Advanced IT for the Medical Home: Engaging the Patient

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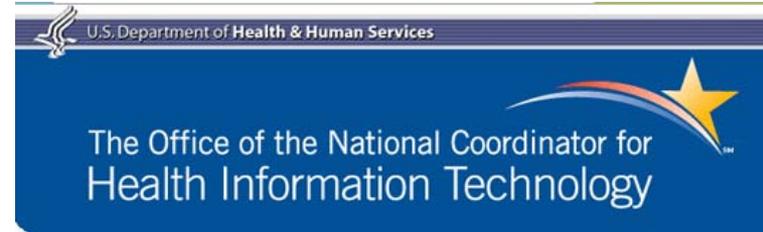*Director of General Internal Medicine*
University of Vermont
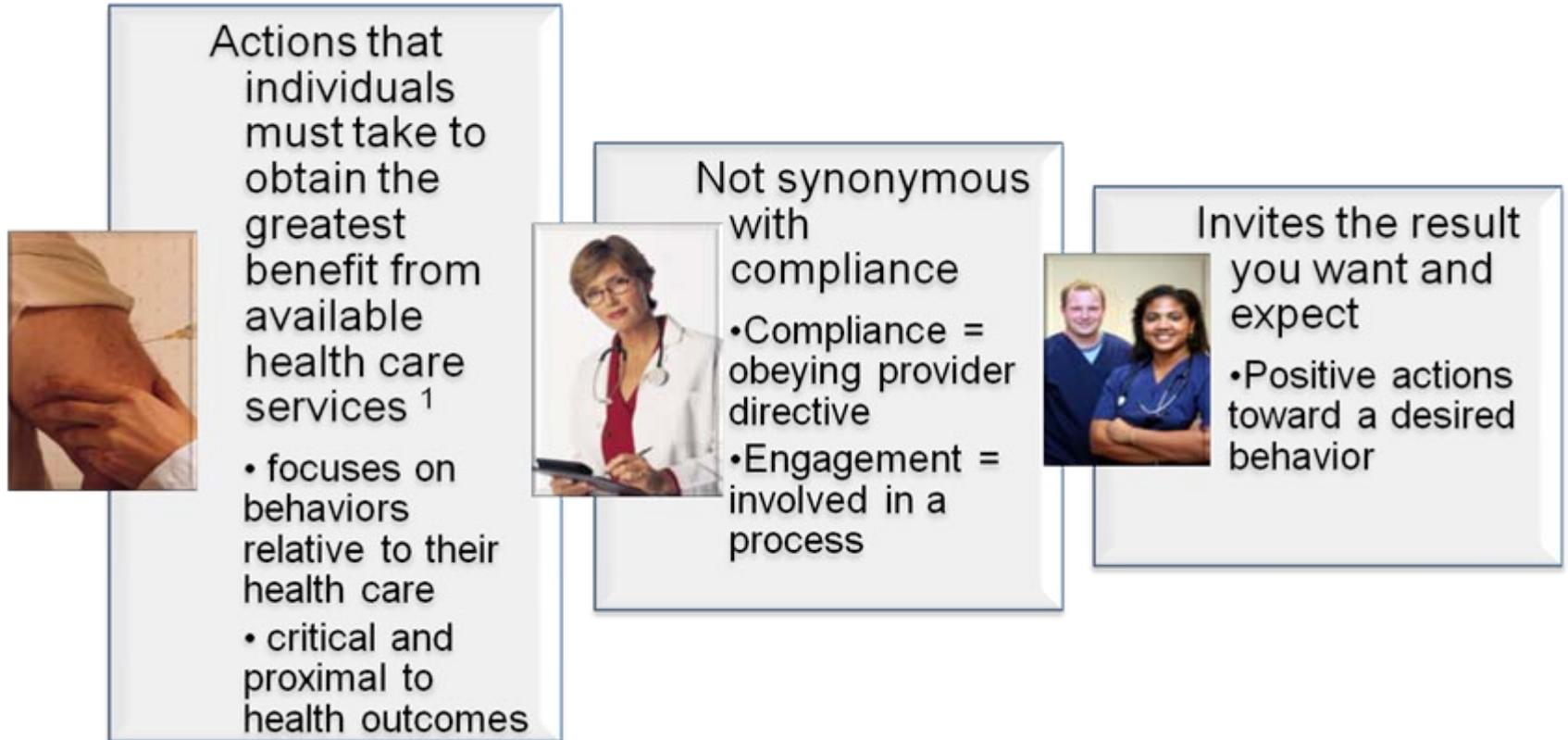
The Push for Patient Centeredness

