



A JOINT CENTER FOR HEALTH SYSTEMS INNOVATION



# The Future of Primary Care: Taking the Pulse of Primary Care Transformation, Nationally and Globally

Asaf Bitton MD, MPH

Director, Primary Health Care, Ariadne Labs
Brigham & Women's Hospital
Harvard Medical School & T.H. Chan School of Public Health

Primary Care Innovation Symposium Weill Cornell Medicine September 12<sup>th</sup>, 2017



#### **Disclosures**



- I am a senior advisor at the Center for Medicare and Medicaid Innovation working on a federal multipayer primary care redesign and transformation effort called Comprehensive Primary Care Plus (CPC+).
  - •The views expressed here <u>do not</u> represent any official CMS viewpoints.
- •My wife works at the Advisory Board Company, a health care research and consulting firm.
  - •They have <u>no association</u> with the materials presented here.

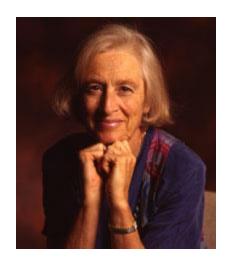
### What is Primary Care?



There is no such thing as a "primary care service". There are only primary care functions and specialty care functions. We know what the primary care functions are; they are evidence-based.

-Barbara Starfield





#### **Key Primary Care Functions: The 5 C's**



- First-Contact Access
- Longitudinal Continuity
- Comprehensiveness (Whole-Person Focus)
- Coordination
- Person-Centeredness



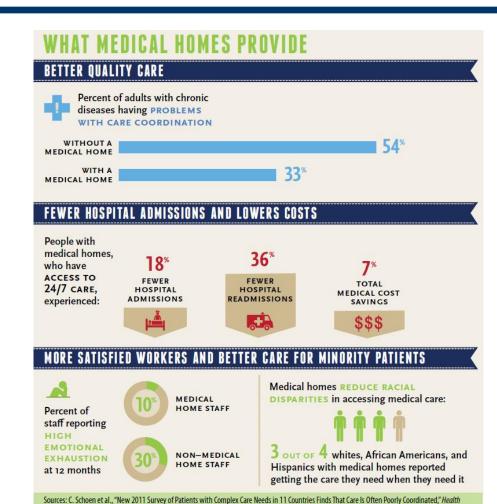
## The Primary Care Value Proposition



#### IT'S A FACT

U.S. ADULTS WHO HAVE A PRIMARY CARE PHYSICIAN HAVE 33 PERCENT LOWER HEALTH CARE COSTS AND 19 PERCENT LOWER ODDS OF DYING THAN THOSE WHO SEE ONLY A SPECIALIST. AS A NATION, WE WOULD SAVE \$67 BILLION EACH YEAR IF EVERYBODY USED A PRIMARY CARE PROVIDER AS THEIR USUAL SOURCE OF CARE.

Sources: B. Starfield, L. Shi, and J. Macinko, "Contribution of Primary Care to Health Systems and Health," *Milbank Quarterly*, Sept. 2005 83(3):457—502; and S. J. Spann, "Report on Financing the New Model of Family Medicine," *Annals of Family Medicine*, Dec. 2004 2(2 Suppl. 3):S1—S21.



Affairs Web First, Nov. 9, 2011; A. Beal et al., Closing the Divide: How Medical Homes Promote Equity in Health Care—Results from the Commonwealth Fund

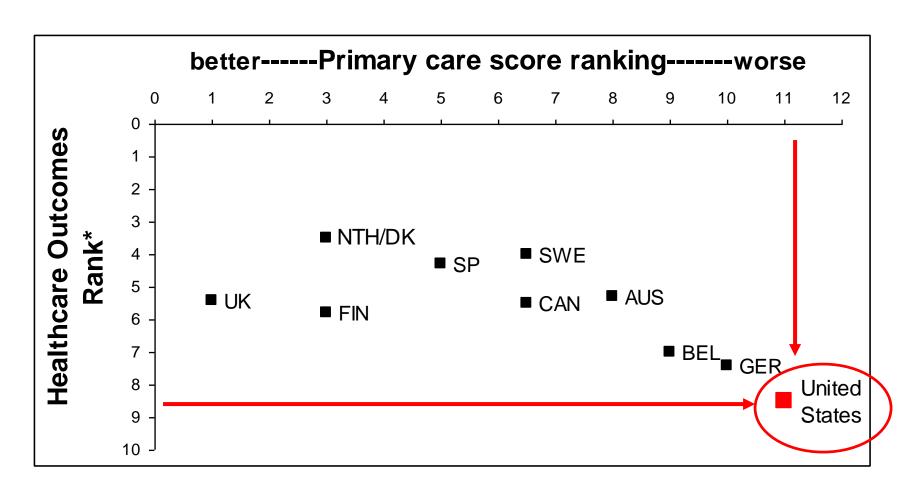
2006 Health Care Quality Survey, The Commonwealth Fund, June 2007; D. D. Maeng and J. Graham, "Reducing Long-Term Cost by Transforming Primary Care: Evidence from Geisinger's Medical Home Model," American Journal of Managed Care, March 2012 18(3):149–55; R. J. Reid et al., "The Group Health

Medical Home at Year Two: Cost Savings, Higher Patient Satisfaction, and Less Burnout for Providers," Health Affairs, May 2010 29(5):835-43.

#### **Comparative Performance**



Better primary care functions are associated with better outcomes



<sup>\*</sup>Rank based on patient satisfaction, expenditures per person, 14 health indicators, and medications per person in Australia, Belgium, Canada, Denmark, Finland, Germany, Netherlands, Spain, Sweden, United Kingdom, United States

Source: Commonwealth Fund and Lisa Letourneau, MD

#### **Changing Direction**



"If you don't change direction, you may end up where you are heading."

-Lao Tzu





## Reinventing the Way We Do Things



"Current care systems cannot do the job.

Trying harder will not work.

Changing systems of care will."



Institute of Medicine. Crossing the Quality Chasm. 2001



#### **Future Trajectories for Primary Care**



© Asaf Bitton MD, MPH

### 1. Evolution

Patient-Centered Medical Home

 Incremental payment reform (care mgmt fees, enhanced P4P, shared savings)

### 2. <u>Devolution</u>

- Minute clinics
- Concierge care
- Limited IT solutions



#### 3. Revolution

- Addressing Population Health and Social Determinants of Health
- Primary Care Capitation / Global Payment / Integrated IT

#### **Future Trajectories for Primary Care**



© Asaf Bitton MD, MPH

### 1. Evolution

Patient-Centered Medical Home

 Incremental payment reform (care mgmt fees, enhanced P4P, shared savings)

#### 2. Devolution

- Minute clinics
- Concierge care
- Limited IT solutions

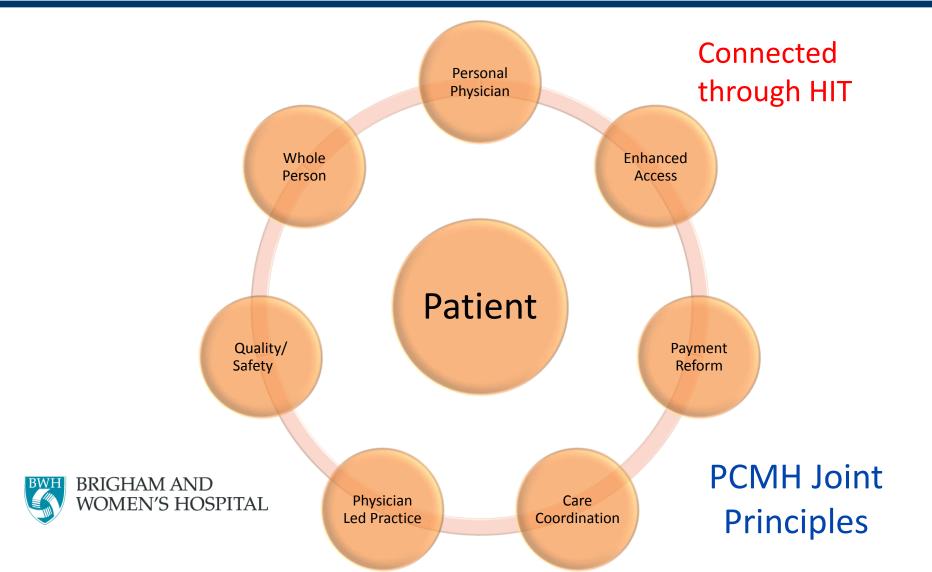


### 3. Revolution

- Addressing Population Health and Social Determinants of Health
- Primary Care Capitation / Global Payment / Integrated IT

