

# Financing Quality Care for Serious Illness Kaiser Permanente

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## National Academy of Sciences, Engineering & Medicine

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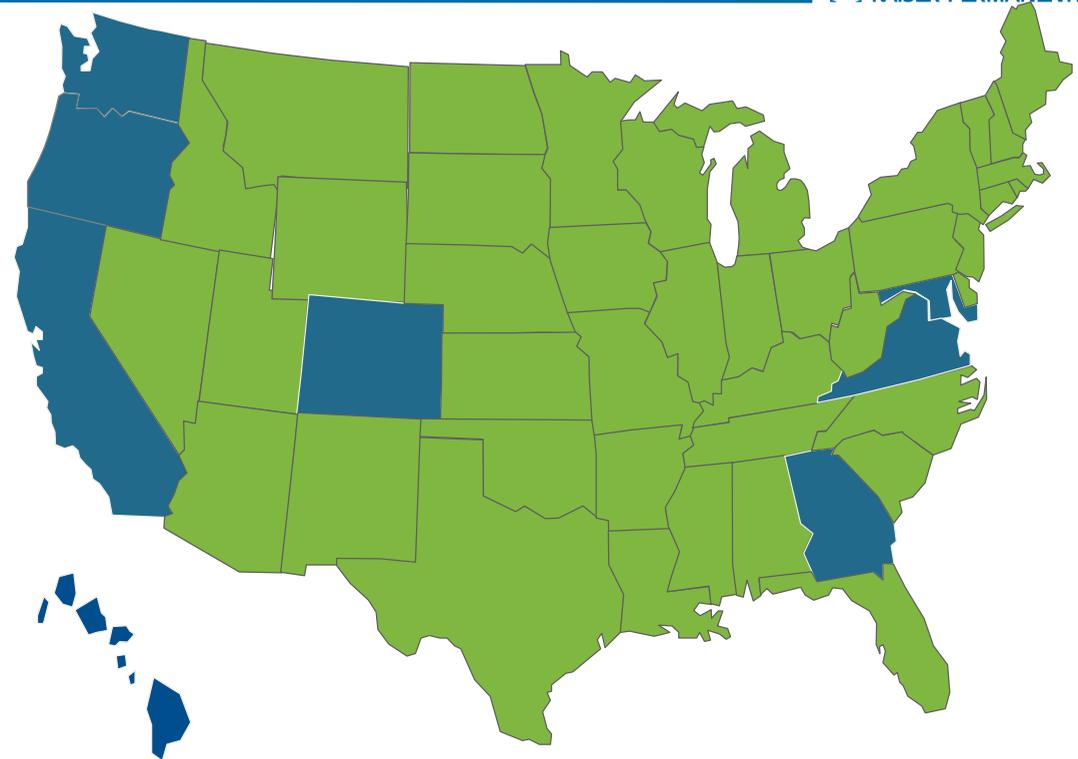
November 2017

# Kaiser Permanente: The oldest group model health maintenance organization.

2017 (as of September)

**11.7 million** members and growing

- (70% Employer Groups, 13% Medicare, 9% Individual, and 8% Medicaid/CHIP & Charitable Health)
- 8 regions serving 8 states and Washington, D.C. (*largest in CA 8.5M*)
- 39 hospitals (co-located with medical offices)
- More than 670 medical offices and other outpatient facilities
- Recognized leader in Quality & Service:



- **22,000** physicians
- **208,000** employees (including 54,000 nurses and 15,000 pharmacy staff)
- **\$65 Billion** in Annual Revenue
- **\$4 Billion** Health Information Technology Investment
- The **LARGEST** private EHR install in the world with 40M unique records, 30PB data
- 70+ years of Providing Care
- Focus on prevention of illness and disease, and community health to help our members.

# How it works



Hospitals and Care are *not* thought of as "Revenue Centers," rather as population health opportunities

POPULATION

Health Plan Members

REVENUE

Group/Individual Contracts:  
*Prospective Payment*

EXPENSE

Kaiser Foundation Hospitals

Kaiser Foundation Health Plan

Permanente Medical Groups\*

Hospital Service Agreement

Medical Service Agreement

*Physicians are NOT employed by Kaiser; they are employed by their medical group.*

*Operating Budgets*

*Capitation to the Group → salary to the physician; very minimal monetary incentives*

**Labor Management Partnership (LMP)**

# Innovative ideas from the beginning

- ◆ Prepayment
- ◆ Group practice
- ◆ Prevention/total health
- ◆ Population-based approach
- ◆ Clinical information technology



Photo:

**Sidney Garfield, MD** (left): a surgeon, visionary, and trailblazer  
**Henry J. Kaiser** (right): an entrepreneur who revolutionized shipbuilding and started global enterprises, including cement, steel, aluminum, and automobiles

# Population Health Built In

We have a structural incentive to “catch them at every turn” but provide the systems to make it easy on the provider (and the patient)



## Forward-sweep

When patients contact KP for any reason, preventive health and disease management reminders are either reviewed by protocol, or automatically displayed in our EMR, helping individuals get care they are due for.