Patient Engagement Systems has Taken the Pledge

PLEDGE
To Empower Individuals To Be
Partners In Their Health Through Health IT

U.S. Department of **Health & Human Services**

The Office of the National Coordinator for
Health Information Technology

- Data Holders Pledge for those who manage or maintain individually identifiable health data
  - *make it easier for individuals and their caregivers to have secure, timely, and electronic access to their health information.*
  - *encourage individuals to use this information to improve their health and their care.*
- Make personal health information (complete health record and/or a subset such as a visit summary) available to individuals and their caregivers in a secure, timely, and **usable** manner

www.healthit.gov/pledge

What is Patient Engagement?

Actions that individuals must take to obtain the greatest benefit from available health care services [1]

- focuses on behaviors relative to their health care
- critical and proximal to health outcomes

Not synonymous with compliance

- Compliance = obeying provider directive
- Engagement = involved in a process

Invites the result you want and expect

- Positive actions toward a desired behavior

[1] *Center for Advancing Heath, 2010*

What is Patient Centeredness?

Depends on whom you ask…

What About the Patient?

Patient Centeredness is dead last in current conformance with medical home goals
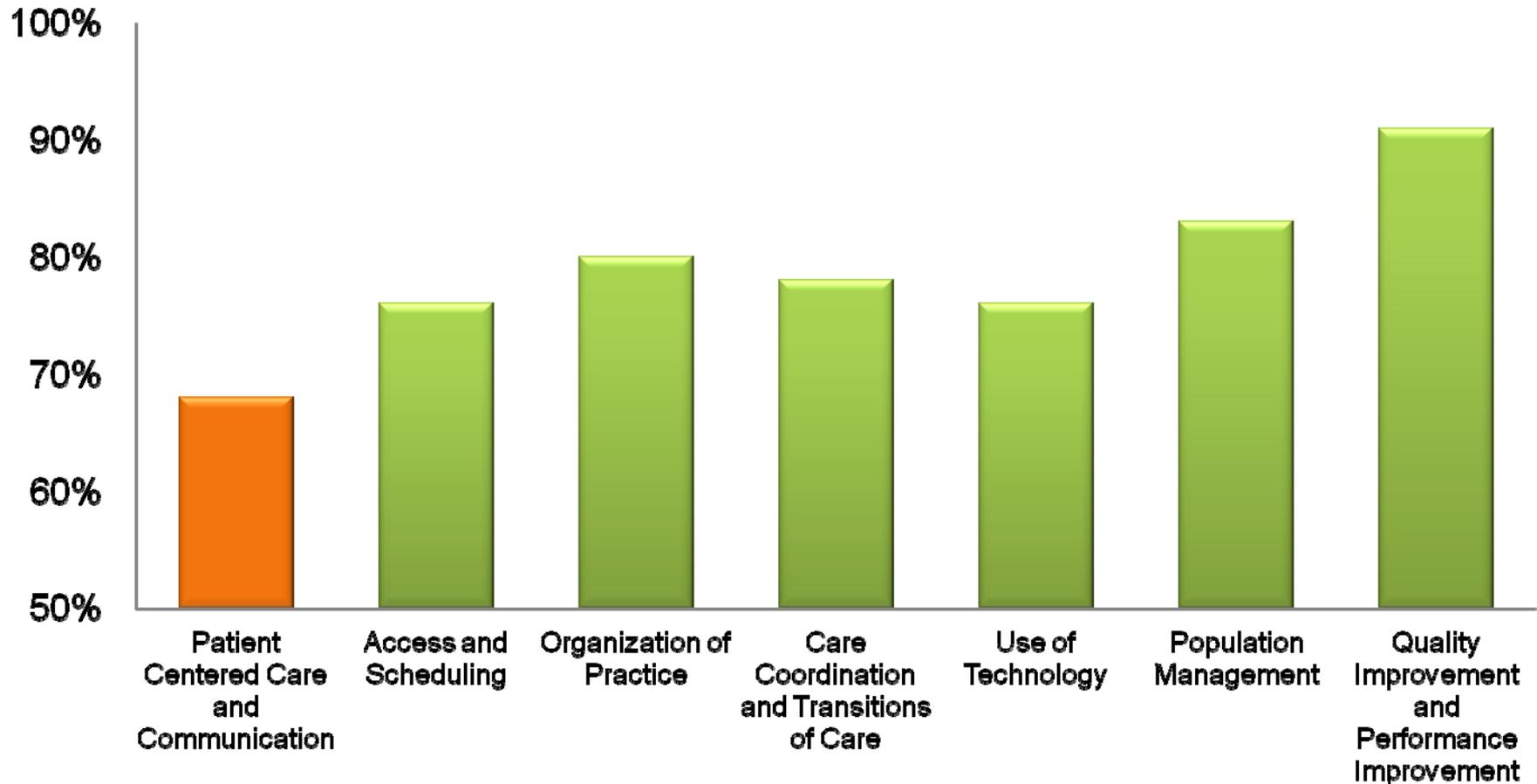
Where is the Patient?

