PCC Lunch and Learn

Thursday, January 27, 2021 | 11:00 AM - 12:00 PM ET
Lunch and Learn
Co-chairs and Presenters

Irene Dankwa-Mullan, MD, MPH
Deputy Chief Health Officer,
IBM Watson Health

Jack Westfall, MD, MPH
Director,
Robert Graham Center

David Grande, MD, MPA
University of Pennsylvania

Ashlee Harris
Penn Center for Community Health Workers

Sonal Patil, MD, MSPH
Cleveland Clinic Community Care Institute
Two Dozen Curated Articles to Shape Primary Care Policy & Practice

Don’t miss THE LIST!
https://www.pcpcc.org/the-list
Two Dozen Articles to Transform Primary Care Policy and Practice

Estimated Effect on Life Expectancy of Alleviating Primary Care Shortages in the United States

Health Affairs | May 2021

This study highlights how the growing trend of vertical integration, combined with differences in Medicare payment between hospitals and nonhospital providers, leads to higher Medicare spending.

Primary Care Practices Providing a Broader Range of Services Have Lower Medicare Expenditures and Emergency Department Utilization

Journal of General Internal Medicine | March 2021

This article explores the shared principle of ‘comprehensiveness’ and assesses the impact comprehensiveness has on medical expenditures and emergency department utilization.

Geographic variation in overscreening for colorectal, cervical, and breast cancer among older adults

Health Affairs | January 2021

Overscreening for colorectal, cervical, and breast cancer among older adults is associated with increased medical expenditures.
This article was featured in the July 22, 2021, Lunch and Learn discussion

PCC Journal Club
THURSDAY, July 22, 2021 | 1:00 PM - 2:00 PM ET

In this segment of the July Lunch and Learn discussion, Dr. Eugene Rich, Senior Fellow at Mathematica, presented the paper and answered questions from the audience.

Summary of Discussion Highlights:

- Expand team-based care:
  - Utilize the full range of the primary care workforce including mobile pharmacists, medical health workers, social workers, and others, allowing each profession to work at the top of their license.
  - Conduct more research on the range of services provided in practices that include NPs and PAs.

- Integrate behavioral health and primary care:
  - When practices provide a broader range of services (including counseling), their Medicare beneficiaries subsequently experience fewer ED visits and lower total spending.
  - Include team members who have behavioral health skills and take advantage of existing primary care physician competencies.
    - E.g., family medicine has historically included training in basic mental health counseling and cognitive behavioral therapy.

Full Resource/Source: Journal of General Internal Medicine
About the Project

The Two-Dollar Articles to Reform Primary Care Policy and Practice is a product of PCCs Bridging the Gap in Primary Care Research project, funded by a Patient-Centered Outcomes Research Institute (PCORI) Engagement Award (19750-PCC). This two-year project (2021-2022) addresses, in part, shortcomings in the dissemination of primary care research, which can slow down the adoption of research results that can improve care. The project aims to identify important primary care patient-centered outcomes research, comparative effectiveness research, and health services research results and engage key stakeholders in disseminating these select, high-impact results in different ways.

PCC is partnering on this project with the North American Primary Care Research Group (NAPCRG), which has vast experience in primary care research and dissemination strategies, including getting input from patients about research priorities and an annual process for crowdsourcing the highest-impact research results (research "pearls"). The 24 research articles on the list were curated by two different groups of experts and leaders, described below.

* Add

Lunch and Learns

December Lunch and Learn Discussion

October Lunch and Learn Discussion

July Lunch and Learn Discussion

Workgroup Leadership

The PCORI formed a Research Dissemination Workgroup (RDW) to identify the most relevant primary care research and inform the translation and dissemination of its selected articles. To do this, we engaged with stakeholders in the research and medical communities, including primary care practitioners and researchers, and identified the most impactful research results that could be shared with a wide audience.

Workgroup Co-chairs:

- Eugene Rich, Senior Fellow, Director on Healthcare Delivery and Innovation, Mathematica
- Joseph Lambert, MD, MPH, Professor, University of Kansas School of Medicine

Workgroup Members:

- Sapna Bensa, MD, PhD, Director of Research, Harvard Center for Primary Care
- Nancy Barnes, MD, MPH, Associate Professor, Johns Hopkins Medicine
- Ada Revello, MD, Director, Agency for Healthcare Research and Quality (AHRQ)
- Harriet Bowman, MD, MPH, President, NAPCRG
- Brian Vanhorn, MD, MPH, Deputy Chief Medical Officer, IBM
- Carol Daviss, MD, President, Health Leadership Institute, Northwestern University
- Susan Egismann-Larson, MS, Executive Director, Institute for Research on the Women’s and Gender Research Institute
- Diane Popescu, PhD, Deputy Director, National Institute of Nursing Research
- Elizabeth Gold, MD, Assistant Professor, University of Colorado School of Medicine
- Robert Greenspan, MD, President of the American Board of Internal Medicine
- John H. Stacey, Senior Director for Primary Care Innovation at Massachusetts General Hospital
- Dana Thornhill, PhD, Deputy Director, Primary Care Innovation Lab
- Stephanie Rodin, MD, Assistant Professor, University of Colorado School of Medicine
- David Offord, MD, President and CEO, Royal College of Physicians
- Eric T. Gonen, MD, PhD, Associate Chief and Translation Officer, University of Pittsburgh Medical Center
- Julia Murphy, Director, Patient Centered Outcomes Research Institute
- Mihai Nica, MD, PhD, Assistant Professor, Boston College, Cornell School of Nursing
- Michael Berman, MD, MPH, Senior Investigator, MaxHealth, Center for Health Innovation
- Susan G. Sattler, RN, PhD, Assistant Professor, University of California, San Francisco
- Thomas Van Zee, MD, FACR, University of Colorado College of Medicine

