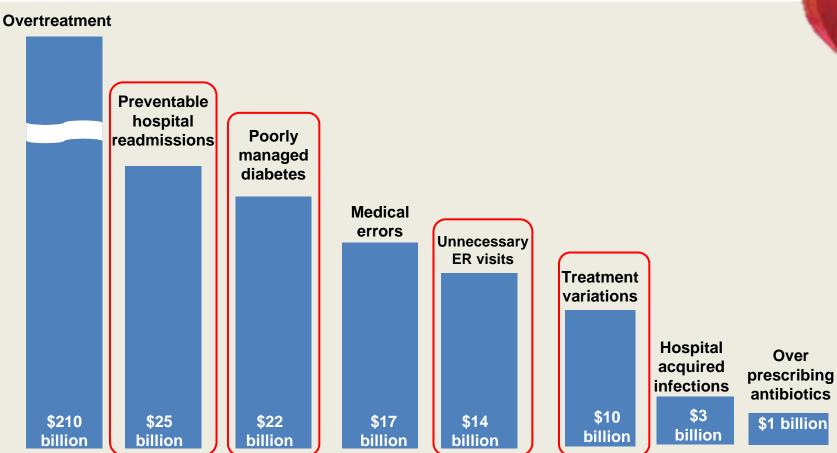
We Attempted Transforming Healthcare Organizations: *Hit all the notes on the xylophone or no music*





We Focused on Where the Costs of Waste Lie

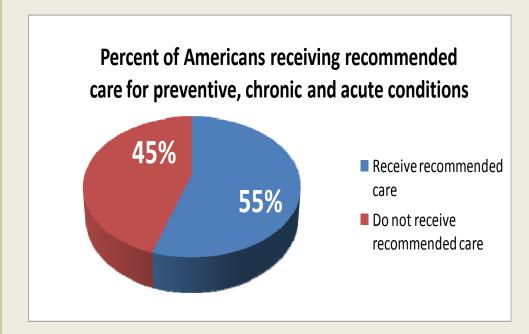




Source: Institute of Medicine (1999), "The Factors Fueling Rising Healthcare Costs 2006", PricewaterhouseCoopers (2006), Medpac (2007), American Association of Endocrinologists (2006), Center for Disease Control and Prevention (2005), Solucient (2007), U.S. Outcomes Research Group of Pfizer Inc (2005), National Committee for Quality Assurance (2005), Analysis by PricewaterhouseCoopers' Health Research Institute. 2010

Grim Statistics





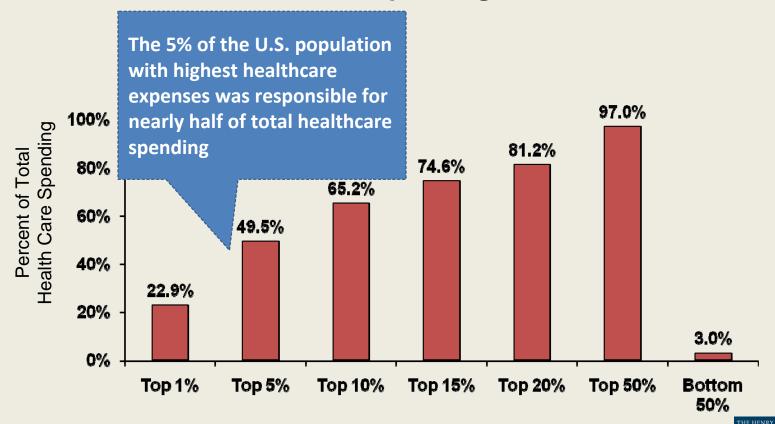
Just over 50% of Americans receive recommended care. Why?

What gets in the way of recommended care being provided 100% of the time?