## PCMH = "Great Primary Care, Delivered by a Team"





## Sounds Like a Nursing Home...



- "Patient Centered Medical Home" (PCMH)
- Not a great name...
- Patients and many providers not aware



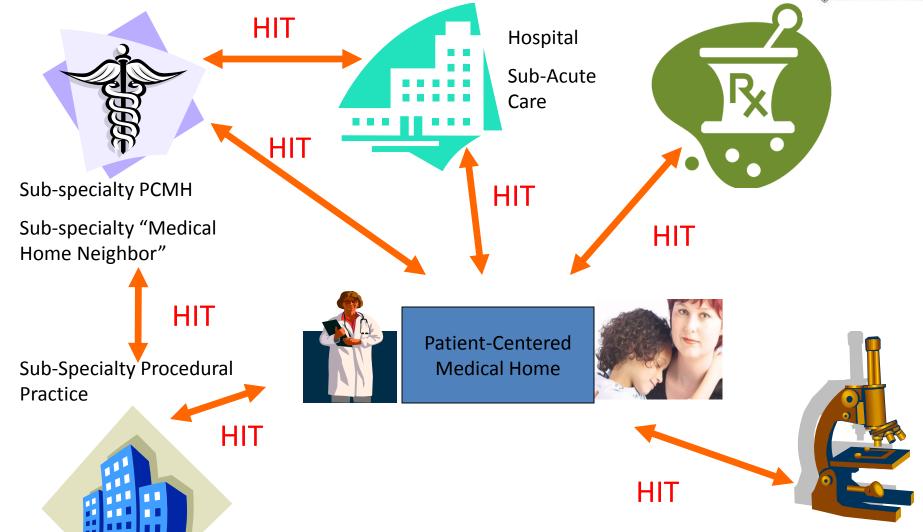


## Medical Homes and Accountable Care Organizations









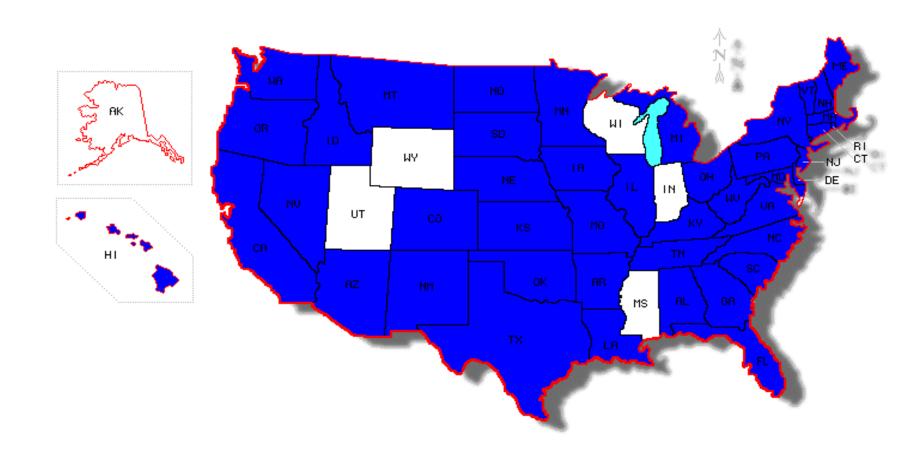




## What is the scope of PCMH transformation nationwide?

## PCMH Nationwide with Payment Reform

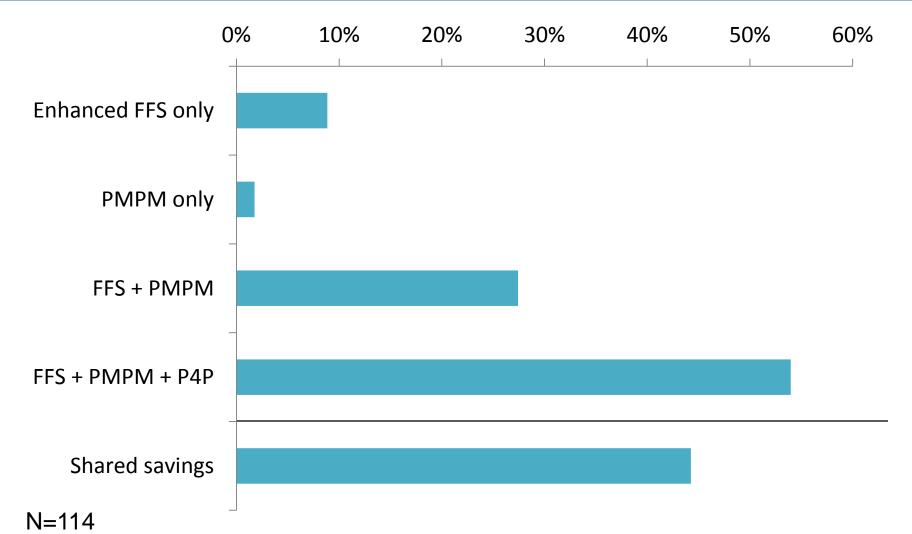




Source: Sam Edwards, Asaf Bitton, Johan Hong, Bruce Landon. Health Aff 33, 10 (2014):1823-1831

### **Payment**





Source: Sam Edwards, Asaf Bitton, Johan Hong, Bruce Landon. Health Aff 33, 10 (2014):1823-1831



#### **Transformation**

#### **EXHIBIT 2**

Practice Recognition And Transformation Support Used By 114 Patient-Centered Medical Home Initiatives That Included Payment Reform Incentives, 2013

Type of initiative, by payer

	Single commercial payer		Medicaid	Multiple	
Type of recognition or support	Small	Large	only	payers	All
RECOGNITION					
Formal recognition required On practice entry <sup>a</sup> After practice entry <sup>a</sup>	73% 45 55	83% 60 40	48% 73 28	62% 54 47	69% 55 45
RECOGNITION TYPE®					
NCQA or other external <sup>a</sup> Internal <sup>a</sup> Recognition application fee support <sup>a</sup> Pay for recognition level <sup>a,b</sup> Target level NCQA 3 <sup>c</sup> Practices that achieved NCQA level 3 (mean) <sup>c</sup>	100 0 0 38 94 81	80 20 31 45 100 76	64 36 9 30 67 57	85 15 24 24 83 54	86 15 14 35 91 69
TRANSFORMATION SUPPORT					
Use practice consultants Use learning collaboratives Data sharing between payers and practices Data sharing among practices	8 15 98 68	55 52 97 86	61 61 83 57	91 95 100 81	46 49 95 73

Source: Sam Edwards, Asaf Bitton, Johan Hong, Bruce Landon. Health Aff 33, 10 (2014):1823-1831



### **Survey Take-Away Points**

- Substantial enthusiasm for the PCMH reflected in the large number of initiatives
  - Trend away from small, limited, single-payer pilots (i.e., multipayer or across the board)
  - Trend toward larger, open-ended delivery reform efforts
- Some integration of risk sharing; much less so for accountable care
- Heterogeneity will inform what we learn from evaluations

#### **PCMH Estimates Nationwide**



- At least 21 million pts in payment-linked PCMH
- VA with another 1065 clinics (9 million pts)
- Dept of Defense TriCare (2 million pts)
- 12,000 practices by NCQA (~ 14 million pts);
- 3500 by Joint Commission (4.5 million pts)
- CMMI CPC+ (3 million pts)
- Some overlap with all of the above
- At least <u>45-50 million patients</u> served by PCMH practices in the US



## PCMH Research Literature: Does This Work?

#### **Opposing Approaches**

#### Researchers

- Identify the optimal approach
- Randomized controlled trials
- Willing to wait
- Single answer/ Triangulation

#### <u>Implementers</u>

- Opportunistic/
   Interventions evolve
- "real life" experiments
- Answers today
- "Experiential" learning



#### **Most Recent Evidence: 2016-17**



#### The Impact of Primary Care Practice Transformation on Cost, Quality, and Utilization

A SYSTEMATIC REVIEW OF RESEARCH PUBLISHED IN 2016



## **Summary of Outcomes: Peer Reviewed Articles** Number of articles reporting: ■ Positive results ■ Mixed results ■ Negative results Cost (n=13) Quality (n=24) Inpatient Utilization (n=6) ED Utilization (n=10) 6 PCP Utilization (n=7) 6

#### A Tale of Two Studies



.

