

Patient-Centered
Primary Care
COLLABORATIVE

The Patient-Centered Medical Home's Impact on Cost and Quality

Annual Review
of Evidence
2014-2015

Published February 2016

Authors:

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Len M. Nichols, PhD, MS, MA

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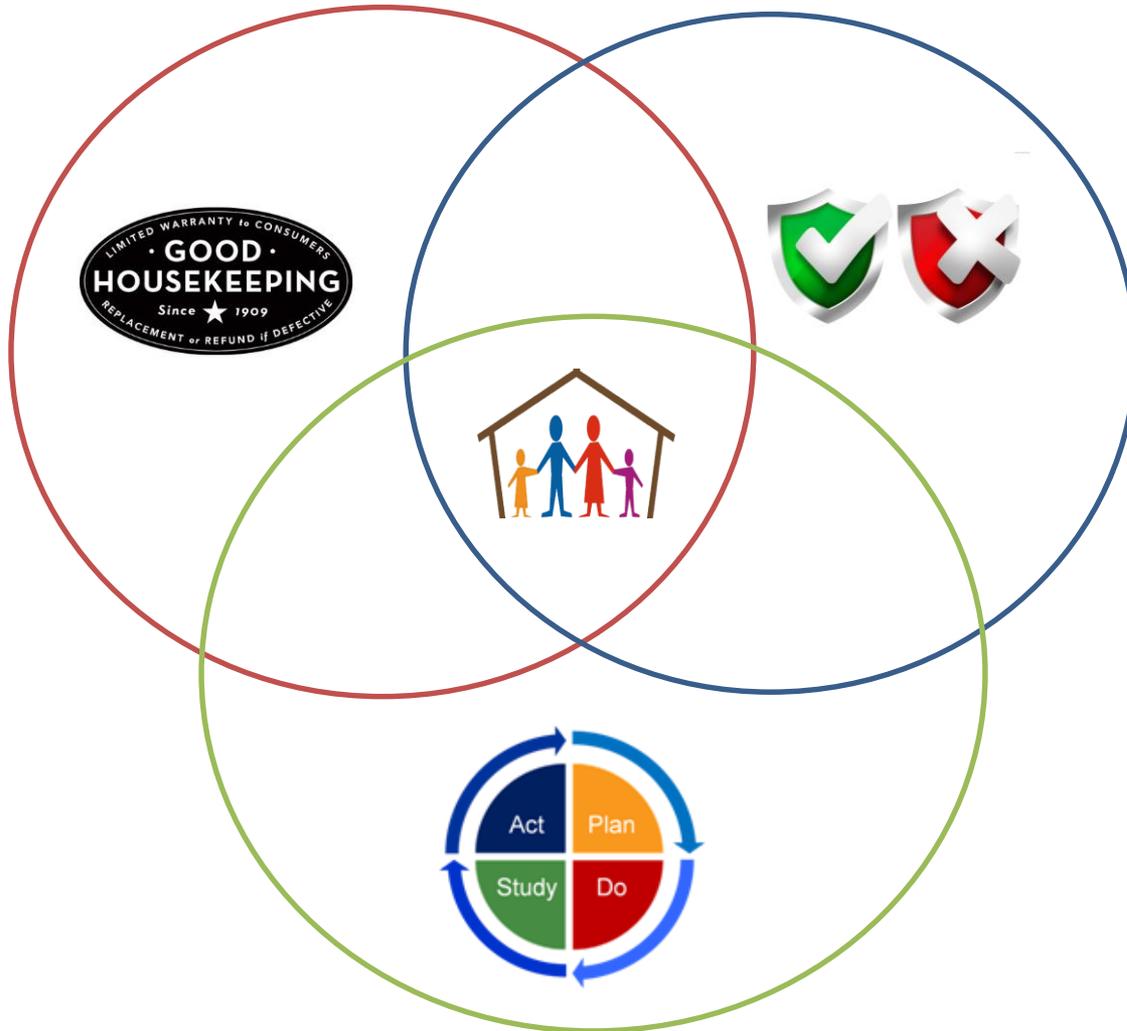
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PCPCC MISSION:

Unifying for a better health system -- by better investing in patient-centered primary care

PUBLIC:
Patients,
Families,
Caregivers,
Consumers
Communities



PAYERS:
Employees,
Employers,
Health plans,
Government,
Policymakers

PROVIDERS: Primary care team, medical neighborhood, ACOs, integrated care

PCMH MODEL/FRAMWORK

Person-Centered

Supports patients and families in managing decisions and care plans

Comprehensive

Whole-person care provided by a team

Coordinated

Care is organized across the 'medical neighborhood'