Source: Elizabeth A. McGlynn and Robert H. Brook, Rand, June 2003

Focus on Spending Leads to Complex Patients

Concentration of Healthcare Spending in the U.S. Population, 2007

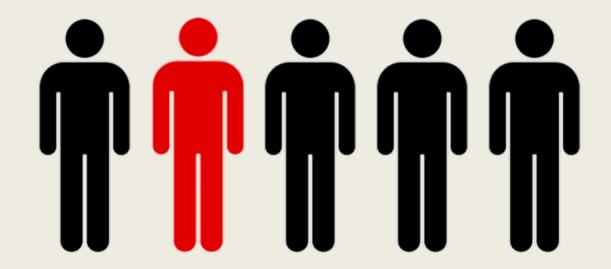


Percent of Population, Ranked by Health Care Spending

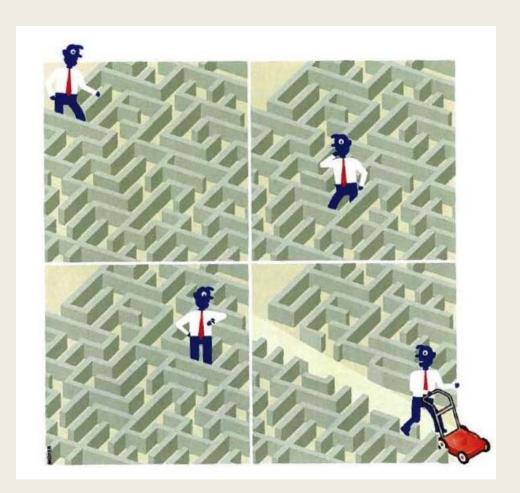




PRHI found that approximately **1** in **5** patients discharged from the hospital *return* within 30 days



Reboot. Many problems resist until we reframe them.



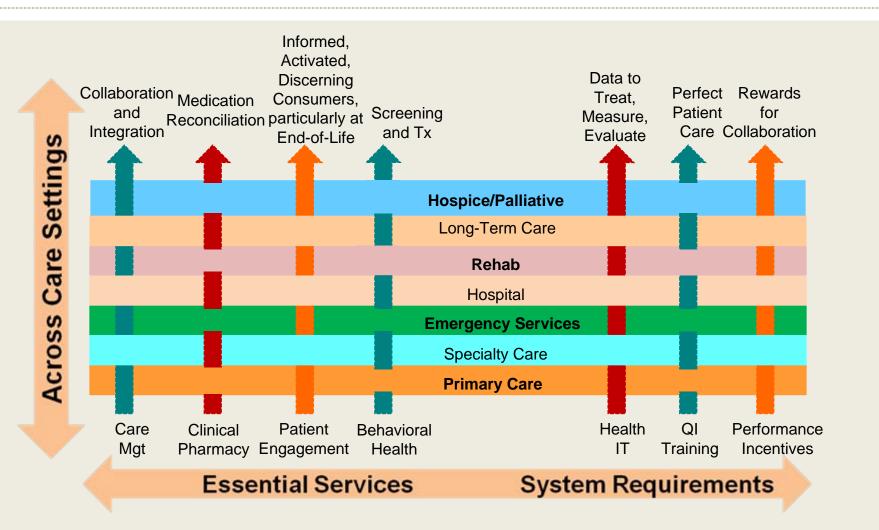
Source: HBR – Don Moyer

From Data to Demonstrations:

Turning our community into a lab for testing new models of care for keeping people out of hospitals

6.

We Adopted The Systems Vision: Transforming the Care of Complex Patients



Why So Many Readmissions?

What is essential to our vision for reducing admissions?