## Back-sweep, Re-sweep

Have a systematic way to catch misses. “If we didn’t reach you before you came in, and we didn’t reach you while you were in, we’ll reach you after you leave.”



# Complete Care is...



The overarching philosophy that supports the culture of how we deliver care at Kaiser Permanente.

It creates a standardized infrastructure and approach to disease management and preventive care services comprised of integrated systems, programs, and people which come together to help us focus on each person as a whole; with a goal of aligning the patients' needs with those of the organization.



## Better Quality Reduces Hospital Costs

MEASURE	AVOIDABLE HOSPITAL COSTS <sup>b</sup>
Breast Cancer Screening	\$329 million–\$332 million
Cholesterol Management	\$935 million–\$2.1 billion
Controlling High Blood Pressure	\$1.4 million–\$2.5 billion
Diabetes Care—HbA1c Control	\$294 million–\$614 million
Osteoporosis Management	\$12.4 million–\$32 million
Persistent Beta-Blocker Treatment	\$5.5 million–\$30 million
Smoking Cessation	\$831 million–\$900 million
<b>TOTAL</b>	<b>\$2.4 billion–\$6.5 billion</b>

<sup>b</sup>Estimates if all plans performed as well as the top 10%.

## Members who visit the Online Personal Action Tool (oPAP) show a high rate of care gap closure

oPAP will continue to move into the forefront as one of the key strategies to engage and activate our members around their care.

- ◆ **Reduce organizational touches**
- ◆ **Close Care Gaps** outside an office visit.
- ◆ **Create a prepared patient** to allow for an efficient use of the Providers time during an office visit – e.g. Medication Reconciliation which can be done by the patient prior to the encounter.
- ◆ **Improve the efficiency of care management** – In 2017 glucose monitor readings will be automatically uploaded leading to time savings in office visits and the work of our care management staff.

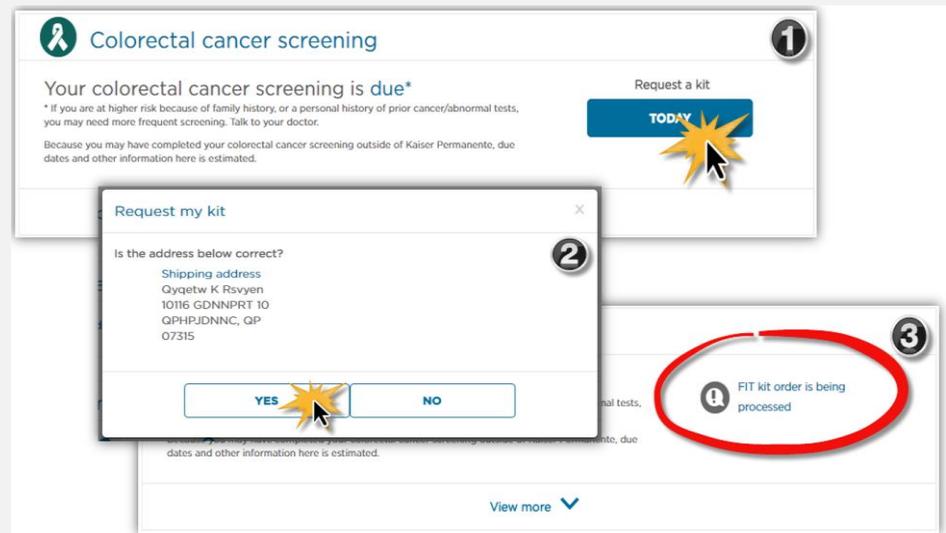
All Gaps - Closure rates



Link: <http://www.sciencedirect.com/science/article/pii/S0749379715007801?via%3Dihub>

### EXAMPLE:

Over 13,000 FIT kits ordered through oPAP since launch on 12/19/16 with a 68% return rate