#### **Original Investigation**

### Association Between Participation in a Multipayer Medical Home Intervention and Changes in Quality, Utilization, and Costs of Care

Mark W. Friedberg, MD, MPP; Eric C. Schneider, MD, MSc; Meredith B. Rosenthal, PhD; Kevin G. Volpp, MD, PhD; Rachel M. Werner, MD, PhD

IMPORTANCE Interventions to transform primary care practices into medical homes are increasingly common, but their effectiveness in improving quality and containing costs is unclear

**OBJECTIVE** To measure associations between participation in the Southeastern Pennsylvania Chronic Care Initiative, one of the earliest and largest multipayer medical home pilots conducted in the United States, and changes in the quality, utilization, and costs of care.

DESIGN, SETTING. AND PARTICIPANTS Thirty-two volunteering primary care practices participated in the pilot (conducted from June 1, 2008, to May 31, 2011). We surveyed pilot practices to compare their structural capabilities at the pilot's beginning and end, Using claims data from 4 participating health plans, we compared changes (in each year, relative to before the intervention) in the quality, utilization, and costs of care delivered to 64 243 patients who were attributed to pilot practices and 55 959 patients attributed to 29 comparison practices (selected for size, specialty, and location similar to pilot practices) using a difference in-differences design.

EXPOSURES Pilot practices received disease registries and technical assistance and could earn bonus payments for achieving patient-centered medical home recognition by the National Committee for Quality Assurance (NCQA).

MAIN OUTCOMES AND MEASURES Practice structural capabilities; performance on 11 quality measures for diabetes, asthma, and preventive care; utilization of hospital, emergency department, and ambulatory care; standardized costs of care.

RESULTS. Pilot practices successfully achieved NCQA recognition and adopted new structural capabilities such as registries to identify patients overdue for chronic disease services. Pilot participation was associated with statistically significantly greater performance improvement, relative to comparison practices, on 1 of 11 investigated quality measures: nephropathy screening in diabetes (adjusted performance of 82.7% vs 71.7% by year 3, P < .001). Pilot participation was not associated with statistically significant changes in utilization or costs of care. Pilot practices accumulated average bonuses of \$92.000 per primary care physician during the 3-year intervention.

CONCLUSIONS AND RELEVANCE A multipayer medical home pilot, in which participating practices adopted new structural capabilities and received NCQA certification, was associated with limited improvements in quality and was not associated with reductions in utilization of hospital, emergency department, or ambulatory care services or total costs over 3 years. These findings suggest that medical home interventions may need further refinement.

JAMA, 2014;311(8):815-825. doi:10.1001/jama.2014.353

Copyright 2014 American Medical Association, All rights reserved,

Editorial page 802

Author Video Interview at jama.com

Supplemental content at iama.com

Author Affiliations: Author affiliations are listed at the end of this article.

Corresponding Author: Mark W. Friedberg, MD, MPP, 20 Park Plaza, Ste 920, Boston, MA 02116 (mfriedbe @rand.org). Research

#### Original Investigation

#### Effects of a Medical Home and Shared Savings Intervention on Quality and Utilization of Care

Mark W. Friedberg, MD, MPP; Meredith B. Rosenthal, PhD; Rachel M. Werner, MD, PhD; Kevin G. Volpp, MD, PhD; Eric C. Schneider, MD, MSc

**IMPORTANCE** Published evaluations of medical home interventions have found limited effects on quality and utilization of care.

**OBJECTIVE** To measure associations between participation in the Northeastern Pennsylvania Chronic Care Initiative and changes in quality and utilization of care.

DESIGN. SETTING. AND PARTICIPANTS: The northeast region of the Pennsylvania Chronic Care initiative began in October 2009, included 2 commercial health plans and 27 volunteering small primary care practice sites, and was designed to run for 36 months. Both participating health plans provided medical claims and enrollment data spanning October 1, 2007, to September 30, 2012 (2 years prior to and 3 years after the pilot inception date). We analyzed medical claims for 17 363 patients attributed to 27 pilot and 29 comparison practices, using difference-in-difference methods to estimate changes in quality and utilization of care associated with pilot participation.

EXPOSURES The intervention included learning collaboratives, disease registries, practice coaching, payments to support care manager salaries and practice transformation, and shared savings incentives (bonuses of up to 50% of any savings generated, contingent on meeting quality targets). As a condition of participation, pilot practices were required to attain recognition by the National Committee for Quality Assurance as medical homes.

MAIN OUTCOMES AND MEASURES Performance on 6 quality measures for diabetes and preventive care; utilization of hospital, emergency department, and ambulatory care.

RESULTS All pilot practices received recognition as medical homes during the intervention. By intervention year 3, relative to comparison practices, pilot practices had statistically significantly better performance on 4 process measures of diabetes care and breast cancer screening; lower rates of all-cause hospitalization (8.5 vs 10.2 per 1000 patients per month; difference, -1.7 [95% C1, -3.2 to -0.03]), lower rates of all-cause emergency department visits (29.5 vs 34.2 per 1000 patients per month; difference, -4.7 [95% C1, -8.7 to -0.9]), lower rates of ambulatory care-sensitive emergency department visits (16.2 vs 19.4 per 1000 patients per month; difference, -3.2 [95% C1, -5.7 to -0.9]), lower rates of ambulatory visits to specialists (104.9 vs 122.2 per 1000 patients per month; difference, -17.3 [95% C1, -26.6 to -8.0]), and higher rates of ambulatory primary care visits (349.0 vs 271.5 per 1000 patients per month; difference, 7.75 [95% C1, 37.3 to 120.5]).

CONCLUSIONS AND RELEVANCE During a 3-year period, this medical home intervention, which included shared savings for participating practices, was associated with relative improvements in quality, increased primary care utilization, and lower use of emergency department, hospital, and specialty care. With further experimentation and evaluation, such interventions may continue to become more effective.

JAMA Intern Med. doi:10.1001/jamainternmed.2015.2047 Published online June 1, 2015. Invited Commentary

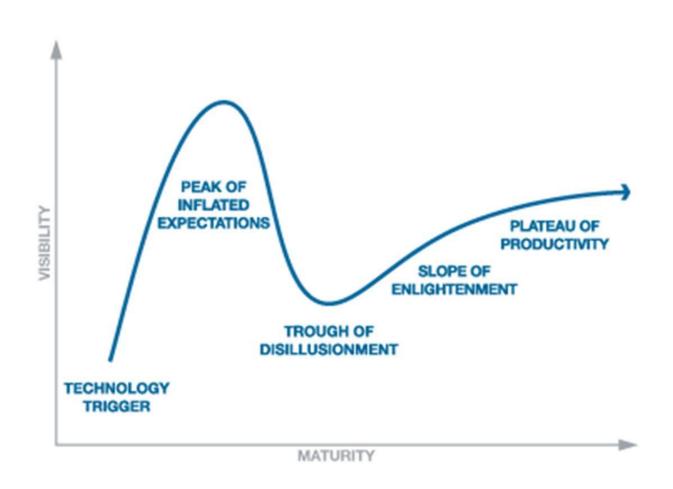
Supplemental content at jamainternalmedicine.com

Author Affiliations: Author affiliations are listed at the end of this

Corresponding Author: Mark W. Friedberg, MD, MPP, 20 Park Plaza, Ste 920, Boston, MA 02116 (mfriedbe@rand.org).

#### **Gartner Hype Cycle**





#### So Does PCMH Work?



{Most} evaluations published over the past 18 months have found positive effects, suggesting that we are on the "slope of enlightenment," where we move past the simplistic question, "Does it work?," to the more compelling question, "What features of the medical home model will make it more effective going forward?"