Care Clinical Patient Behavioral Health HIT QI Training

No Money — No Service

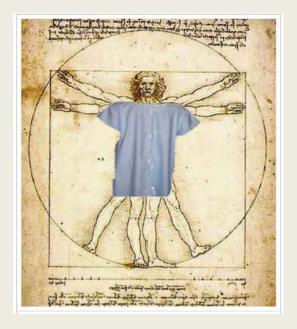


2014 Programs: We Keep People Out of Hospitals



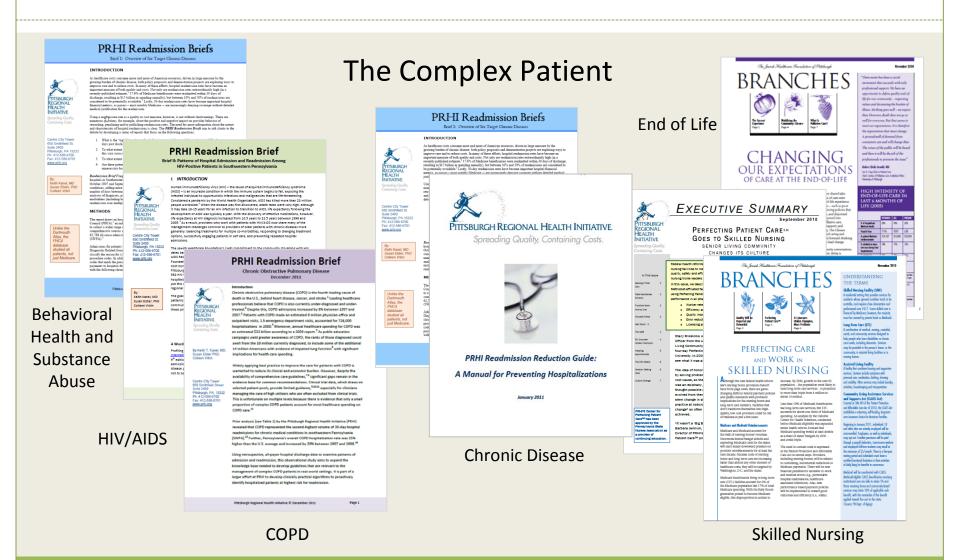
The Complex Patient

Who is frequently hospitalized?

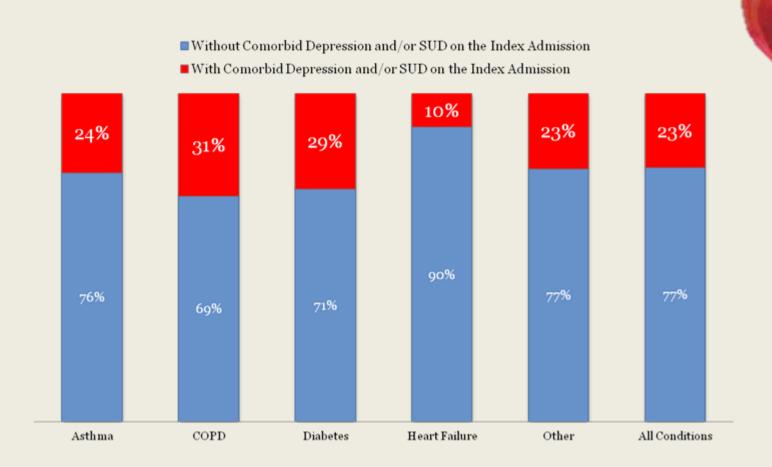


Do you know your customer?

We Did Our Own Sleuthing with PHC4 Data



High Rates of Comorbid Depression and Substance Use Disorders Among 30-Day Readmissions



Partners in Integrated Care

- \$3.5 million AHRQ grant to integrate depression and unhealthy substance use screening into primary care
 - 4 regional health improvement collaboratives





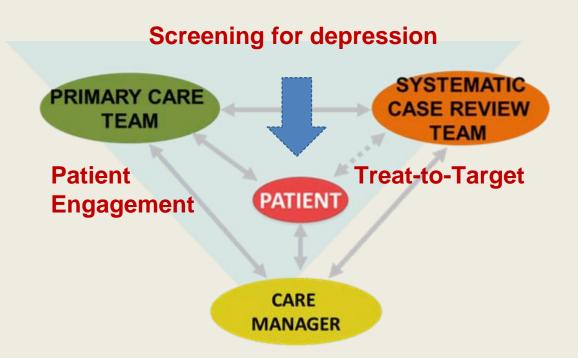




50 primary care sites; 11 in western PA

COMPASS (Care of Mental, Physical and Substance Use Syndromes)

\$18 million CMMI cooperative agreement led by ICSI



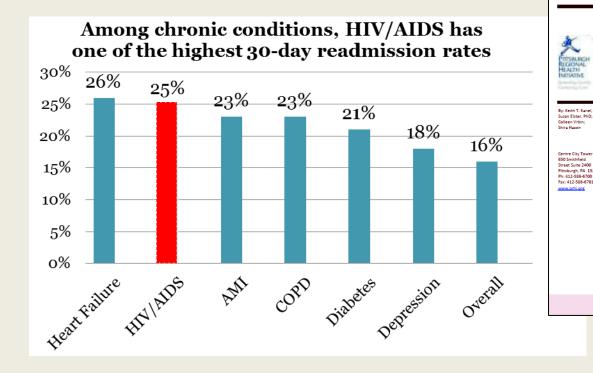
Consortium:

- •Community Health Plan of Washington
- •Kaiser Permanente Colorado
- •Kaiser Permanente Southern California
- •Mayo Clinic Health System
- Michigan Center for Clinical Systems Improvement

Mount Auburn Cambridge Independent Practice Association

- •Pittsburgh Regional Health Initiative
- •AIMS (Advancing Integrated Mental Health Solutions) Center at the University of Washington
- •HealthPartners Institute for Education and Research

PRHI Data: High Hospital Readmissions Rates Among HIV-Positive Population



PRHI Readmission Brief

Patterns of Hospitalizations Among HIV-Positive Patients in Southwestern Pennsylvania April 2012 Update

ntroduction

The purpose of this Pittsburgh Regional Health Initiative (PRHI) Readmission Reduction Brief is to update and expand upon the July 2010 publication, Redemission Brief IP Patterns of Hospital Admission and Readmission among HIV-Positive Patients in Southwestern Pennsylvania. This brief extends that analysis, not only by including an additional year data, but by additing new analyses based on de-identified longitudina joint data, that the salest data is the salest of the control of the property of the patient of the patients of the patien

PRHI Readmission Brief

Brief II: Patterns of Hospital Admission and Readmission Among HIV-Positive Patients in Southwestern Pennsylvania

I. INTRODUCTION

Prinspublical REGIONAL HEALDH INITIATIVE

Centre City Tower 650 Smithfield St. Suite 2400 Pittsburgh, PA 152 Ph: 412-586-6701 Fax: 412-586-6701

> By: Keith Kanel, MD Susan Elster, PhD

Human immunodeficiency virus (HV) — the cause of acquired immunodeficiency syndrome (AIDS) — is an incumble condition in which the immune system begins to fall, exposing the infected individual to opportunistic infections and malignancies that are life-threatening. Considered a pandemic by the World Health Organization, AIDS has killed more than 23 million people worldwide. When the disease was first discovered, death rates were very high, althoughput in the mystem of the property of the p

life expectancy at 2005.² As a result management cha generally: balanci options, successfu admissions.

The Jewish Healt dates back to 19: AIDS Resources E Foundation respr Cost Containmen Pittsburgh Regior 562 HIV-positive hospitals in an 11 put this number

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A Word about
Profiling HIV-pos
International Sta
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admission – the
disease process

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February 2014

Using Hospital Admission and Readmission

Patterns

to Improve Outreach to

Persons Living with HIV/AIDS

in Pennsylvania

July 1, 2010 - September 30, 2012

Prepared by

By Susan Einter, Colleen Vrbin, JoAnn Glad & Philip Cynn

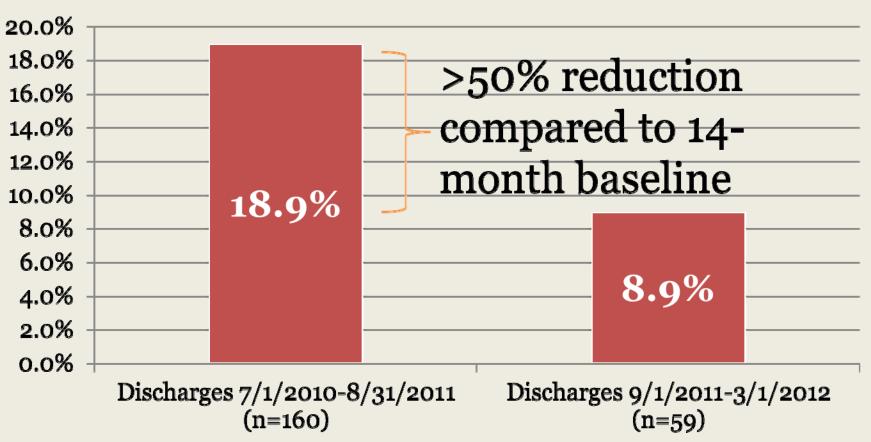
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Research Ended with Prepared passes of Health dollars.

