4-1-2015

Innovating at Jefferson: Developing the Patient-Centered Medical Home (PCMH) COST Tool

Robert D. Lieberthal, PhD
Thomas Jefferson University

Innovating at Jefferson: Developing the Patient-Centered Medical Home (PCMH) COST tool

Rob Lieberthal, PhD

Presentation for the JSPH Faculty Research Seminar

April 1, 2015

Acknowledgements and Disclosures

- Patient-Centered Medical Home COST Study Team
  - George Valko, Mona Sarfaty, Colleen Payton, Tom Karagiannis, Ashok Vegesna, Evan Bilheimer

- This project was supported by grant number R03HS022630 from the Agency for Healthcare Research and Quality. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Agency for Healthcare Research and Quality

Objectives

- Describe the cost-collection tool we created for the PCMH model
- Propose improvements to our tool in order to enhance the response rate
- Determine our next steps in terms of research and innovation for PCMH at Jefferson

Patient-Centered Medical Home

- A leading model of primary care reform that helps shift primary care from reactive, episodic care to proactive, population health management
- Can be viewed as a solitary practice or a complement to accountable care organizations (ACOs)
- Has demonstrated improvements in quality
  - Remains a work in progress
- Cost remains an open question

Recent studies have found mixed evidence about costs of PCMH

- A PCMH literature review by Jackson et al 2013 found 14 studies that reported economic outcomes
- Hoff et al 2012 included 12 economic studies ("Efficiency", "Cost Control", "Cost Savings", "Utilization"
- Friedberg et al 2014 found no statistically significant changes in utilization or costs of care due to PCMH
- van Hasselt et al 2014 found lower total cost of care among Medicare beneficiaries due to PCMH

Small practices and the operating costs of transformation

- Smaller practices represent a large proportion of primary care in the US
- Many of the costs of practice transformation are upfront fixed costs
- Smaller practices in particular may not have the economies of scale or resources to absorb these costs

Estimating the operational costs of PCMH—Valko et al (AHRQ R03)

PCMH Activity Pillar

- One or more NCQA recognition criteria

NCQA Application Process

- Time spent completing application + cost of application + cost of maintaining recognition

Practice Culture Costs

- Cost of staff dissatisfaction + cost of disruption - cost offsets

How a tool can get at these costs

- Collect point in time clinical data (survey and interview)
- Collect data using clinical activities (structured tool)
  - Over time
  - Additional characteristics of practices and population
- Use this data to impute cost of transforming, sustaining, and overall

Navigation sheet--start here

Worksheets within this spreadsheet	Sheet type	Complete / Incomplete
Cl - Classifying the practice	Input--Core	Incomplete
Si - Practice size	Input--Core	Incomplete
Pt - Patient panel	Input--Core	Incomplete
F - Financial scope	Input--Core	Incomplete
Py - Payment arrangements	Input--Core	Incomplete
1 - Access and Continuity	Input--Core	Incomplete
2 - Identify and Manage Populat	Input--Core	Incomplete
3 - Plan and Manage Care	Input--Core	Incomplete
4 - Provide self care support	Input--Core	Incomplete
5 - Track and coordinate care	Input--Core	Incomplete
6 - Measure and improve perform	Input--Core	Incomplete
Sp - Space tasks	Input--Core	Incomplete
E - Equipment tasks	Input--Core	Incomplete
Ph - Physician tasks	Input--If applicable	Incomplete
Nu - Nurse care manager tasks	Input--If applicable	Incomplete
MA - Clinical staff tasks	Input--If applicable	Incomplete
Q - Quality tasks	Input--Core	Incomplete
Tr - Training tasks	Input--Core	Incomplete
Co - Collaborations and outside programs	Input--Core	Incomplete
Pr - Practice culture	Input--Core	Incomplete
Ce - Certification costs	Input--Core	Incomplete
Su - Sustain costs	Calculated	N/A
TC - Transf costs	Calculated	N/A
To - Total costs	Calculated	N/A
DD - Drop down menus	Background	N/A