"In developing the PCMH 2011 standards, we were guided by a strong consensus that <u>we must expand the patient-centered perspective</u>."
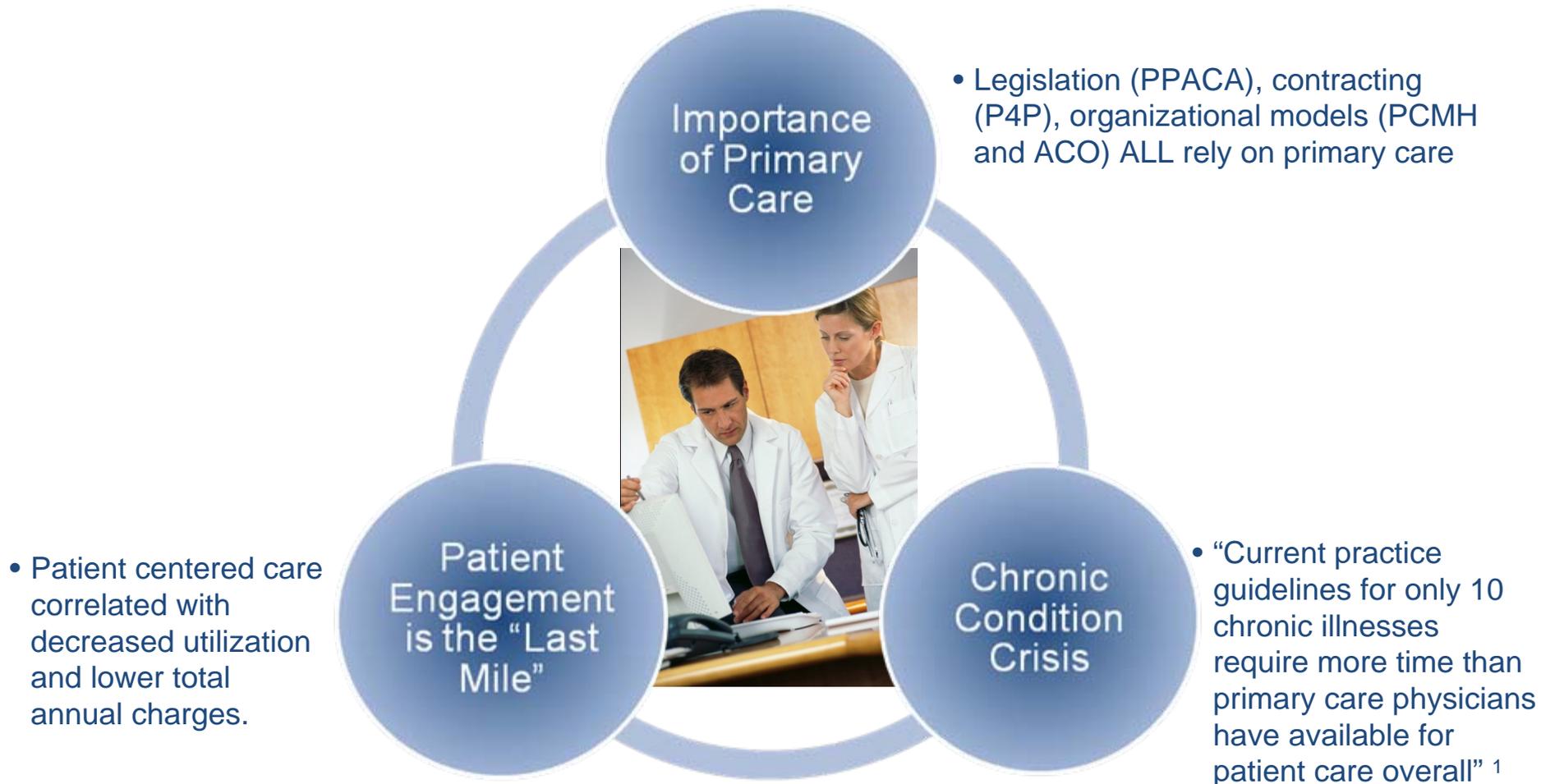
Robust patient centeredness is an important program goal:

- There is a stronger focus on integrating behavioral healthcare and care management
- Patient survey results help drive quality improvement
- Patients and their families are involved in quality improvement.

Where does engagement fit?

External Pressures on Primary Care

- Legislation (PPACA), contracting (P4P), organizational models (PCMH and ACO) ALL rely on primary care

- Patient centered care correlated with decreased utilization and lower total annual charges.

- "Current practice guidelines for only 10 chronic illnesses require more time than primary care physicians have available for patient care overall" [1]

[1] http://www.ncbi.nlm.nih.gov/pubmed/15928223
[2] http://www.ncbi.nlm.nih.gov/pubmed/21551394

What are the options?

Available choices for engaging patients

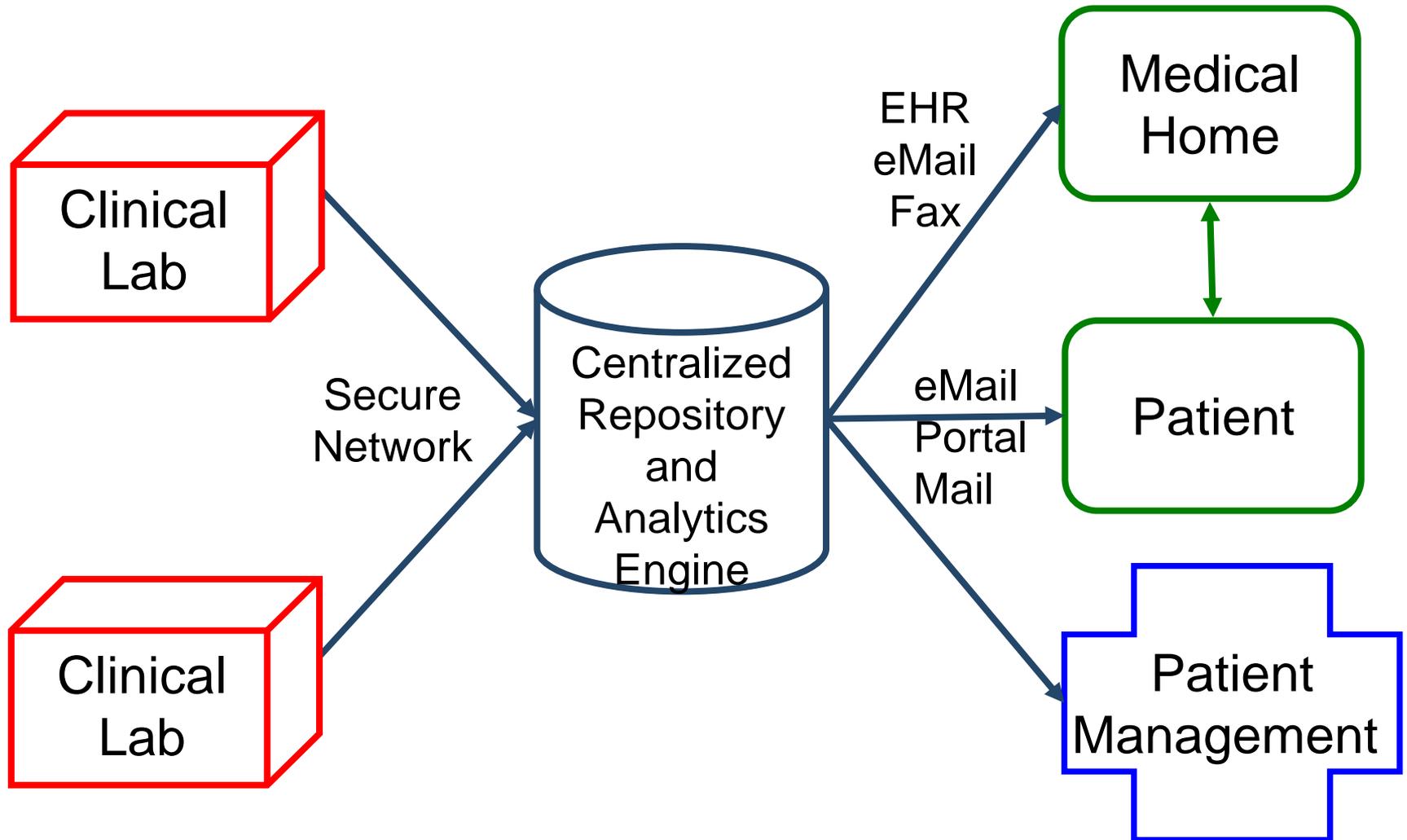| Medium	Pros	Cons
Portals	• Large amount and wide variety of content • Flexibility for personalization	• Need secure login • Too much/confusing content can wash out key messages • Can be difficult to navigate
eMail	• Cheap and easy • Easily personalized • People more accustomed to receiving information via email	• Complexities for secure email or • No PHI
Text messages	• Cheap and easy	• Limited to 140 characters • No PHI
IVR	• Can handle & triage complex cases	• Difficult to navigate • Impersonal • Language limitations
1st class mail	• Can carry structured messages • Secure for PHI	• Expense • One-way messaging
Live person	• Personal • Can be staffed with clinical personnel	• Costly • Requires training and staff with clinical understanding