\$2034 Sealth Healthcare Foundation, Pittsburgh Regional Health Indiative

Readmission Reduction Project

30-Day Readmission Rate at Affiliated Hospital

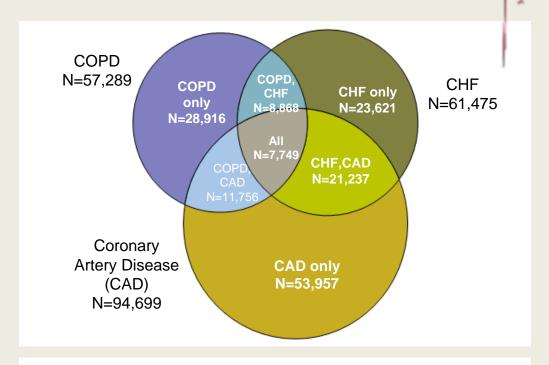


Minority AIDS Initiative

- \$1.4+ million, two-year grant from the Special Pharmaceutical Benefits Program (SPBP) and Pennsylvania Department of Health
- Effort to locate and re-engage in treatment HIVpositive patients lost to care
- 20 AIDS Service Organizations (ASOs) across Pennsylvania

Complex Patients: Overlap Between High Volume Chronic Diseases

PRHI Readmission Briefs Brief I: Overview of Six Target Chronic Diseases PRHI Readmission Brief Chronic Obstructive Pulmonary Disease December 2011 Chronic obstructive pulmonary disease (COPD) is the fourth leading cause of death in the U.S., behind heart disease, cancer, and stroke. Leading healthcare professionals believe that COPD is also currently under-diagnosed and undertreated. Despite this, COPD admissions increased by 8% between 1997 and 2007. Patients with COPD made an estimated 8 million physician-office and outpatient visits, 1.5 emergency department visits, accounted for 726,000 hospitalizations in 2000. Moreover, annual healthcare spending for COPD wa an estimated \$32 billion according to a 2004 report. 5 As public education By: Keith Kanel, MD Susan Elster, Ph Colleen Vrbin campaiens yield greater awareness of COPD, the ranks of those diagnosed could swell from the 10 million currently diagnosed, to include some of the additional 14 million Americans with evidence of impaired lune function with significant implications for health care spending. Widely applying best practice to improve the care for patients with COPD is warranted to reduce its clinical and economic burden. However, despite the availability of comprehensive care guidelines, ^{7,8} significant gaps remain in the evidence base for common recommendations. Clinical trial data, which draws on selected patient pools, provide limited guidance, 9,10,11 especially for clinicians PHC4 database managing the care of high utilizers who are often excluded from clinical trials. This is unfortunate on multiple levels because there is evidence that only a small studied all proportion of complex COPD patients account for most healthcare spending on COPD care 12 Prior analysis (see Table 1) by the Pittsburgh Regional Health Initiative (PRHI) revealed that COPD represented the second-highest volume of 30-day hospital readmissions for chronic medical conditions in southwestern Pennsylvania (SWPA). 23 Further, Pennsylvania's overall COPD hospitalization rate was 25% higher than the U.S. average and increased by 20% between 2007 and 2008. Using retrospective, all-paver hospital discharge data to examine patterns of admission and readmission, this observational study aims to expand the knowledge base needed to develop guidelines that are relevant to the management of complex COPD patients in real-world settings. It is part of a larger effort at PRHI to develop clinically practical algorithms to proactively identify hospitalized patients at highest risk for readmission Pittsburgh Regional Health Initiative © December 2011

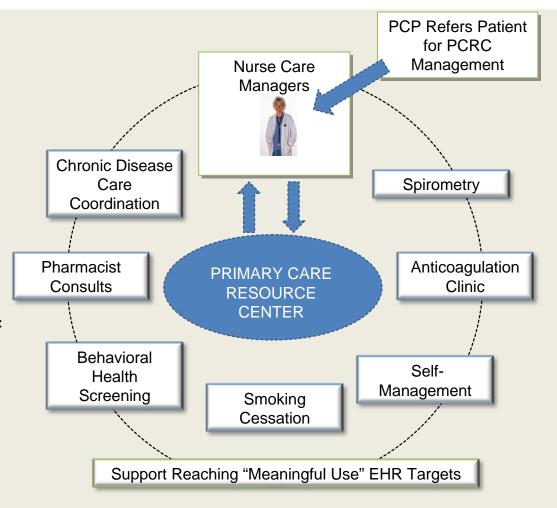


- **50% of COPD** discharges have co-morbid CHF and/or CAD.
- 62% of CHF discharges have co-morbid COPD and/or CAD.
- 43% of CAD discharges have co-morbid CHF and/or COPD.