### STATISTICS:

- ◆ Over 3.1 million unique visits and 13.3 million total visits since its 2012 inception
- ◆ 24.8 million total notifications sent since 2014
- ◆ 4 million Pre-Visit notifications processed since 2015
- ◆ 152,000+ EMMI videos viewed since 2016
- ◆ Deployed Sick Notes, FIT Kit order fulfillment button, and prominent abnormal FIT messages

KP SureNet has over 30 initiatives and continues to grow



- **KP SureNet** is a program that systematically identifies patients with potential care gaps.
- **Pharmacists and other care professionals** monitor KP's EMR to alert physicians about patients who may be taking medications that have harmful interactions.
- Regional staff **centrally aggregates** and synthesizes data to facilitate diagnosis detection and follow up for selected conditions



<h2>Gross Hematuria</h2> <p>As of July 27, 2017</p>	
Patient Volume	2218
Cystoscopies in progress/completed	587
Cancers Found	17
Abnormal Findings	41

## Findings published from 2-year pilot program

- Potentially avoided
  - 22 ER visits = \$9,922
  - 44 Hospitalizations = \$372,345
  
- For every dollar spent, an estimated \$2.14 saved through reduced hospitalizations and ER visits related to ADEs among patients treated with amiodarone

### *JMCP Journal of Managed Care Pharmacy*

### *Evaluation of a Pharmacist-Managed Amiodarone Monitoring Program*

Michele M. Spence, PhD; Jennifer K. Polzin, PharmD; Calvin L. Weisberger, MD; John P. Martin, MD; Jay P. Rho, PharmD; and Giselle H. Willick, PharmD

#### ABSTRACT

**BACKGROUND:** Because of the potential for serious adverse effects, patients treated with amiodarone must be carefully screened and routinely monitored for potential liver, thyroid, and pulmonary toxicity. However, laboratory and pulmonary monitoring rates have been found to be substantially lower than recommended in guidelines, including those of the North American Society of Pacing and Electrophysiology (NASPE, 2007).

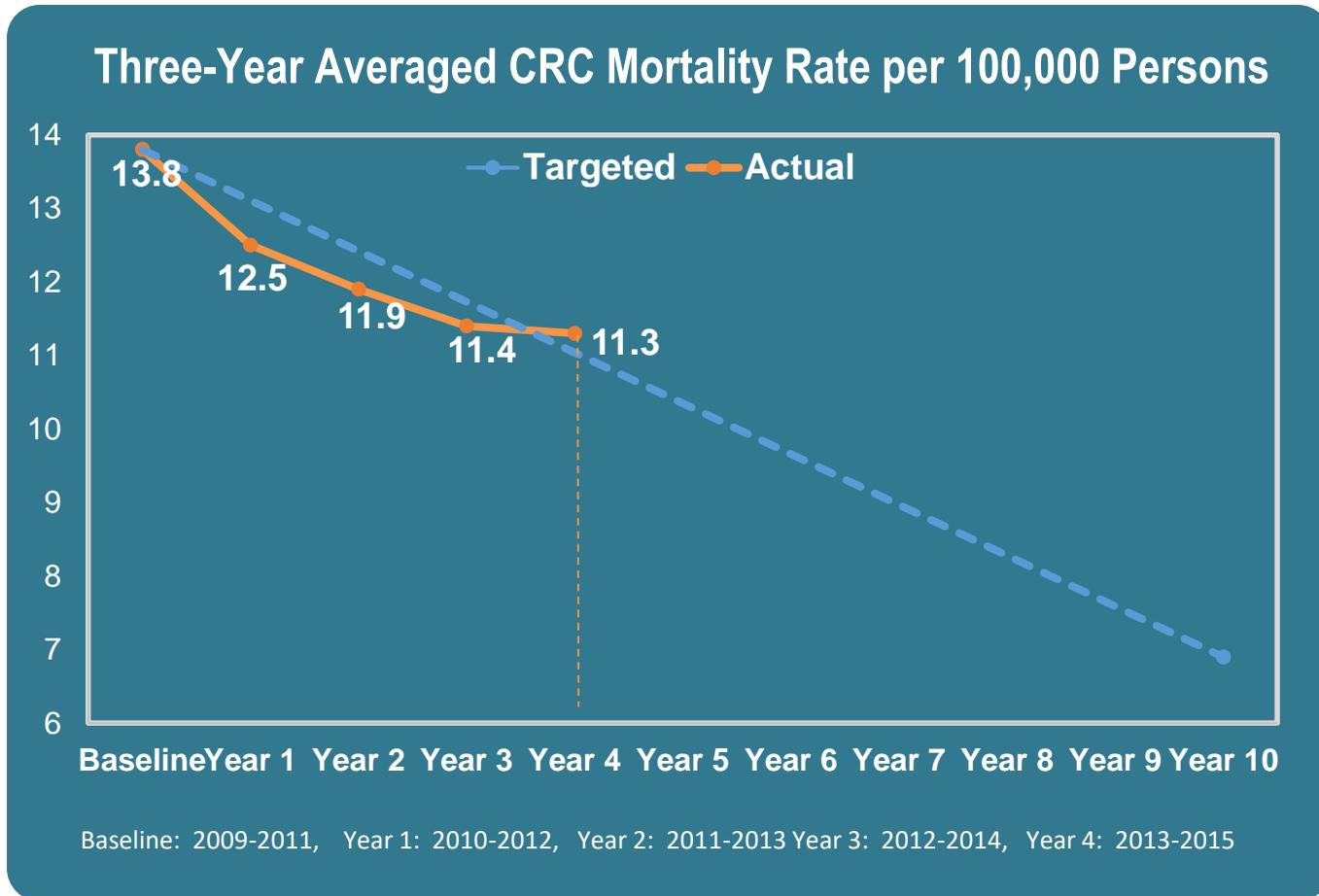
**OBJECTIVE:** To (a) assess rates of laboratory monitoring of liver, thyroid, and pulmonary function and adverse events in a pharmacist-managed amiodarone monitoring program compared with usual care in an integrated health care system and (b) estimate return on investment (ROI) from this intervention.