Smart-phone Apps	• Secure for PHI • Flexible	• Programming • Uncertain psychological impact

Our Intervention

Design Criteria

- Low cost per case
- Low technology investment at the practice
  - With or without electronic medical record
- Little change in practice flow
- Little disruption of patient-provider relationship
- Accommodate multiple data sources
- High face validity (accuracy)

Informatics are critical

Data driven analytics based on process and timing

Clinical Lab

Clinical Lab

Secure Network

Centralized Repository and Analytics Engine

EHR eMail Fax

Medical Home

eMail Portal Mail

Patient

Patient Management

Clinical Outreach

Guidelines Based Communications

|	
Flow sheets	• Trends and decision support • Assists with guideline recognition
Condition specific population reports	• Practice "report card" • Basis for QI
Provider reminders & alerts	• Maintain "patient centeredness"
Patient reminders	• Motivates patients to stay involved • Heightens understanding of care plans

Evaluation

3 peer-reviewed studies

- 5 year NIH randomized trial with 7,414 patients in 64 practices
  - Maclean CD, Gagnon M, Callas P, Littenberg B. **The Vermont Diabetes Information System: A Cluster Randomized Trial of a Population Based Decision Support System.** *Journal of General Internal Medicine* 2009 Dec; 24(12):1303-10.

- 4 years of commercial managed care claims
  - Littenberg B, MacLean CD, Zygarowski K, Drapola B, Duncan J, Frank C. **The Vermedx® Diabetes Information System Reduces Health Care Utilization.** *Am J Managed Care* 2009 15:166-170.