-Eric Schneider MD, MSc, Commonwealth Fund

## 7 Habits of Effective Practice Transformation



- Engaged Leadership
- Teams
- Daily Huddles/Weekly Meetings
- Patient Involvement at all levels
- Quality Improvement Method
- Target Setting
- Care Management



#### What do we know about PCMH?



- Substantial numbers of patients and providers are now in PCMH (at least 45-50 million nationwide)
- There are increasingly robust new payment mechanisms
- The majority of the peer-reviewed evidence supports PCMH transformation
- Changing practice means changing culture
- 7 habits of effective transformation
- Significant structural payment reform is on the horizon which will likely increase the impetus and pace of practice transformation

### **Future Trajectories for Primary Care**



© Asaf Bitton MD, MPH

#### 1. Evolution

Patient-Centered Medical Home

Incremental payment reform (care mgmt fees, enhanced P4P, shared savings)

### 2. <u>Devolution</u>

- Minute clinics
- Concierge care
- Limited IT solutions



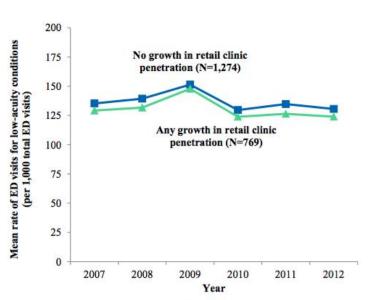
### 3. Revolution

- Addressing Population Health and Social Determinants of Health
- Primary Care Capitation / Global Payment / Integrated IT

## 1. Retail / Minute Clinics: Convenient but Costly?



#### Martsolf et al



Data sources were 2007-2012 State Emergency Department Databases, merged with data on retail clinics from Merchant Medicine.

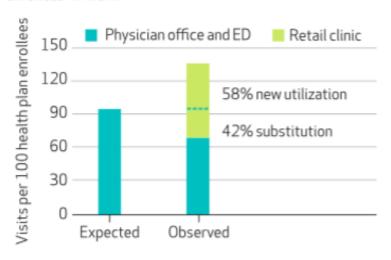
Note: Figure E1 (available online at http://www.annemergmed.com) shows trends in the rate of ED visits for low-acuity conditions by quartile of growth retail clinic penetration

**Figure 2.** Trends in the rate of ED visits for low-acuity conditions, by growth in retail clinic penetration, 2007 to 2012.

Martsolf et al, Ann Emerg Med, 2017

#### EXHIBIT 3

Expected and observed visits for low-acuity conditions to retail clinics, physician offices, and EDs per 100 health plan enrollees in 2012



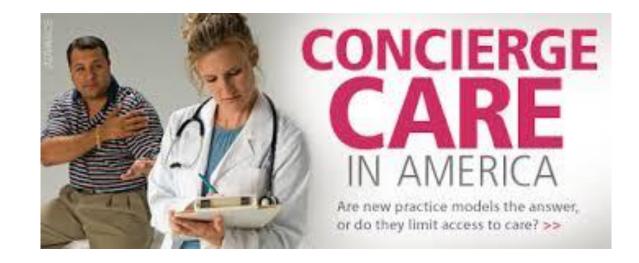
**SOURCE** Authors' analysis of 2010–12 Aetna claims and enrollment data. **NOTES** Low-acuity conditions are defined in the text. Expected visits were based on utilization trends among nonusers of retail clinics. ED is emergency department.

Ashwood et al, Health Aff, 2016

#### 2. Concierge Care



- 6% of PCPs (at least)
- No clear evidence about costs, quality, patient experience
- Difference
   between Direct
   Primary Care and
   Concierge Care



### 3. IT innovation for Primary Care



MEDICAL HOME

By David W. Bates and Asaf Bitton

DOI: 10.1377/hlthaff.2010.0007
HEALTH AFFAIRS 29,
NO. 4 (2010): 614-621
©2010 Project HOPE—
The People-to-People Health
Foundation, Inc.

### The Future Of Health Information Technology In The Patient-Centered Medical Home

David W. Bates (dbates@ partners.org) is chief of the Division of General Internal Medicine at Brigham and Women's Hospital in Boston, Massachusetts.

Asaf Bitton is a fellow in general internal medicine at Brigham and Women's Hospital and the Department of Health Care Policy at Harvard Medical School in Boston. ABSTRACT Most electronic health records today need further development of features that patient-centered medical homes require to improve their efficiency, quality, and safety. We propose a road map of the domains that need to be addressed to achieve these results. We believe that the development of electronic health records will be critical in seven major areas: telehealth, measurement of quality and efficiency, care transitions, personal health records, and, most important, registries, team care, and clinical decision support for chronic diseases. To encourage this development, policy makers should include medical homes in emerging electronic health record regulations. Additionally, more research is needed to learn how these records can enhance team care.

- 1. Telehealth
- 2. Quality measurement
- 3. Care transitions
- 4. Personal health records
- 5. Registries
- 6. Team Care
- 7. Clinical
  Decision
  Support

#### Why IT has not met our needs



PERSPECTIVE THE HITECH ERA IN RETROSPECT

#### The HITECH Era in Retrospect

John D. Halamka, M.D., and Micky Tripathi, Ph.D.

t a high level, the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 accomplished something miraculous: the vast majority of U.S. hospitals and physicians are now active users of electronic health record (EHR) systems. No other sector of the U.S. economy of similar size (one sixth of the gross domestic product) and complexity (more than 5000 hospitals and more than 500,000 physicians) has undergone such rapid computerization.

Along the way, however, we lost the hearts and minds of cliMedicaid would get value from their large investment on a fixed timeline. But in the absence of business and clinical drivers for change (HITECH predated the Affordable Care Act by more than a year), meaningful use came to be used as a de facto vehicle for transforming health care delivery — a purpose for which, as a technology investment program, it was not adequate.

This approach led to complex requirements that stressed processes more than outcomes, telling providers not only what they should do with their EHRs but also how they should use them.

Soon physicians were expected to provide high-quality and empathic care in a 12-minute visit while weaning themselves from paperbased workflows, entering the numerous structured data elements required for meaningful use, rolling out new HIPAA privacy notices, implementing security protections for new electronic data, learning and incorporating new ICD-10 billing codes, and convincing their patients to use patient portals and secure e-mail, all while avoiding safety and malpractice issues. Instead of being a gift horse that reduced clinician burden, the EHR became an

#### **Data Flows...and Limitations**





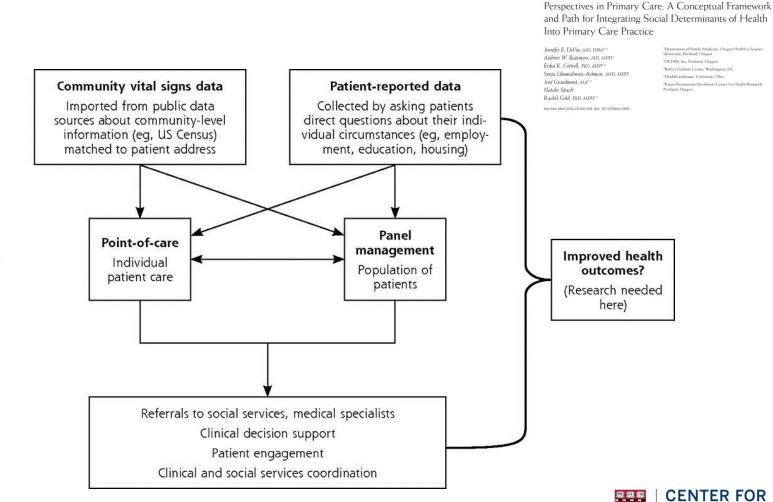


HARVARD MEDICAL SCHOOL

Step 1: Collect and organize SDH data

Step 2: Present and integrate SDH data into primary care workflows

Step 3: SDH data triggers automated support and action



#### **Future Trajectories for Primary Care**



© Asaf Bitton MD, MPH

#### 1. Evolution

Patient-Centered Medical Home

Incremental payment reform (care mgmt fees, enhanced P4P, shared savings)

shared savings)

### 2. <u>Devolution</u>

- Minute clinics
- Concierge care
- Limited IT solutions



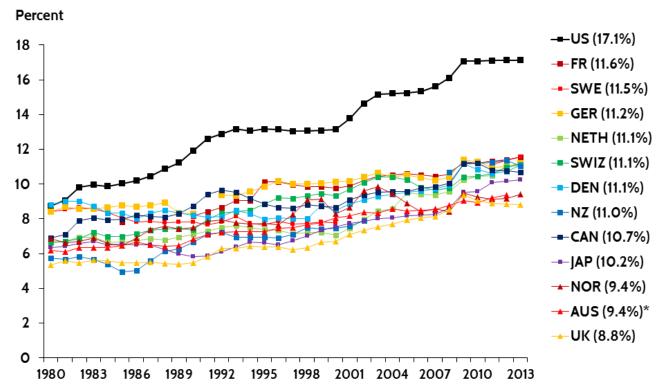
#### 3. Revolution

- Addressing Population Health and Social Determinants of Health
- Primary Care Capitation / Global Payment / Integrated IT

#### The "Wayward Worm"



#### Exhibit 1. Health Care Spending as a Percentage of GDP, 1980-2013



\* 2012.