**METHODS:** This retrospective cohort study used clinic and enrollment data

within the year after the index prescription (odds ratio [OR] = 3.13, 95% CI = 1.12-8.71), as well as a TSH test (OR = 8.13, 95% CI = 0.27-20.20) and T4 (OR = 2.51, 95% CI = 1.67-3.75). PFTs were also more likely to be given to these patients (OR = 5.89, 95% CI = 1.86-18.99). A higher percentage of patients in the pharmacist-managed group than in usual care were taking a high-dose statin during the 12-month follow-up period (47.5% vs. 36.2%,  $P = 0.003$ ), but of those patients, a greater proportion were switched to another statin (14.0% [ $n = 12$ ] vs. 7.5% [ $n = 5$ ],  $P = 0.037$ ) or a lower dose (9.2% [ $n = 8$ ] vs. 3.8% [ $n = 3$ ],  $P = 0.022$ ). Six patients in the usual care group (3.79% of patients on high-dose statins) developed rhabdomyolysis, and 5 (3.24% of all patients in usual care) had an admission for interstitial lung disease. The proportions of patients using amiodarone and digoxin concomitantly were similar in the 2 groups (55.6% vs. 31.2%,  $P = 0.197$ ). Among patients with abnormal laboratory results for ALT, TSH, and T4, or digoxin, there were 1 full versus 4 partial hospitalizations and 1 ED visit in the