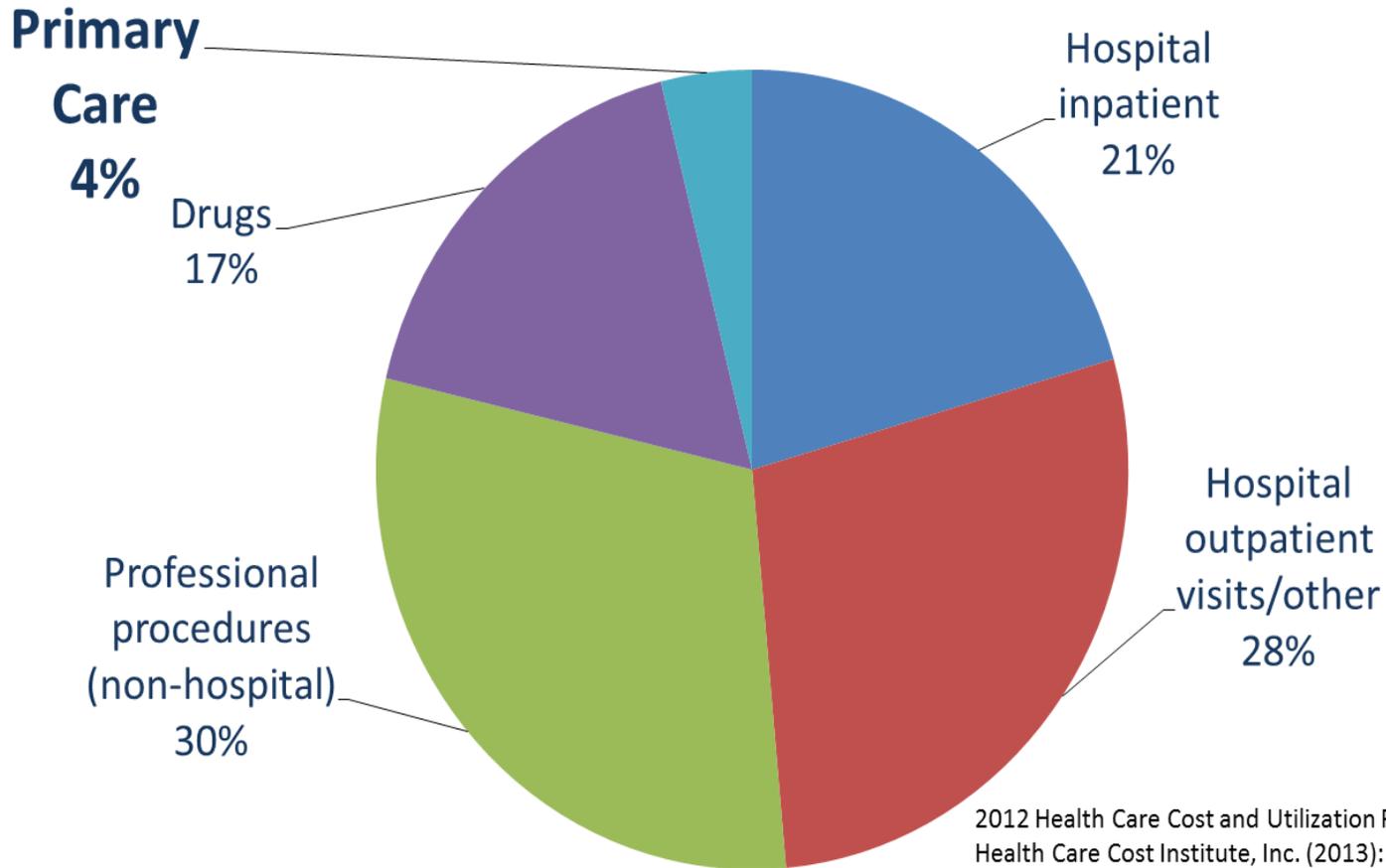
Committed to Quality and Safety

Maximizes use of health IT, decision support and other tools

Accessible

Care is delivered with short waiting times, 24/7 access and extended in-person hours

PAYING NOW ... OR PAYING LATER



2012 Health Care Cost and Utilization Report. " Health Care Cost Institute, Inc. (2013): Table A1 [Inte Washington, DC: HCCI; 2013 Sept <http://www.healthcostinstitute.org/>