Notes: GDP refers to gross domestic product. Dutch and Swiss data are for current spending only, and exclude spending on capital formation of health care providers.

Source: OECD Health Data 2015.



#### Not what you think

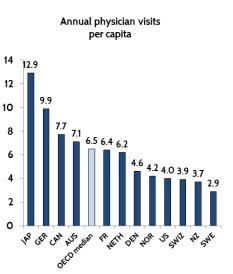


#### Exhibit 3. Physician Supply and Use, 2013 or Nearest Year

## 

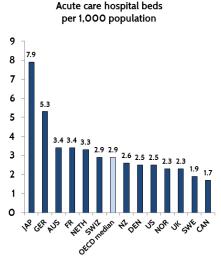
Note: Data from 2012 in Canada, Denmark, Japan, and Sweden.

Source: OECD Health Data 2015



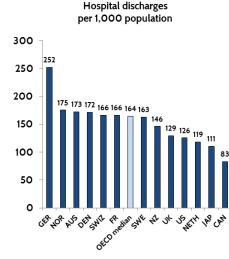
Note: Data from 2012 in Canada, Japan, Sweden, and Switzerland: and 2010 in the U.S.

#### Exhibit 4. Hospital Supply and Use, 2013 or Nearest Year



Note: Data from 2012 in Australia, Canada, the Netherlands, and the U.S.  $\,$ 

Source: OECD Health Data 2015



Note: Data from 2012 in Australia, Canada, the Netherlands, and Switzerland; 2011 in Japan; and 2010 in Denmark, Norway, Sweden, and the U.S.



### It's about the prices...



#### Exhibit 7. Prices for Hospital and Physician Services, Pharmaceuticals, and Diagnostic Imaging

	Total hospital and physician costs, 2013 <sup>a</sup>		Diagnostic imaging prices, 2013 <sup>a</sup>		Price comparison for in-patent
	Bypass surgery	Appendectomy	MRI	CT scan (abdomen)	pharmaceuticals, 2010 (U.S. set to 100) <sup>b</sup>
Australia	\$42,130	\$5,177	\$350	\$500	49
Canada	-	-	-	\$97	50
France	_	-	-	_	61
Germany	-	-	-	-	95
Netherlands	\$15,742	\$4,995	\$461	\$279	-
New Zealand	\$40,368	\$6,645	\$1,005	\$731	-
Switzerland	\$36,509	\$9,845	\$138	\$432	88
United Kingdom	_	-	-	_	46
United States	\$75,345	\$13,910	\$1,145	\$896	100

<sup>&</sup>lt;sup>a</sup> Source: International Federation of Health Plans, 2013 Comparative Price Report.

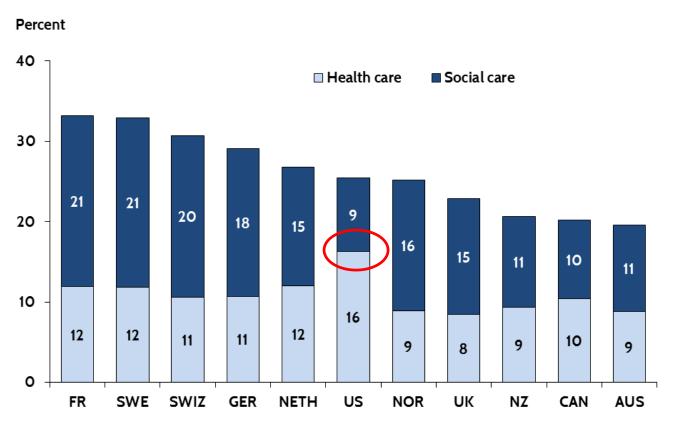


<sup>&</sup>lt;sup>b</sup> Numbers show price indices for a basket of in-patent pharmaceuticals in each country; lower numbers indicate lower prices. Source: P. Kanavos, A. Ferrario, S. Vandoros et al., "Higher U.S. Branded Drug Prices and Spending Compared to Other Countries May Stem Partly from Quick Uptake of New Drugs," *Health Affairs*, April 2013 32(4):753–61.

# Back to "the wayward worm": Where we really need to focus



Exhibit 8. Health and Social Care Spending as a Percentage of GDP



Notes: GDP refers to gross domestic product.

Source: E. H. Bradley and L. A. Taylor, *The American Health Care Paradox: Why Spending More Is Getting Us Less*, Public Affairs, 2013.



## A Famous Map (John Snow), 1854 ARIADNE LABS





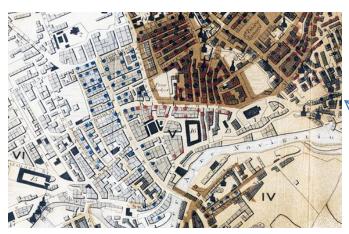


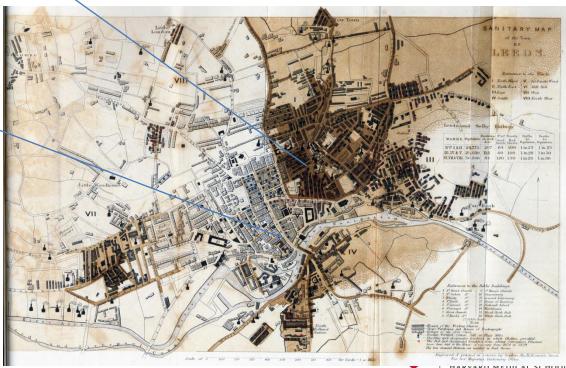




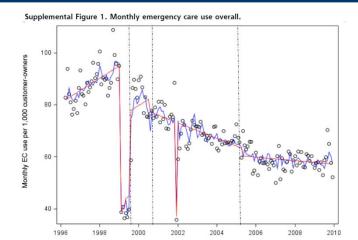
## An Even More Useful Map: Chadwick's Map of Leeds, 1842



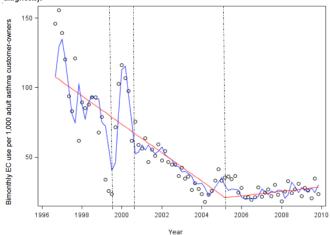




### What is Possible: Southcentral Foundation - Alaska

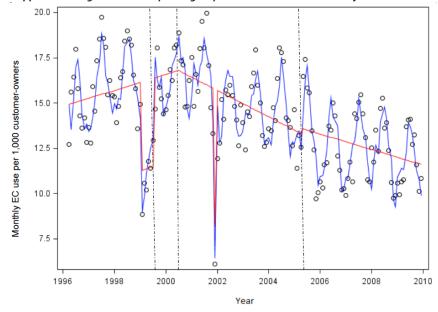


Supplemental Figure 2. Bimonthly emergency care use for asthma (primary or secondary diagnosis).



Bimonthly rate extracted from RPMS.

Inner product of estimated coefficients and independent variables. Predicted value including autoregressive components. Supplemental Figure 3. Monthly emergency care use for unintentional injuries.



o Monthly rate extracted from RPMS.

Inner product of estimated coefficients and independent variables.