- 4 years of hospital and ER admissions from a state-wide registry
  - Khan S, *et al*. **The Effect of the Vermont Diabetes Information System on Inpatient and Emergency Department Use: Results from a Randomized Trial.** *Health Outcomes Research in Medicine* 2010 1:61-66.
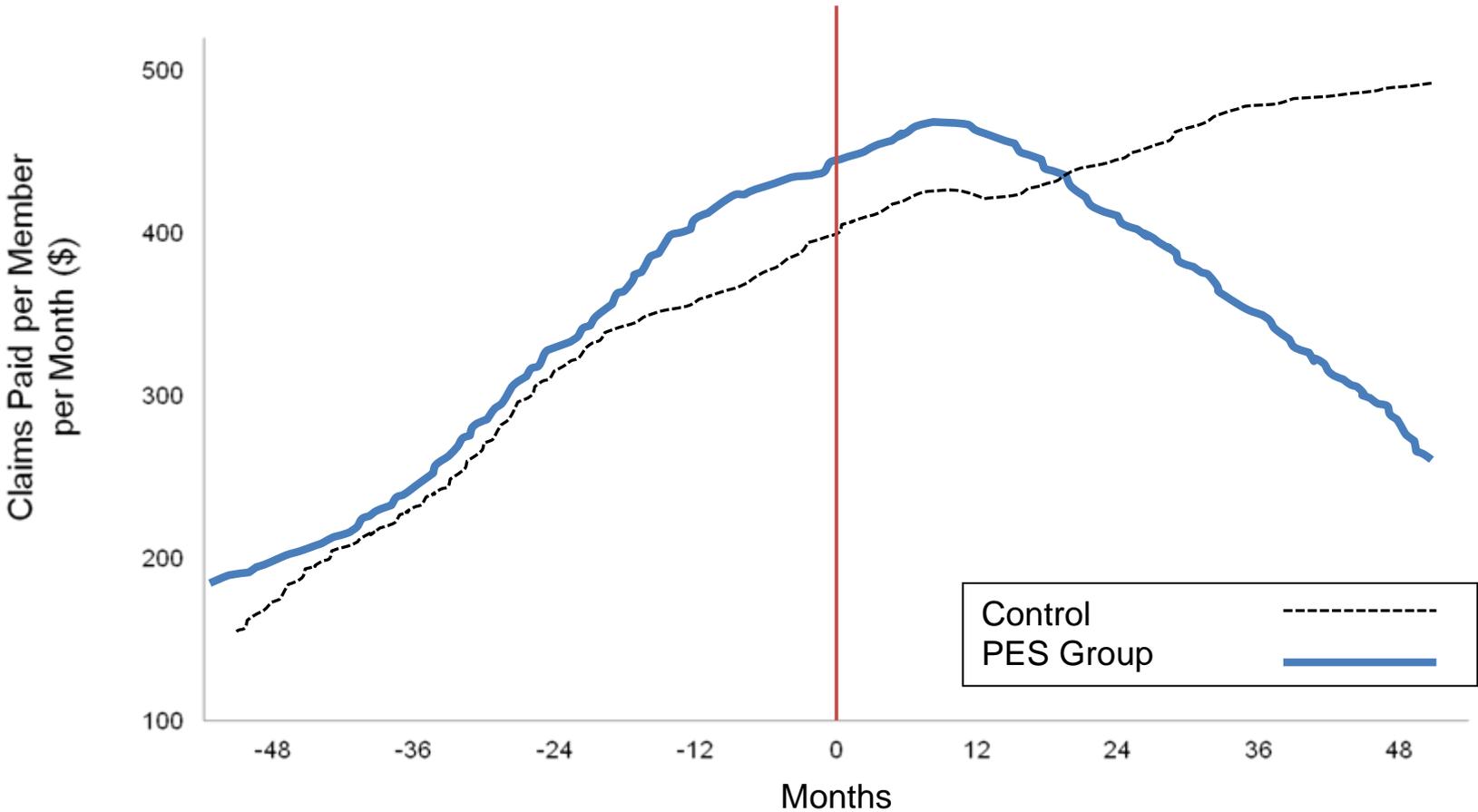
PATIENT ENGAGEMENT WORKS