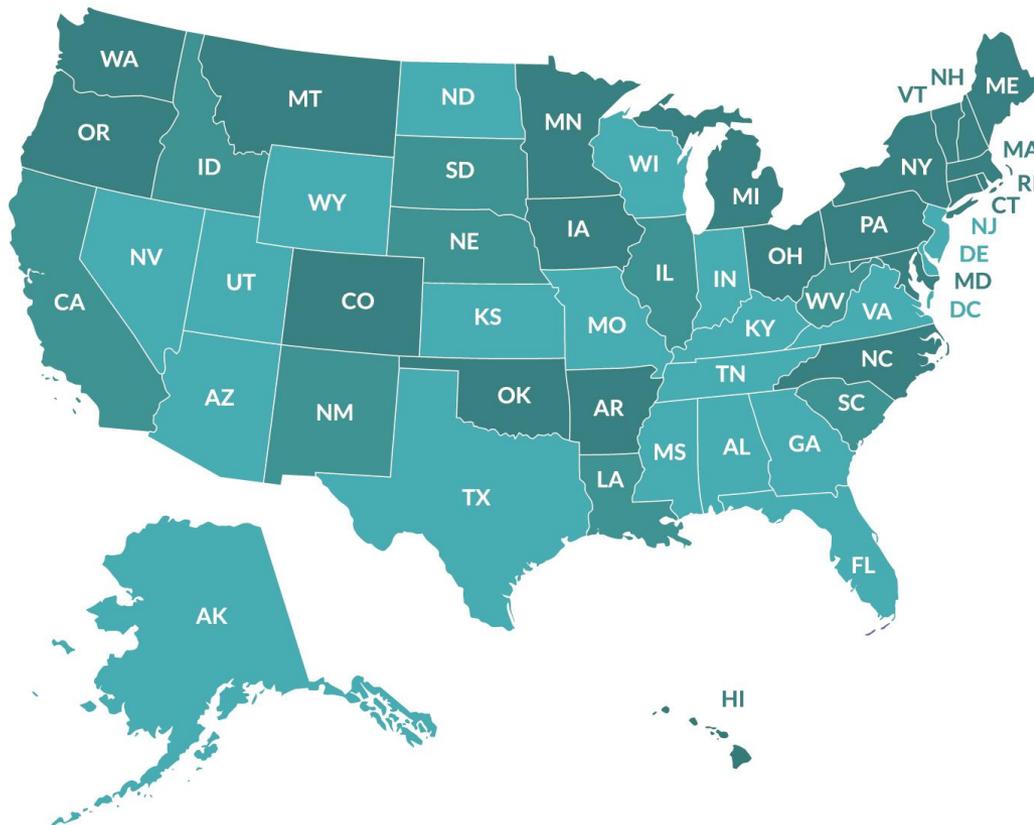
#PCMHEvidence

PCMH EXPANDING RAPIDLY but still an early innovation

Primary Care Innovations and PCMH Map



In 2014, the PCPCC unveiled a new searchable, publicly available database that tracks the increasing number of primary care innovations and PCMH initiatives taking place across the country.



-  State View
-  National View
-  List View
-  Outcomes View

Source: www.pcpcc.org/initiatives

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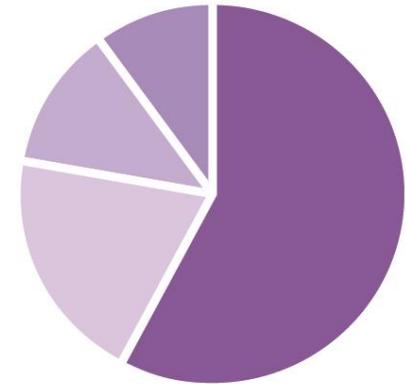
#PCMHEvidence

METHODS

INCLUSION CRITERIA:

- Predictor variable:
 - Medical home
 - PCMH
 - Advanced Primary Care
- Outcome variable:
 - Cost or
 - Utilization
- Date published:
Between Oct 2014
and Nov 2015

30 total studies



- 17 peer-reviewed studies
- 4 state government evaluations
- 6 industry reports
- 3 independent evaluations of federal initiatives

RESULTS: TRENDS

(n^1 = Improvement in measure/ n^2 = Measure assessed by study)