# Colorectal Cancer Moonshot Goal

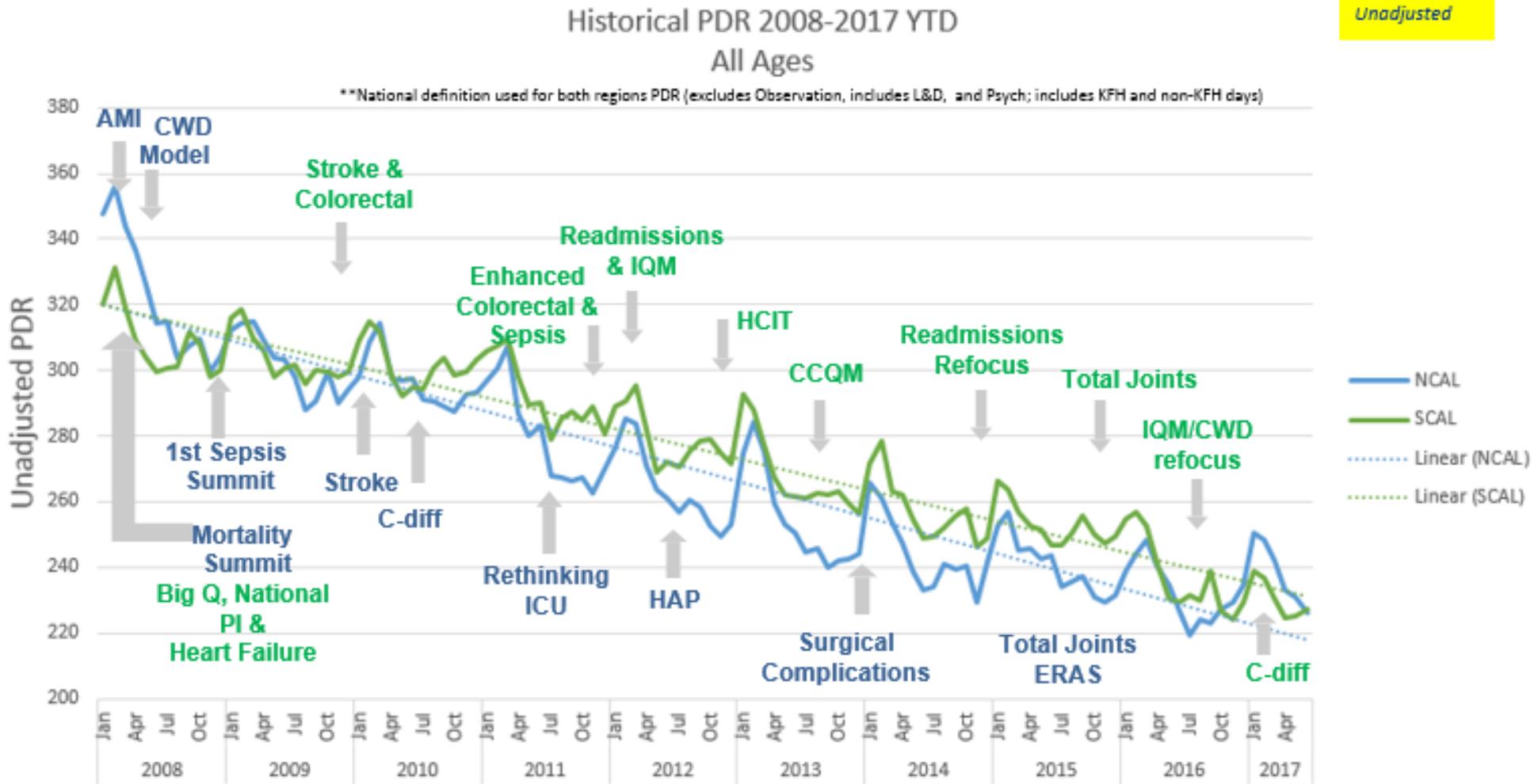
Colorectal cancer mortality declined by 2.5 per 100,000



Estimated Cost of Colon Cancer: \$30,000/year

# Care Without Delay/Integrated Quality Management

Significant decrease in patient days equal to several billion. This coupled with increased efficiency has resulted in a 20-30% decline in hospital utilization



The average cost of a readmission for any given cause is \$11,200

## Long Term Non-Medical

- Securing Community Resources
- Frail Bundle
  - Nutrition
  - Exercise and Socialization (mobility)
  - Caregiver Resources/Support
  - Transportation
  - Resources (Financial)

## Short Term Non-Medical

- Early dialogue and patient family engagement
- Scripting
- Hand-offs
- Effective Pairing
- Frequent Huddling

## Long Term Medical

- Establish Long Term Medical Plan
  - Patients Goals of Care must take into account chronic medical conditions
  - Medical plan must be accomplishable
  - Scripting
- “Do it today and why not now?” - tomorrows medical evaluation/treatment should be done today

## Short Term Medical

- Timely assessment and securing of medical treatment
  - Labs, X-ray, radiology tests, Consultations
- Effective service agreements
  - Specialty Consultation

## Addressing Social Needs of High Resource/High Need Patient Population

### Pilot outcomes (2016 to date) - Social Need Prevalence

#### What are members screening positive for?

##### High Prevalence

- Caregiver support (52%)\*
- Financial (37%)
- Affording healthy meals (29%)
- Food didn't last (29%)

\*12% of pilot population identified as caregivers of an individual who is physically or mentally disabled.

##### Medium Prevalence

- Utilities (24%)
- Social isolation (24%)
- Transportation (22%)
- Medical care costs (20%)
- Health literacy (16%)

##### Lower Prevalence

- Applying for public benefits (12%)
- Housing conditions (11%)
- Financial counseling (9%)
- Employment (6%)
- Homelessness (6%)
- Housing Safety (5%)
- Child-related (5%)\*\*

\*\*51% of pilot population identified as not being a caregiver of children.

# Preliminary Cost Results

Without knowing the propensity risk scores, intervention appears to have had a negligible impact on costs. Findings to be published soon!

