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Ohio Cardiovascular Health Collaborative

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Cardi-OH ECHO - Hypertension

Thursday, February 28, 2019

Team-based Care Approaches to Hypertension Management

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Disclosure Statements

The following planners, speakers, moderators, and/or panelists of the CME activity have financial relationships with commercial interests to disclose:

- Adam T. Perzynski, PhD reports being co-founder of Global Health Metrics LLC, a Cleveland-based software company and royalty agreements for forthcoming books with Springer publishing and Taylor Francis publishing.
- Siran M. Koroukian, PhD reports ownership interests in American Renal Associates, and Research Investigator subcontract support from Celgene Corporation.
- George L. Bakris, MD reports partial salary from Bayer as FIDELIO PI, partial salary from Janssen as CREDENCE Steering Committee, partial salary from Vascular Dynamics as Calm-2 Steering Committee, and receiving honorarium as a consultant to Merck, NovoNordisk.
- These financial relationships are outside the presented work.

All other planners, speakers, moderators, and/or panelists of the CME activity have no financial relationships with commercial interests to disclose.

Learning Objectives

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- Describe the rationale for team-based care
- Identify team-based care approaches shown to improve blood pressure control across diverse populations
- Determine resources available to implement these approaches

Why Team-based Care?

Enough Time in Primary Care?

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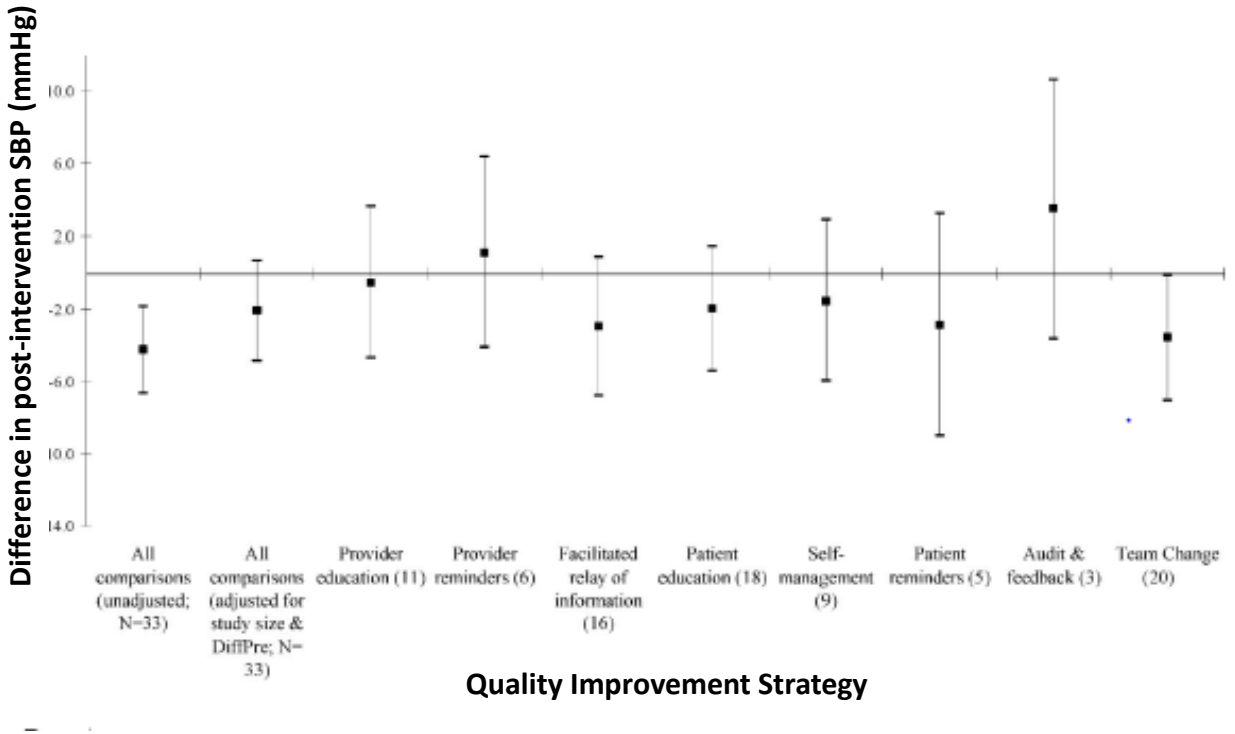
- To satisfy the USPSTF **preventive care** recommendations for an average panel size of 2500 patients requires an average of 7.4 hours/working day
- To provide **chronic disease care** for the top 10 chronic diseases requires ~3.5 hours/day, provided the disease is stable and in control
  - For uncontrolled disease, time demands increased to 10.6 hours/day

To provide preventive and chronic disease care requires about 10.9-18.0 hours/day by a primary care clinician using conservative estimates

Primary Care: Is There Enough Time for Prevention? Kimberly S. H. Yarnall, MD, Kathryn I. Pollak, PhD, Truls Østbye, MD, PhD, Katrina M. Krause, MA, and J. Lloyd Michener, MD. Am J Public Health. 2003 April; 93(4): 635–641.
Is there time for management of patients with chronic diseases in primary care? Østbye T[1], Yarnall KS, Krause KM, Pollak KI, Gradison M, Michener JL. Ann Fam Med. 2005 May-Jun;3(3):209-14.