The PCORI also established the regular Lunch and Learn series to translate and disseminate the policy implications of select articles identified by the Research Dissemination Workgroup. The Lunch and Learn series is another dissemination channel that is meant to inform and educate a wide range of primary care stakeholders on the most relevant and actionable primary care research. In these meetings, primary care researchers, practitioners, and policymakers are brought together to discuss the key messages and policy implications of the most important research identified by the RDW, with the goal of better understanding the research and its impact on patient care.
Effect of Community Health Worker Support on Clinical Outcomes of Low-Income Patients Across Primary Care Facilities
A Randomized Clinical Trial

Shreya Kangovi, MD, MS; Nandita Mitra, PhD; Lindsey Norton, MSS, MLSP; Rory Harte; Xinyi Zhao, MPH; Tamala Carter, CHW; David Grande, MD, MPA; Judith A. Long, MD

Discussant: Ashlee Harris – Penn Center for Community Health Workers

Funding Source: PCORI-1310-07292; NHLBI K23-HL128837
Social Determinants of Health

Photo Credit: JGJ Consulting
Community Health Workers
1. Patient-centered
2. Standardized
3. Evidence
Original Investigation

Patient-Centered Community Health Worker Intervention to Improve Posthospital Outcomes
A Randomized Clinical Trial

Shreya Kangovi, MD, MS; Nandita Mitra, PhD; David Grande, MD, MPA; Mary L. White; Sharon McCollum; Jeffrey Sellman, BA; Richard P. Shannon, MD; Judith A. Long, MD

Community Health Worker Support for Disadvantaged Patients With Multiple Chronic Diseases: A Randomized Clinical Trial

Shreya Kangovi, MD, MS; Nandita Mitra, PhD; David Grande, MD, MPA; Haerong Hsu, PhD; Robyn A. Smith, BS; and Judith A. Long, MD
Objective

In a multi-center randomized controlled trial (VA, FQHC, AMC), determine whether 6 months of CHW support leads to improved outcomes.
Methods

• Participants:
  – Uninsured or publicly insured
  – Residents of a high-poverty region in Philadelphia
  – ≥2: hypertension, diabetes, obesity and tobacco dependence, one in poor control

• Outcomes assessed at 6, 9 months:
  – Self-rated physical health, mental health, chronic disease control, patient activation, quality of primary care, and all-cause hospitalizations
<table>
<thead>
<tr>
<th>Participants (n=592)</th>
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<tbody>
<tr>
<td>Age, years</td>
</tr>
<tr>
<td>African-American</td>
</tr>
<tr>
<td>Household Income &lt; 15K</td>
</tr>
<tr>
<td>Trauma History</td>
</tr>
<tr>
<td>Baseline Chronic Disease Control</td>
</tr>
<tr>
<td>Systolic Blood Pressure (mmHg)</td>
</tr>
<tr>
<td>Obesity (BMI)</td>
</tr>
<tr>
<td>Diabetes (HbA1c%)</td>
</tr>
<tr>
<td>Tobacco dependence (Cig per day)</td>
</tr>
<tr>
<td>Outcomes</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>∆Self-rated Physical Health</td>
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<tr>
<td>∆Self-rated Mental Health</td>
</tr>
<tr>
<td>∆Patient Activation</td>
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<tr>
<td>∆Chronic disease control</td>
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<tr>
<td>Systolic blood pressure (mmHg)</td>
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<tr>
<td>Obesity (BMI)</td>
</tr>
<tr>
<td>Diabetes (Hba1c%)</td>
</tr>
<tr>
<td>Tobacco dependence (Cig per day)</td>
</tr>
<tr>
<td>Odds Ratio</td>
</tr>
<tr>
<td>Highest quality (CAHPS)</td>
</tr>
</tbody>
</table>
Total hospital days

6 months
- IMPaCT: 69%

9 months
- IMPaCT: 65%
- Control: 65%

Legend:
- IMPaCT
- Control
## Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Diff-in-diff</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean length of stay</td>
<td>-3.1</td>
<td>0.06</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Odds Ratio</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeat admissions</td>
<td>0.4</td>
<td>0.02</td>
</tr>
<tr>
<td>30-d readmission</td>
<td>0.3</td>
<td>0.04</td>
</tr>
</tbody>
</table>