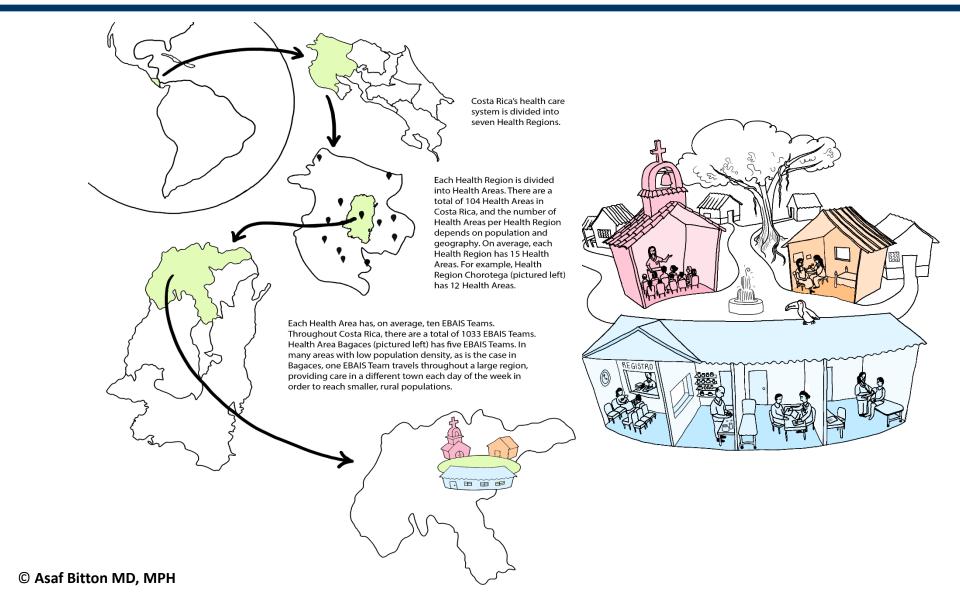
Predicted value including autoregressive components.





### **Costa Rica: Effective EBAIS teams**





## 1 Thought and 3 Questions about Primary Health Care Financing



Delivery systems are often designed to support financing mechanisms, as opposed to financing systems designed to support primary care delivery reform

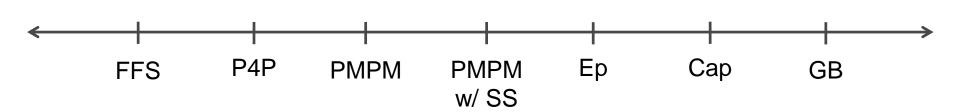
- 1. What are we buying?
- 2. How do we know what we are buying?
  - {Are we sure?}
  - {Are there unintended consequences?}
- 3. What is the unit of transaction?





## ARIADNE LABS WOMEN'S HOSPITAL BRIGHAM AND WOMEN'S HOSPITAL BRIGHAM BRIGH

### **Types of Financing Mechanisms**

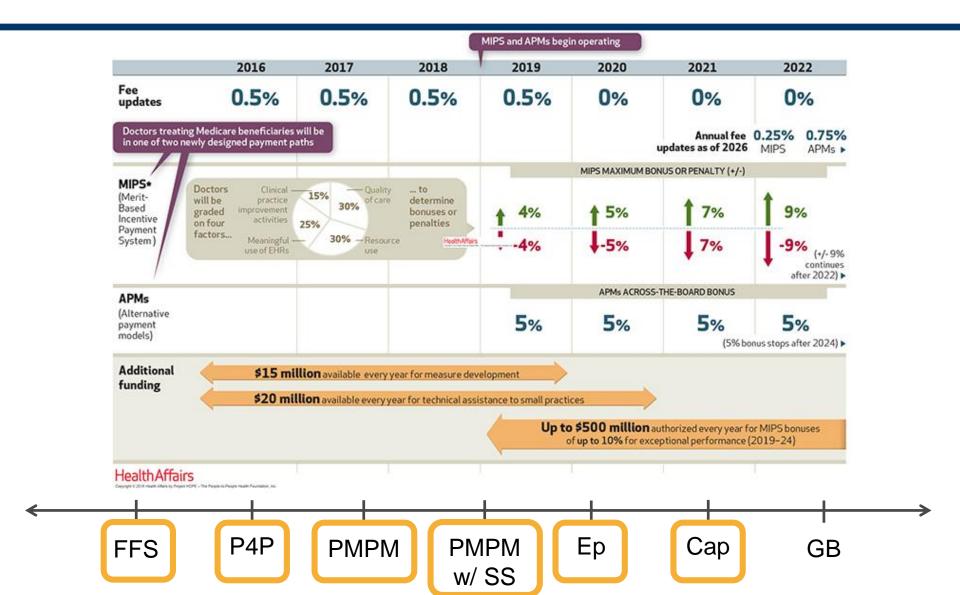


- FFS: Fee for Service
- P4P: Pay for Performance
- PMPM: Per member per month
- PMPM w/SS: Per member per month with shared savings
- Ep: Episodic Payments
- Cap: Capitation Payments
- GB: Global Budget



### **MACRA** – Physician Payment Reforms





## Microsimulation Models for Primary Care



## Effects of New Funding Models for Patient-Centered Medical Homes on Primary Care Practice Finances and Services: Results of a Microsimulation Model

Sanjay Basu, MD, PhD<sup>1,2</sup> Russell S. Phillips, MD<sup>2,3</sup> Zirui Song, MD, PbD<sup>2,4</sup> Bruce E. Landon, MD, MBA, MSc<sup>2,3,5</sup> Asaf Bitton, MD, MPH<sup>2,5-7</sup>

<sup>1</sup>Department of Medicine, Stanford University, Stanford, California

<sup>2</sup>Center for Primary Care, Harvard Medical School, Boston, Massachusetts

<sup>3</sup>Division of General Medicine and Primary Care, Beth Israel Deaconess Medical Center, Boston, Massachusetts

<sup>4</sup>Department of Medicine, Massachusetts General Hospital, Boston, Massachusetts

<sup>5</sup>Department of Health Care Policy, Harvard Medical School, Boston, Massachusetts

<sup>6</sup>Division of General Medicine, Brigham and Women's Hospital, Boston, Massachusetts

<sup>7</sup>Ariadne Labs, Brigham and Women's Hospital, and Harvard T.H. Chan School of Public Health, Boston, Massachusetts

#### **ABSTRACT**

**PURPOSE** We assess the financial implications for primary care practices of participating in patient-centered medical home (PCMH) funding initiatives.

**METHODS** We estimated practices' changes in net revenue under 3 PCMH funding initiatives: increased fee-for-service (FFS) payments, traditional FFS with additional per-member-per-month (PMPM) payments, or traditional FFS with PMPM and pay-for-performance (P4P) payments. Net revenue estimates were based on a validated microsimulation model utilizing national practice surveys. Simulated practices reflecting the national range of practice size, location, and patient population were examined under several potential changes in clinical services: investments in patient tracking, communications, and quality improvement; increased support staff; altered visit templates to accommodate longer visits, telephone visits or electronic visits; and extended service delivery hours.

**RESULTS** Under the status quo of traditional FFS payments, clinics operate near their maximum estimated possible net revenue levels, suggesting they respond strongly to existing financial incentives. Practices gained substantial additional net annual revenue per full-time physician under PMPM or PMPM plus P4P payments (\$113,300 per year, 95% CI, \$28,500 to \$198,200) but not under increased FFS payments (-\$53,500, 95% CI, -\$69,700 to -\$37,200), after accounting for costs of meeting PCMH funding requirements. Expanding services beyond minimum required levels decreased net revenue, because traditional FFS revenues decreased.

**CONCLUSIONS** PCMH funding through PMPM payments could substantially improve practice finances but will not offer sufficient financial incentives to expand services beyond minimum requirements for PCMH funding.





## Microsimulation Structure and Main Findings



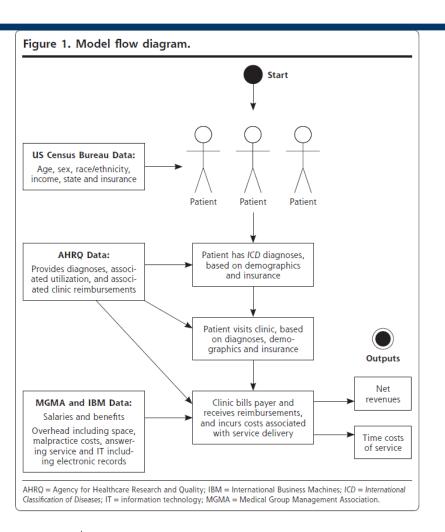
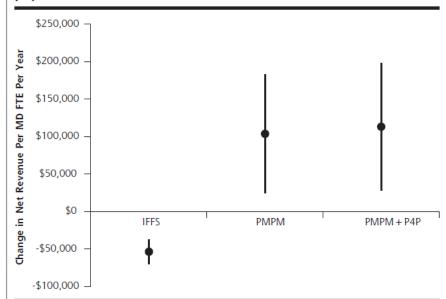


Figure 2. Net revenue changes per full-time physician per year from clinics meeting minimum requirements to receive PCMH funding, as compared with the clinic operating under traditional fee-for-service payments.