Aggregated Outcomes from the 30 Studies



21 of 23

studies that reported on cost measures found reductions in one or more measures

23 of 25

studies that reported on utilization measures



found reductions in one or more measures

DETAILS: Cost



21 of 23

studies that reported
on cost measures found
reductions in one or
more measures

MEASURES OF COST

- Total cost of care
 - Net or overall costs
 - Total PMPM spend
 - Total PMPM for pediatric patients
 - Total PMPM for adult patients
- Total Rx spending
- ED payments per beneficiary
- ED costs for patients with 2 or more comorbidities
- PMPM spending on inpatient
- Inpatient expenditures (PMPY)
- Outpatient expenditures (PMPY)
- Expenditures for dental, social, and community based supports

“TOTAL COST” (Peer reviewed, n=17)

- Studies below reported “Total cost of care”
 - 10 measures were total cost of care savings, one measure was no net savings
 - Geisinger Health System PCMH
 - Blue Cross Blue Shield of Michigan Physician Group Incentive Program (*Health Affairs*)
 - Blue Cross Blue Shield of Michigan Physician Group Incentive Program (*Medical Care Research & Review*)
 - Colorado Multi-payer PCMH pilot
 - **No net savings over 2 year study**
 - Pennsylvania Chronic Care Initiative (*American Journal of Managed Care*)
 - UCLA Health System study
 - Vermont Blueprint for Health

DETAILS: Utilization

23 of 25

studies that reported on utilization measures



found reductions in one or more measures

MEASURES OF UTILIZATION

- Emergency department (ED) use
 - All cause ED visits
 - Ambulatory care sensitive condition (ACSC) ED visits
 - Non-urgent, avoidable, or preventable ED visits
 - ED utilization
- Hospitalization
 - All cause hospitalizations
 - ACSC in-patient admissions
 - In-patient days
- Urgent care visits
- Readmission rate
- Specialist visits
 - Ambulatory visits for specialists

“ED USE” (Peer reviewed studies n=17)

- Studies below reported on “ED use”
 - 13 measures were ED use reductions, 1 measure was ED use increase
 - California Health Care Coverage Initiative
 - CHIPRA Illinois study
 - Colorado Multi-payer PCMH pilot
 - Medicare Fee-For-Service NCQA study
 - Pennsylvania Chronic Care Initiative
 - Rochester Medical Home study
 - UCLA Health System study
 - Texas Children’s Health Plan
 - Veterans Affairs PACT study (*AJMC*)
 - *Reported higher ED use for one measure, and ACSC hospitalizations per patient*

DETAILS, BY STUDY

Location/Initiative	Cost & Utilization	Additional Outcomes	Payment Model Description
<p>Colorado Multi-payer PCMH pilot⁴⁸ <i>Published: Journal of General Internal Medicine, October 2015</i> Data Review: April 2007-March 2009 (pre-intervention baseline); April 2009-March 2012 (post-intervention) <i>Study evaluated cost, utilization and quality measures</i></p>	<ul style="list-style-type: none"> No net overall cost savings in study period, possibly due to offsetting increases in other spending categories <p>Two years after initiation of pilot, PCMH practices (vs. baseline) had:</p> <ul style="list-style-type: none"> Reduction in ED costs of \$4.11 PMPM (13.9%; $p < 0.001$) and \$11.54 PMPM for patients with 2 or more comorbidities (25.2%; $p < .0001$) ~7.9 % reduction in ED use ($p = 0.02$) 2.7% reduction in primary care visits ($p = .006$) for patients with 2 or more comorbidities <p>Three years after initiation, PCMH practices showed sustained improvements with:</p> <ul style="list-style-type: none"> Reduction in ED costs of \$3.50 PMPM (11.8%; $p = 0.001$) and \$6.61 PMPM for patients with 2 or more comorbidities (14.5%; $p = .003$) 9.3% reduction in ED visits ($p = 0.01$) 1.8% reduction in primary care visits ($p = .06$) for patients with 2 or more comorbidities 10.3% reduction in ACSC inpatient admissions ($p = 0.05$) 	<p>PCMH pilot practices were associated with:</p> <ul style="list-style-type: none"> Increased cervical cancer screening rates after 2 years (12.5% increase, $p < .001$) and 3 years (9.0% increase, $p < .001$) Lower rates of HbA1c testing in patients with diabetes (.7% reduction at 3 years, $p = .03$) Lower rates of colon cancer screening (21.1% and 18.1% at 2 and 3 years respectively $p < .001$) Decreased primary care visits (1.5% at 3 years, $p = .02$) 	<p>MPPM fees based on the level of NCQA accreditation that each practice attained</p> <p>Pay-for-performance program, which awarded bonuses to practices based on meeting both quality and utilization benchmarks</p> <p>This is a multi-payer initiative</p>

REFERENCE: Rosenthal, M.B., Alidina, S., Friedberg, M.W., Singer, S.J., Eastman, D., Li, Z., & Schneider, E.C. (2015). A difference-in-difference analysis of changes in quality, utilization and cost following the Colorado Multi-Payer Patient-Centered Medical Home Pilot. *Journal of General Internal Medicine*.