Front page of the COST Tool

It's an Excel spreadsheet

2 - Identify and Manage Populat

Section	Subsection	Question	Measure	Survey answer	Year: Pre-2008	2008	2009	2010	2011	Incomplete
	2		Identify and Manage Patient Populations (Outreach, In-reach, Measurement)							
	2	1	To what extent did you expand or improve health data collected on patients through Installing an EMR, enhancing an EMR, regular reports (e.g. daily, weekly, mothly, or registry outreach calls)?	Choose one (yes or no)	Choose one (extent)	Choose one (extent)	Choose one (extent)	Choose one (extent)	Choose one (extent)	Incomplete
	2	2	What was the additional time (hours per year) related to exapnding or improving health data?							
	2	2	1 Provider time							Incomplete
	2	2	2 Clinical staff time							Incomplete
	2	2	3 Administrative staff time							Incomplete
	2	3	What was the time savings (hours per year) related to exapnding or improving health data?							
	2	3	1 Provider time							Incomplete
	2	3	2 Clinical staff time							Incomplete
	2	3	3 Administrative staff time							Incomplete

Major issue—low response rate

- Only 3 out of 11 practices in our study completed and returned the tool
- 3 other practices completed a much simpler version of their costs
- Possible explanation: time? priorities? financial sophistication?

Potential solution—capture the value of such a tool in the marketplace

- External providers—small practices that want to prospectively or retrospectively assess these costs
- External training—professional societies, recognition bodies, and pharmaceutical companies all offer PCMH training
- Internal providers—switch to PCMH may be a key part of the JeffCARE network and PA ACO i.e. a service Jefferson offers to affiliated providers

Potential solution—much simpler tool

- A much simpler tool could be the way to raise the response rate
- Think about an app with five-six questions
- The app tells you what PCMH will cost
- Drawbacks
  - Would this generate enough data for research?
  - Would this app have a substantial value?

Potential solution—large grant

- An R01 would provide more funding for a longer period
- Practices could be enrolled prospectively before transformation
- An research coordinator could go to practices to collect data on costs and satisfaction on a monthly basis
- We would enroll control groups—1) previously transformed practices, 2) those that never transform

Questions

- What problems are we likely to run into with these approaches?
- Would one approach be superior? Why do you think so?
- How can we best move forward with our PCMH work?

Take away

- Smaller practices need the most help estimating costs
- Smaller practices have the least resources to devote to cost analysis
- We will seek new methods to investigate these issues in future research
- Contact me if you have questions, ideas, or suggestions (robert.lieberthal@jefferson.edu)

Backup slides

Small practices and financial characteristics

Practice Characteristics	Proportion of Practices
NCQA recognition (2011)	
Level I	3 out of 11
Level II	3 out of 11
Level III	5 out of 11
Financial affiliation	
Independent	6 out of 11
Academic medical center	2 out of 11
Another organization (FQHC grantee)	3 out of 11
Primary type of insurance	
Medicare / Managed Medicare	3 out of 11
Medicaid / Managed Medicaid	2 out of 11
Private (commercial) insurance	5 out of 11
Uninsured	1 out of 11

Small practices: financial burden of PCMH

Practice Responses	Proportion of Practices
Do you think you could have transformed to a PCMH without the Chronic Care Initiative?	
Yes	1 out of 11
No	8 out of 9
Major Unforeseen Costs	
New Staff Hires	5 out of 11
EMR and/or Software	6 out of 11
New Technology	5 out of 11
Training Existing Staff	6 out of 11
Reimbursement or Financing Concerns	3 out of 11

Specific aims for a large grant

- Aim 1: Match a cohort of practices that will transform into patient-centered medical homes (PCMHs) with a control group of conventional practices and a control group of practices that have already transformed into PCMHs
- Aim 2: Develop and validate a tool to evaluate the direct and indirect costs of PCMH in primary care practices
- Aim 3: Characterize the direct and indirect costs of practices that transform to the cost of operating traditional primary care practices

References

- Friedberg, M. W., Schneider, E. C., Rosenthal, M. B., Volpp, K. G., & Werner, R. M. (2014). Association between participation in a multipayer medical home intervention and changes in quality, utilization, and costs of care. *JAMA*,*311*(8), 815-825.
- Hoff, T., Weller, W., & DePuccio, M. (2012). The Patient-Centered Medical Home A Review of Recent Research. *Medical Care Research and Review*,*69*(6), 619-644.
- Jackson, G. L., Powers, B. J., Chatterjee, R., Bettger, J. P., Kemper, A. R., Hasselblad, V., ... & Williams, J. W. (2013). The patient-centered medical home: a systematic review. *Annals of internal medicine*, *158*(3), 169-178.
- Hasselt, M., McCall, N., Keyes, V., Wensky, S. G., & Smith, K. W. (2014). Total Cost of Care Lower among Medicare Fee-for-Service Beneficiaries Receiving Care from Patient-Centered Medical Homes. *Health services research*.