IFFS = increased fee for service; P4P = pay for performance; PCMH = patient-centered medical home; PMPM = per-member-per-month.

Note: The PCMH funding approaches include IFFS rates, PMPM funding, and PMPM plus P4P bonuses (Table 1). The uncertainty ranges portrayed incorporate 3 sets of uncertainty through repeated sampling from the probability distributions of the input parameters: uncertainty in levels of utilization and associated revenue, cost to the practice including staff compensation and other practice costs, and payments through the new PCMH financing approaches (eg, level of payment increase from IFFS).



## High Levels of Capitation Needed for **Transformative Primary Care**

DOI: 10.1377/hltha HEALTH AFFAIRS 36,

NO. 9 (2017): 1599-1

©2017 Project HOPE The People-to-People

Sanjay Basu (basus

stanford.edu) is an professor of medic

Department of Mer

Stanford University Medicine, in Califor

Russell S. Phillips of the Center for I

Care, Harvard Med

in Boston, Massach

policy, Department



SCHOOL OF PUBLIC HEALTH

#### PRIMARY CARE

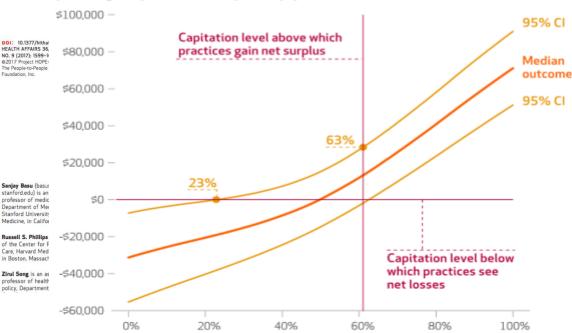
By Sanjay Basu, Russell S. Phillips, Zirui Song, Asaf Bitton, and Bruce E. Landon

#### THE PRACTICE OF MEDICINE **High Levels Of Capitation Payments Needed To Shift Primary Care Toward Proactive** Team And Nonvisit Care

ABSTRACT Capitated payments in the form of fixed monthly payments to cover all of the costs associated with delivering primary care could encourage primary care practices to transform the way they deliver care. Using a microsimulation model incorporating data from 969 US practices, we sought to understand whether shifting to team- and non-visit-based care is financially sustainable for practices under traditional fee-for-service, capitated payment, or a mix of the two. Practice revenues and costs were computed for fee-for-service payments and a range of capitated payments, before and after the substitution of team- and non-visit-based services for low-complexity in-person physician

#### EXHIBIT 3

Net surplus per FTE physician per year after shifting to team- and non-visit-based care, by percentage of patients with capitated payment



source Authors' calculations. NOTES Net surplus per full-time-equivalent (FTE) physician per year is defined in the Notes to Exhibit 2. The minimum capitation level is the level above which 95 percent of practices would gain revenue by shifting to a team- and non-visit-based primary care delivery strategy. Appendix Exhibit 6 contains a conceptual illustration of the analysis used to determine this level (see Note 18 in text). CI is confidence interval.

### **Federal Initiatives**





#### **Accountable Health Communities**



Preventive & Population Health Models Group The Innovation Center at CMS

January 2016







### **Comprehensive Primary Care Plus**

Advancing the Delivery of and Payment for Primary Care

Information for Payers



## **Comprehensive Primary Care Plus Initiative**







#### Source: Centers for Medicare & Medicaid Services

#### **Overview:**

18 states, 54 payers, 4000 practices, >2 Million Medicare patients

#### Key reforms:

New aligned payment model, empanelment, risk-stratified care management, patient engagement, EHRs, chronic disease registries, continuous quality improvement, state-based learning environment



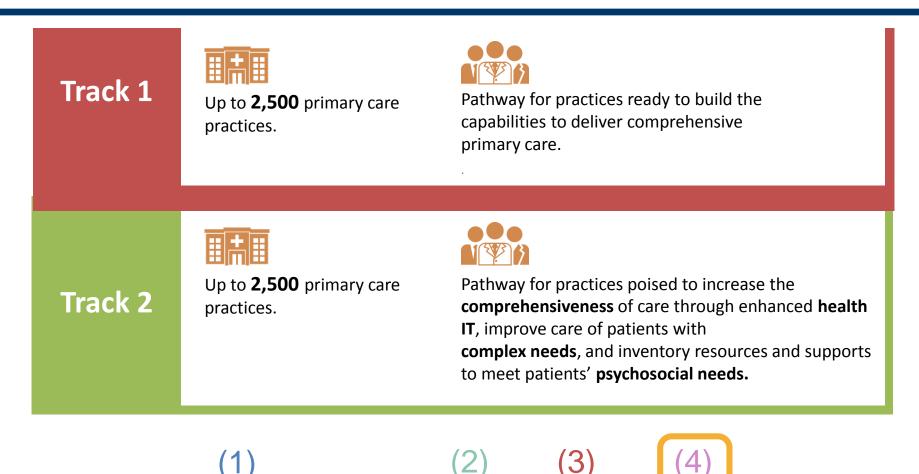
# Comprehensive Primary Care Plus (CPC+)

P4P

**FFS** 

**PMPM** 





**PMPM** 

w/ SS

Ep

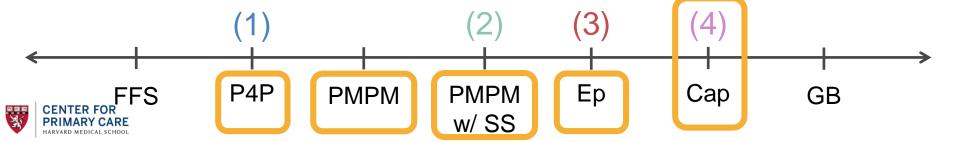
Cap

**GB** 

# Comprehensive Primary Care Plus (CPC+)

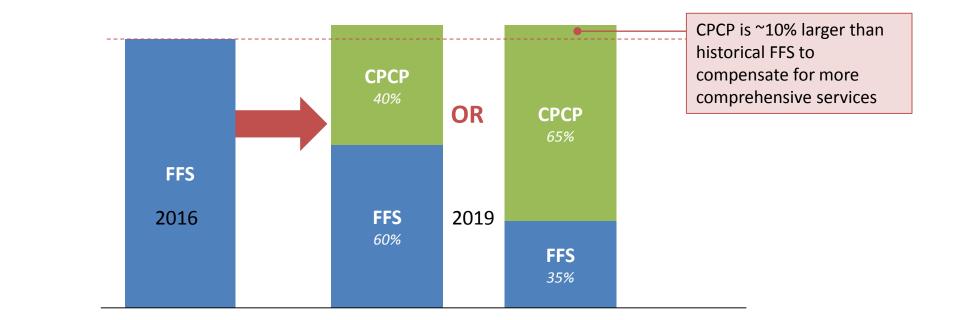


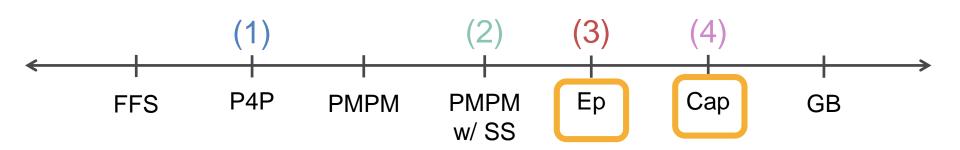
	Care Management Fee (PBPM)	Performance-Based Incentive Payment	Underlying Payment Structure
Track 1	\$15 average	\$2.50 opportunity	Standard FFS
Track 2	\$28 average; including \$100 to support patients with complex needs	\$4.00 opportunity	Reduced FFS with prospective "Comprehensive Primary Care Payment" (CPCP)