DESCRIPTION: Authors conducted difference-in-difference analyses evaluating 15 small and medium-sized practices participating in a multi-payer PCMH pilot. The authors examined the post-intervention period two years and three years after the initiation of the pilot.



“ ‘Nature’ refers to the health care ecology of the region including practice size, practice culture, and patient population, whereas ‘nurture’ refers to the intervention design and its components (including technical assistance, provider participation, PCMH incentive payments, and shared savings incentives, etc.). ”

NATURE VS. NURTURE: Factors Driving PCMH Practice Success in 2 Regions of Pennsylvania⁷³

**WHY DO
SOME
MEDICAL
HOMES WORK
WHILE
OTHERS
DON'T?**

		Southeast Region	Northeast Region
Nature	Practices	<ul style="list-style-type: none"> • Mostly small, independent practices • A few very large academic medical centers and FQHCs 	<ul style="list-style-type: none"> • Several "right-size" (medium-sized) practices • Solo practices often belonged to larger medical group • Strong relationship with hospitals
	Patient population	<ul style="list-style-type: none"> • Many had significant economic hardship 	<ul style="list-style-type: none"> • Less diverse, fewer with economic challenges
Nurture	Quality improvement focus	<ul style="list-style-type: none"> • QI focused almost exclusively on diabetes care 	<ul style="list-style-type: none"> • Focused on multiple chronic conditions
	Implementation	<ul style="list-style-type: none"> • Fairly rushed implementation, 1st region in the initiative to launch • Only 1/3 of practices had EHRs at the beginning of implementation 	<ul style="list-style-type: none"> • Had opportunity to learn from other regions • All practices had EHRs at beginning of implementation
	Payment model	<ul style="list-style-type: none"> • Practices received PMPM after earning NCQA recognition • Payments not contingent upon hiring care manager 	<ul style="list-style-type: none"> • Practices were not required to have NCQA recognition until 18 months into implementation <p>2 streams of payment:</p> <ul style="list-style-type: none"> • 1 for care management and • 1 for practice transformation
		<p>No opportunity for shared savings until year 4 (after initial JAMA study⁷² was published)</p>	<p>Opportunity for shared savings tied to quality improvement</p>
Payer support	<p>In many practices, no data and no technical support provided</p>	<p>Provided practices with ED and inpatient notification and reports from the beginning of implementation</p>	

KEY FINDINGS

- **CONTROLLING COSTS BY PROVIDING THE RIGHT CARE**

- **POSITIVE CONSISTENT TRENDS:**

- By providing the right primary care “upstream,” we change how care is used “downstream”
- Consistent reductions in high-cost (and many times avoidable) care, such as: emergency department (ED) use and hospitalization, etc
- Cost savings evident – but assessment of total cost of care required (while assessing quality, health outcomes, patient engagement, & provider satisfaction)

- **ALIGNING PAYMENT AND PERFORMANCE**

- **BEST OUTCOMES FOR MULTI-PAYER EFFORTS:**

- Most impressive cost & utilization outcomes among multi-payer collaboratives with incentives/performance measures linked to quality, utilization, patient engagement, or cost savings ... more mature PCMHs had better outcomes
- No single best payment model emerged, but extended beyond fee-for-service

- **ASSESSING AND PROMOTING VALUE**

- **BETTER MEASURES & DEFINITIONS:**

- Variation across study measures -- and PCMH initiatives – make for challenging evaluations and expectations (patients, providers, payers)

TRAJECTORY TO VALUE-BASED PURCHASING

PCMH part of a larger framework

HIT Infrastructure: EHRs and population health management tools

Primary Care Capacity: PCMH or advanced primary care

Care Coordination: Coordination of care across medical neighborhood & community supports for patient, families, & caregivers

Value/ Outcome Measurement
Reporting of quality, utilization and patient engagement & population health measures

Value-Based Purchasing: Reimbursement tied to performance on value

Alternative Payment Models (APMs): ACOs, PCMH, & other value based arrangements

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