Demonstrated Reductions in Utilization and Charges
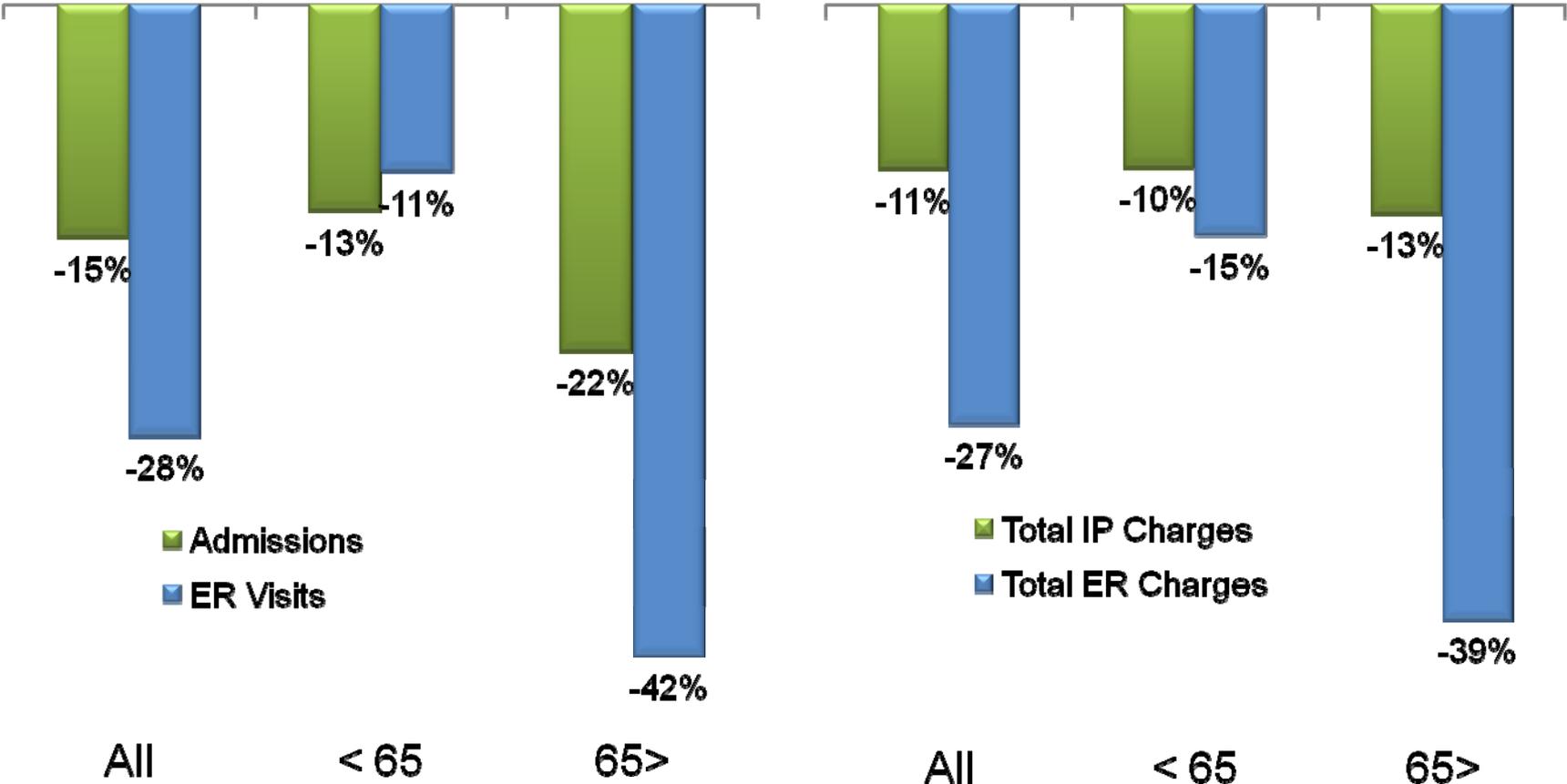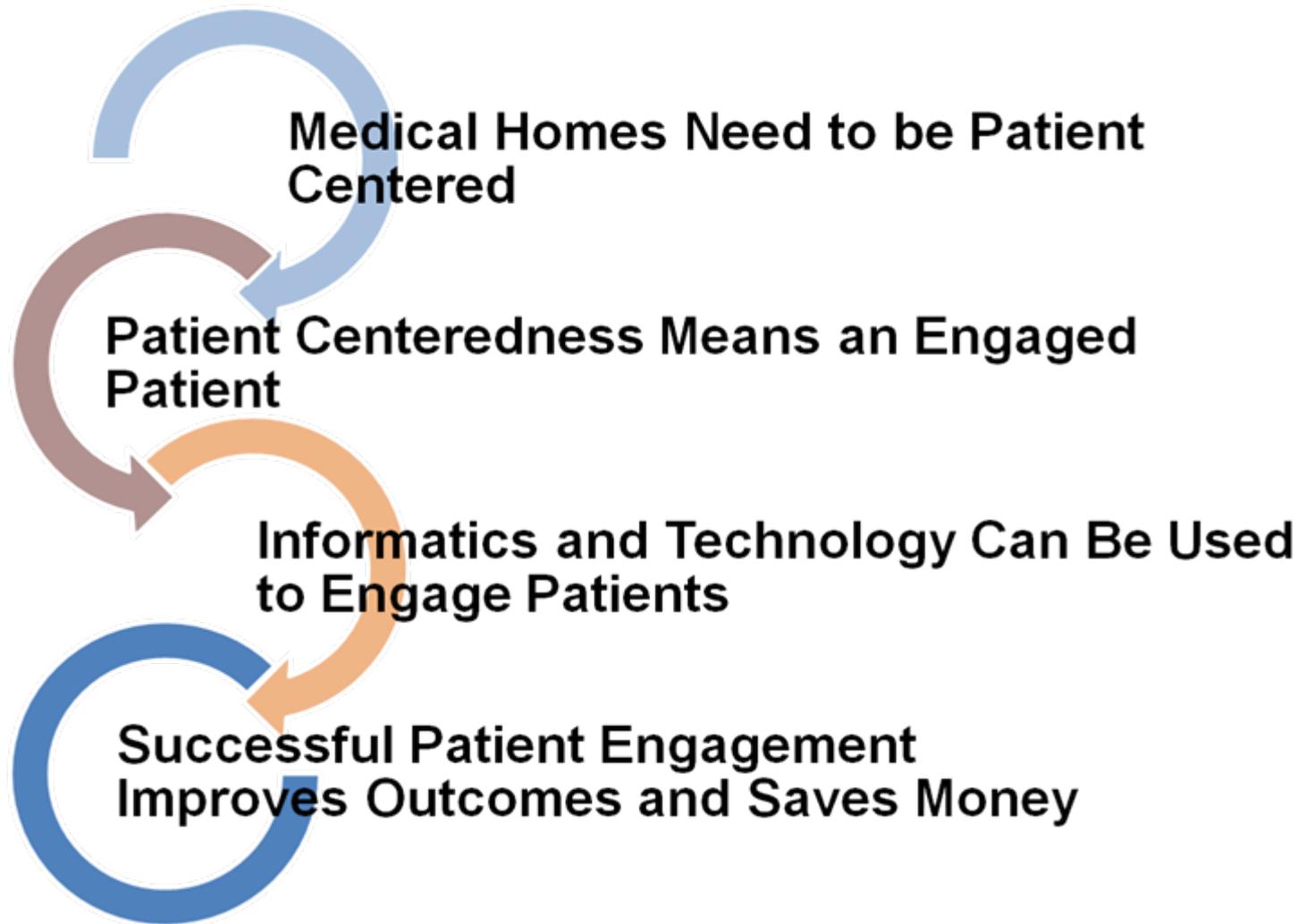
PATIENT ENGAGEMENT WORKS

Lower Overall Costs

Effect of PES Platform on Claims Paid
Lowess Smoothing

Vertical line represents the start date for PES group patients and a randomly chosen date for control patients

Summary Points

Medical Homes Need to be Patient Centered

Patient Centeredness Means an Engaged Patient

Informatics and Technology Can Be Used to Engage Patients

Successful Patient Engagement Improves Outcomes and Saves Money

Thank You

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