## Comprehensive Primary Care Plus (CPC+)



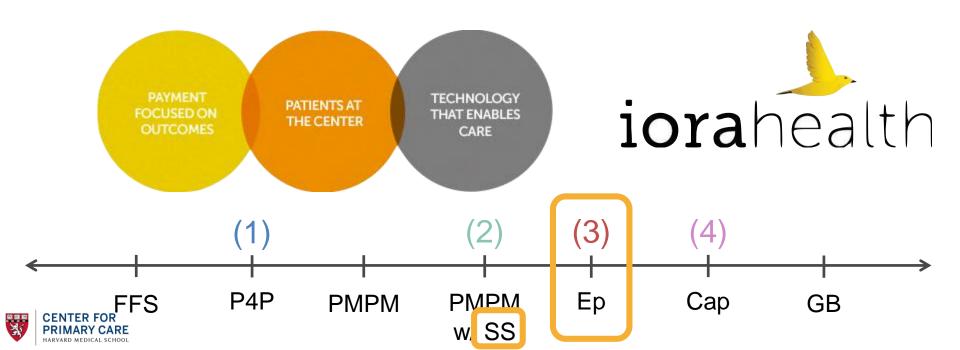




## New private payment/delivery models: lora Health



- Sub-capitation for primary care services, contracted with purchaser (employer or insurer)
  - Essentially → a primary care bundle or year-long episode payment
- Wrap around insurance for specialist and inpatient care
- Shared savings on total cost of care



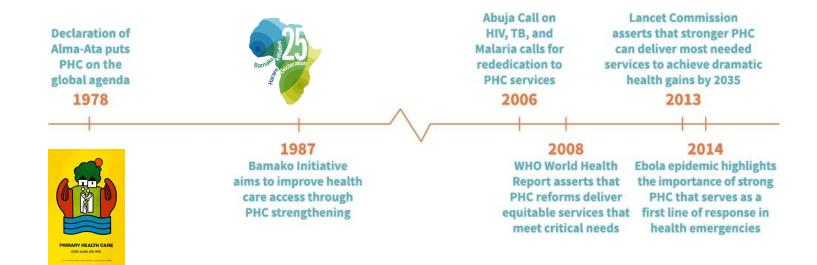
# A Global Century of Primary Health Care



Improving primary health care has long been recognized as key to achieving health and development goals. Several global platforms have called for strong, accessible primary health care systems.



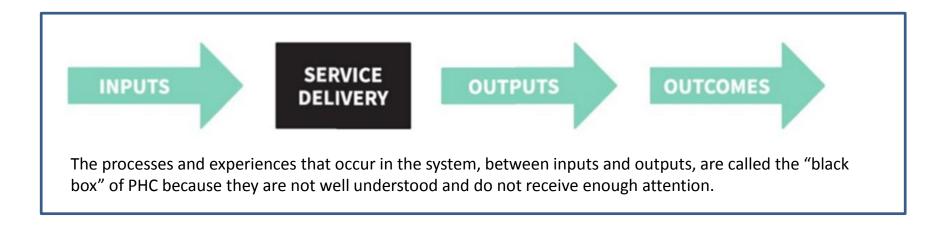




## The Challenges... {and there are many}...



Many countries have identified (PHC) as an urgent priority, but they lack comprehensive data to pinpoint specific weaknesses, understand their causes, and strategically direct resources to address them. They also lack a means to improve PHC within existing vertical programs.



# Across the globe, the quality of primary health care is often poor



An average patient-provider interaction: diagnosis and treatment for a given condition (chest pain) in India

Source: Jishnu Das, World Bank Group



3.89 minutes



2.89 questions

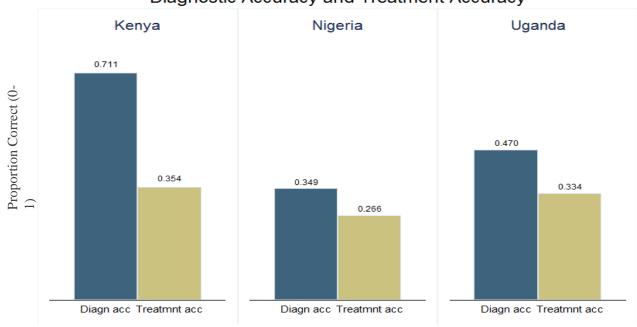


1.46 exams



2.34 medicines

#### Diagnostic Accuracy and Treatment Accuracy



### **About PHCPI**



The Primary Health Care Performance Initiative (PHCPI) is a partnership that brings together country policymakers, health system managers, practitioners, advocates and other development partners to catalyze improvements in primary health care in low- and middle-income countries through better measurement and knowledge-sharing.















# PHCPI Launch: The Beginning of a Journey...

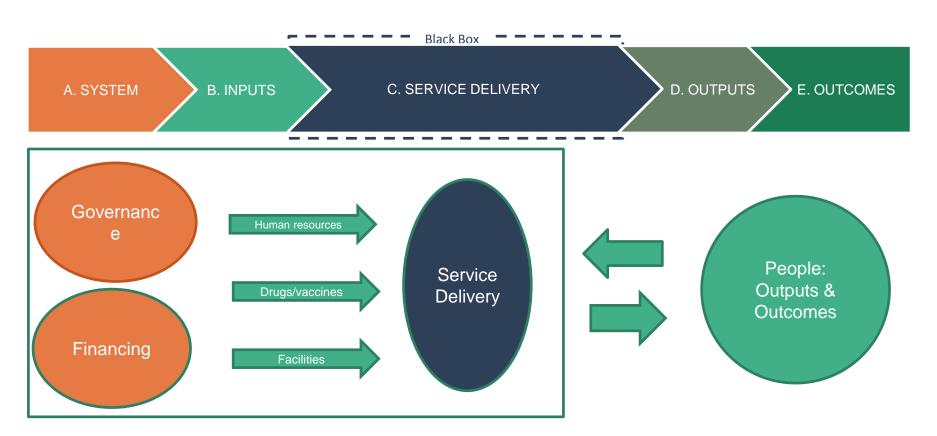






## PHCPI Conceptual Framework



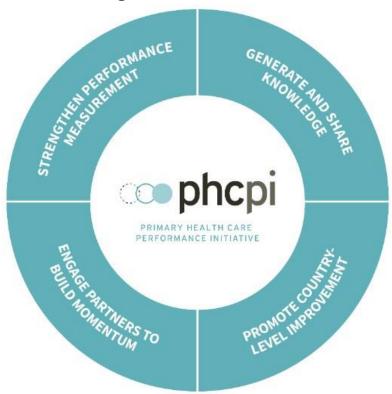


© Bill & Melinda Gates Foundation





### PHCPI supports stronger PHC through four interconnected areas of work:



### **How We Work with Partners**



#### PHCPI is evolving to a much broader partnership, including with:



#### **Countries**

- Identifying key policy questions and areas for improvement
- Developing new measurement and data visualization tools
- Testing new interventions through learning collaboratives like JLN
- Disseminating lessons for improvement



## **Development Partners**

- Focusing funding and activities on PHC improvement
- Utilizing PHCPI data and tools
  - Engaging in conversations to support countries that have prioritized PHC



## **Civil Society Organizations**

- Coalition building
- Driving global and national attention to PHC
- Engaging with decision makers

# 6 modest predictions on the future of primary care



- 1. Primary care will survive...in fact it will be more important than ever
  - → Providing the core functions
- 2. We will provide primary care differently
  - → Through teams enabled by better IT
- 3. We will pay for primary care differently
  - → Through a shift toward capitated, bundled, and episodic payments

# 6 modest predictions on the future of primary care



- 4. Primary care will be oriented toward building healthy communities
  - → Addressing social needs and behavioral health
- 5. Global health efforts focused toward primary care
  - → Shift investments toward increasing the strength, stability, and capacity of primary care

- 6. Massive need for innovation
  - → Massive opportunity for social impact

### **Future Trajectories for Primary Care**



© Asaf Bitton MD, MPH

### 1. Evolution

Patient-Centered Medical Home

Incremental payment reform (care mgmt fees, enhanced P4P, shared savings)

### 2. <u>Devolution</u>

- Minute clinics
- Concierge care
- Limited IT solutions



### 3. Revolution

- Addressing Population Health and Social Determinants of Health
- Primary Care Capitation / Global Payment / Integrated IT

### Invention vs. Innovation



© Asaf Bitton MD, MPH

DC-3, 1935





Kitty Hawk, 1903









### Thank You!