† Among those with index admission
Conclusions

• Addressing outcomes that matter to patients:
  – Better experience/quality
  – Decreased acute care utilization
  – Prior studies have shown mental health benefits

• Persistence of effect

• Favorable ROI for Medicaid
Ashlee Harris

Penn Center for Community Health Workers

http://chw.upenn.edu/
Home Blood Pressure Monitoring in Cases of Clinical Uncertainty to Differentiate Appropriate Inaction from Therapeutic Inertia

Sonal J. Patil, MD, MSPH
Staff, Clinician-Investigator
Wellness and Preventive Medicine Department, Cleveland Clinic
Community Care Institute
January 27, 2021

Funding: This project was funded by American Academy of Family Physicians (AAFP) Joint Grants Award Program
Clinic BPs are known to be least accurate. Repeated out of office BP measurements accurately reflect hypertension control status.

White coat effect in treated hypertension is not associated with adverse long-term cardiovascular outcomes.

Blood pressure (BP) is a physiologic parameter that fluctuates throughout day.

Physicians and patients are reluctant to intensify treatment when they are uncertain if the single elevated clinic BP truly reflects patient’s hypertension control status.

Clinic BPs are known to be least accurate. Repeated out of office BP measurements accurately reflect hypertension control status.
However, physicians’ hypertension control rates continue to be calculated and ranked based on the last documented single conventional clinic BP (rarely research quality BP measurement).

**Typical Primary Care Visits: 15-20 minutes**

**Research Question:** When physicians and patients are uncertain about intensifying treatment in presence of an elevated clinic BP reading, will documenting average home BPs improve hypertension control rates and clinical decision making?
Patients:
Hypertension + recent Clinic BP high (>140/90) + No change in hypertension management at current visit or prior 4 weeks

Intervention:
Home BP monitoring twice daily for 2 weeks
- Proper home BP measurement technique taught and verified initially and when returning home BP machine using checklists

Outcomes:
❑ Change in hypertension control rates by substituting clinic BPs with average home BPs
❑ Physician responses to average Home BP notifications
❑ Patients surveyed for their opinions on home BP monitoring
❑ Chart review 6 months later to check subsequent clinic BPs and physician responses to those clinic BPs
What did we find?

2/3rd of patients (59/90) with clinic BP in uncontrolled hypertension range had controlled hypertension with average Home BPs (<140/90)

Of the 31 patients with uncontrolled hypertension by average home BPs only 14 (15%) needed medication changes.

Average Home BP documentation improved hypertension control rates

Substituting average home BP for last clinic BP in 13 of the 278 hypertensive patients improved an individual physician’s hypertension control rates by 5%.

20 patients with average home BP in controlled hypertension range had a subsequent elevated clinic BP within 6 months - Physicians did not change medications (appropriate inactions).
Participant Survey responses to Home BP monitoring

**Improved health behaviors:**

“Reduce salt intake because one day I ate a small pack of pretzels in the evening, my BP....was noticeably higher than other days “

“It made me consider how my anxiety affects blood pressure.” “Breathing exercises, mental happy thoughts.”

“Increased frequency and intensity of exercise”

**Improved understanding of their hypertension control:**

“Assured me that my bp is lower when I'm not near a health professional.”

“I thought it was better controlled, but realized it was not.” “Started taking blood pressure medication afterwards.”

**Recommendations for clinical practices:**

67% of patients said that nurses did not follow the proper BP measurement steps. “They should follow the same rules”

“Have those of us affected bring in some ‘kitchen’ readings.”
We could not predict clinic BP cutoff for which patients are more likely to have average home BP reading <140/90

<table>
<thead>
<tr>
<th>Clinic BP cutoff (n)</th>
<th>Average Home BP &lt;140/90</th>
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<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Below 160/95 (n= 39)</td>
<td>25</td>
</tr>
<tr>
<td>Above 160/95 (n=51)</td>
<td>34</td>
</tr>
</tbody>
</table>

16 patients had systolic clinic BP >170 and 10 of those patients had average home BP of < 140/90.

In sum, hypertension guidelines and performance measures do not consider the impact of conventional clinic BP measurements on BP thresholds. *Average Home BPs should be used for estimating hypertension control rates and for clinical decision making.*
Policy and Practice Implications:

- Loan or prescribe valid Home BP monitors ([www.validatebp.org](http://www.validatebp.org)). Insurance coverage of valid home BP machines may reduce disparities.

- Team-based care to facilitate home BP monitoring. 3 days or maximum 7 days of twice daily home BP readings are enough.

- Trust patient’s self-report of home BP readings if they own valid BP monitors to improve patient engagement.

- EHR’s should have discrete extractable data fields for average Home BP entry.

- If documented, last recorded average Home BP should be used for calculating hypertension control rates irrespective of follow-up clinic BP readings.
Thank you!