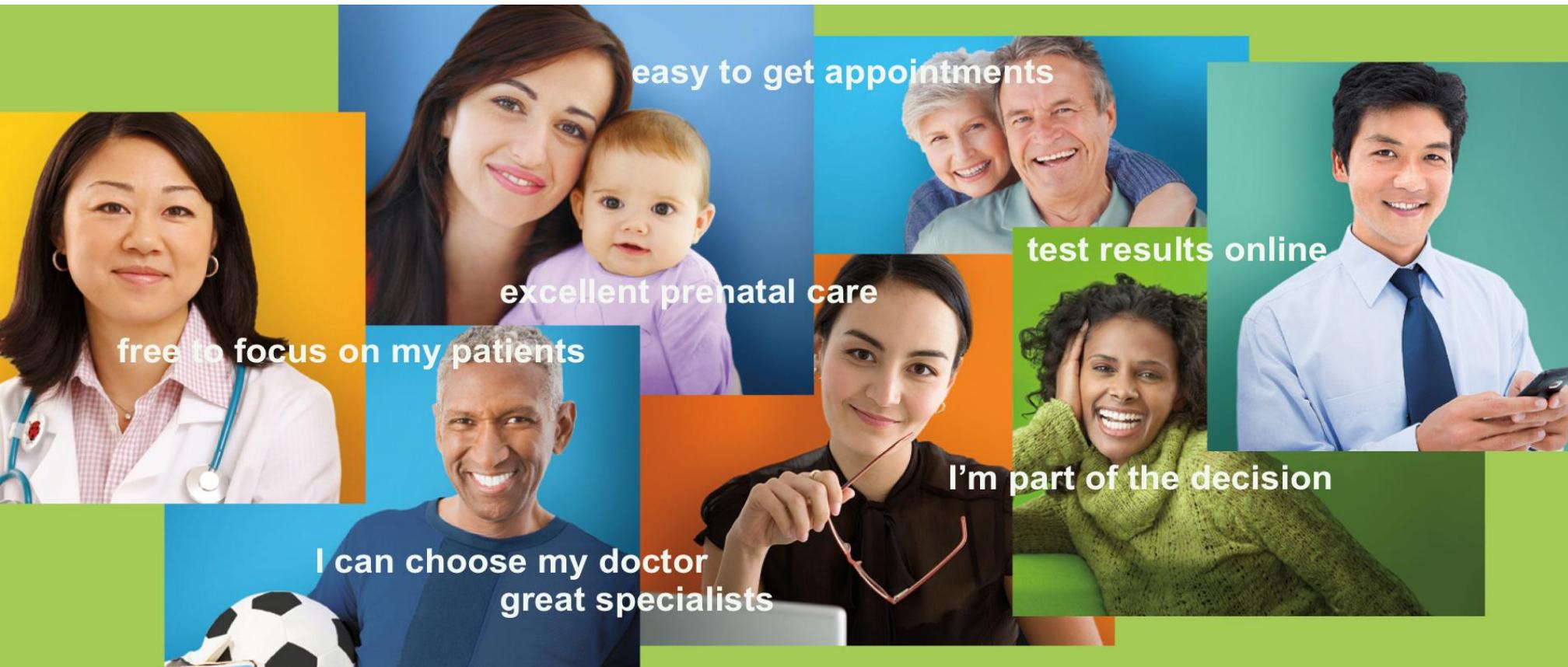
Variable	Nov 2015 - Dec 2016	
	Estimate	P-Value*
<b>Total Cost</b>	<b>0.9%</b>	<b>0.70</b>
KP Total Cost	22.2%	<u>0.01</u>
KP ED Cost	11.2%	0.16
KP IP Cost	18.9%	0.06
KP OP Cost	-9.5%	0.23
OM Total Cost	0.7%	0.93
OM ED Cost	2.9%	0.66
OM IP Cost	-2.7%	0.70
OM OP Cost	-2.6%	0.64

Generalized linear regression model:

$$\text{Log}(\text{Cost} + 1) = \text{Intercept} + \text{Post\_Intervention} + \text{Intervention} + \text{Post} + \text{Gender} + \text{Race/Ethnicity} + \text{Age} + \text{DxCG} + \text{Marital Status} + \text{Diabetes} + \text{CAD/CHF} + \text{Asthma} + \text{Depression} + \text{Error}$$



# People with serious illness are more likely to experience transitions in care



## Care Anywhere, Any Time