We Created New Models of Care: Hospital-based Primary Care Resource Center

- Supports teambased care coordination of chronic medical conditions
- Provides addedvalue primary care support services beyond the means of small practices
- Can utilize excess hospital space



Primary Care Resource Centers

 Focus on care coordination and ancillary services for three target chronic diseases to reduce avoidable readmissions

COPD HF AMI

- \$10.4 million CMMI grant
- Seven regional hospitals

Revolving Door in Long-Term Care





- One in four Medicare patients is readmitted to the hospital from a skilled nursing facility within 30 days
- 45% of hospitalizations among Medicare and Medicaid enrollees receiving care at either Medicare skilled nursing facilities or Medicare nursing facilities are avoidable

Long-Term Care

RAVEN

- Four-year, \$19 million grant from the CMMI to reduce hospitalizations among 19 nursing facility residents in western Pennsylvania
- JHF lead education provider
- Long-Term Care Champions
 - Focus on readmission reduction
 - Working with <u>5</u> independent skilled nursing

Responding to the new world:

VBP, data liberation & IT solutions



We Developed an E-Learning Knowledge Network

Tomorrow's HealthCare™

- Online knowledge and elearning network
- C-Suite Dashboard track realtime progress toward quality targets
- Share quality improvement initiatives
- Track institutional learning, staff member by staff member

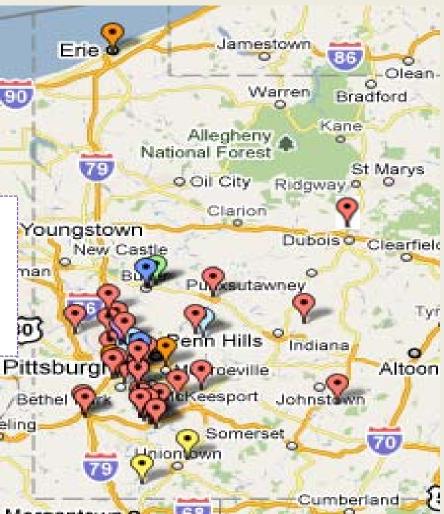


Regional Extension Center (REC)



Assist primary care providers to install and meaningfully use Electronic Health Records:

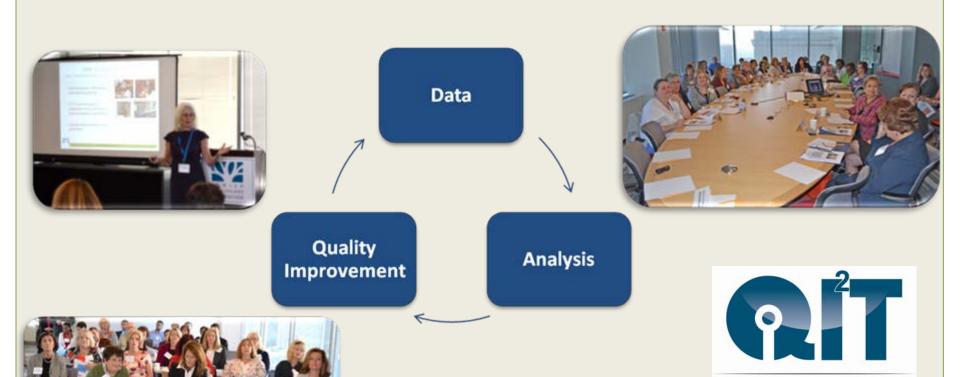
865 PCPs in 305 sites97% now using EHRs85% at Meaningful Use





We Envisioned The Future: Where Quality Improvement Meets Information Technology (QI²T)

 State-of-the art center will train workers and patients to use health data to drive quality improvement



WHERE QUALITY IMPROVEMENT
MEETS INFORMATION TECHNOLOGY

CMS Qualified Entity

 PRHI named one of twelve Qualified Entities (QE) for Medicare claims data





Pennsylvania Center for Health Information Activation

 Useful, credible information to consumers that is understandable and actionable.

NEW

 Changing the asymmetry of information and sharing power.



Spreading Quality, Containing Costs.

Web: <u>www.prhi.org</u>

LinkedIn: www.linkedin.com/groups?gid=4840225&trk=my groups-b-grp-v

Twitter: www.twitter.com/prhiorg

Facebook: www.facebook.com/PRHIorg

YouTube: www.youtube.com/user/PRHIorg