Why Team-Based Care?

- Team changes have been shown to improve blood pressure control
- Provider recognition that combining skills from across team members can have a greater impact



Quality improvement strategies for hypertension management: a systematic review. Walsh JM[1], McDonald KM, Shojania KG, Sundaram V, Nayak S, Lewis R, Owens DK, Goldstein MK. Med Care. 2006 Jul;44(7):646-57.

Elements of Team Changes

- Transfer of all responsibilities around BP to team members (pharmacists, physician assistants, nurse practitioners, worksite)
- Shared responsibility (pharmacist gives provider recommendations, nurse)

Interventions used repeatedly in team-based care approaches

- Home blood pressure monitoring
- Use of a treatment protocol

Quality improvement strategies for hypertension management: a systematic review. Walsh JM[1], McDonald KM, Shojania KG, Sundaram V, Nayak S, Lewis R, Owens DK, Goldstein MK. Med Care. 2006 Jul;44(7):646-57.

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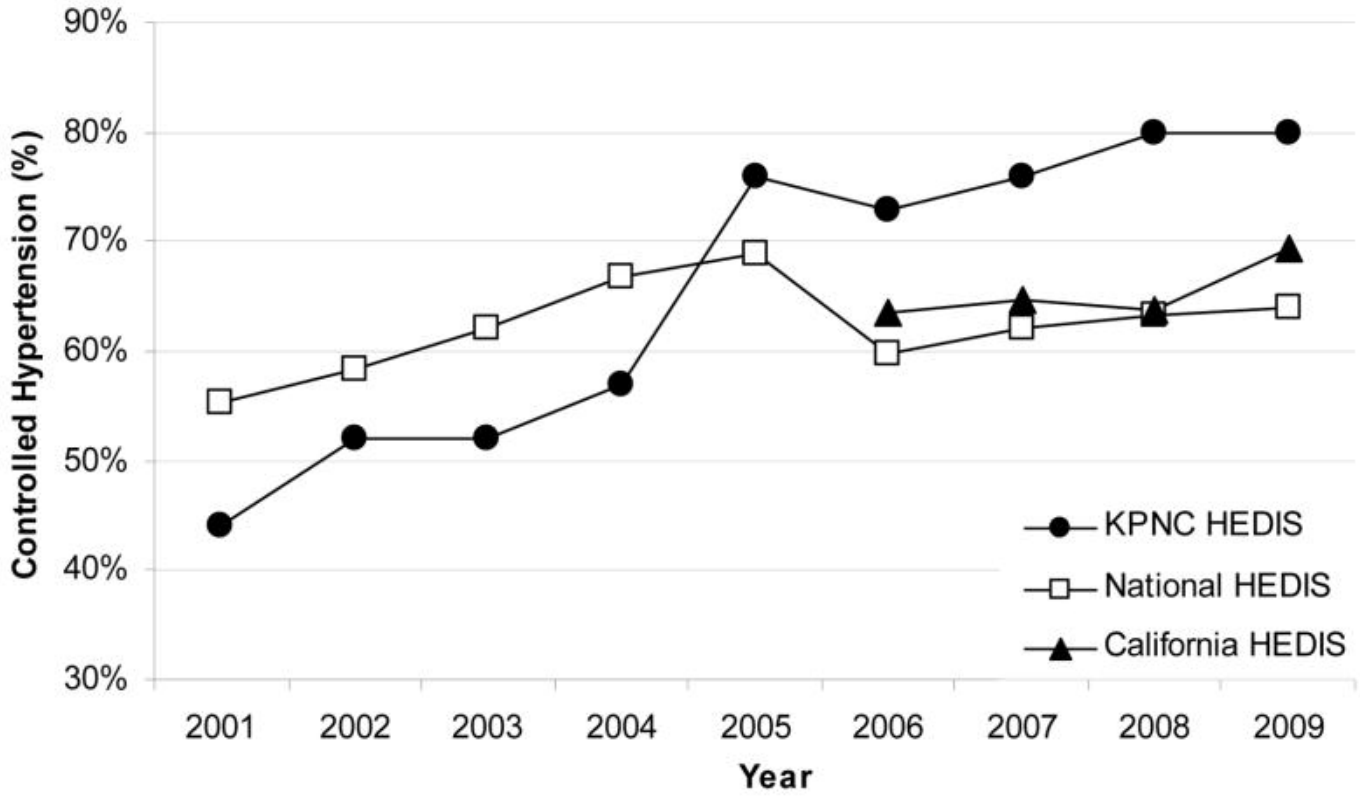
Team-Based Interventions within Safety Net Populations

Kaiser Hypertension Program Improved BP Control

(A)



Jaffe et al. Improved Blood Pressure Control Associated With a Large-Scale Hypertension Program. JAMA 2013; 310(7): 699-705.

Kaiser Hypertension Program Reduces Disparities

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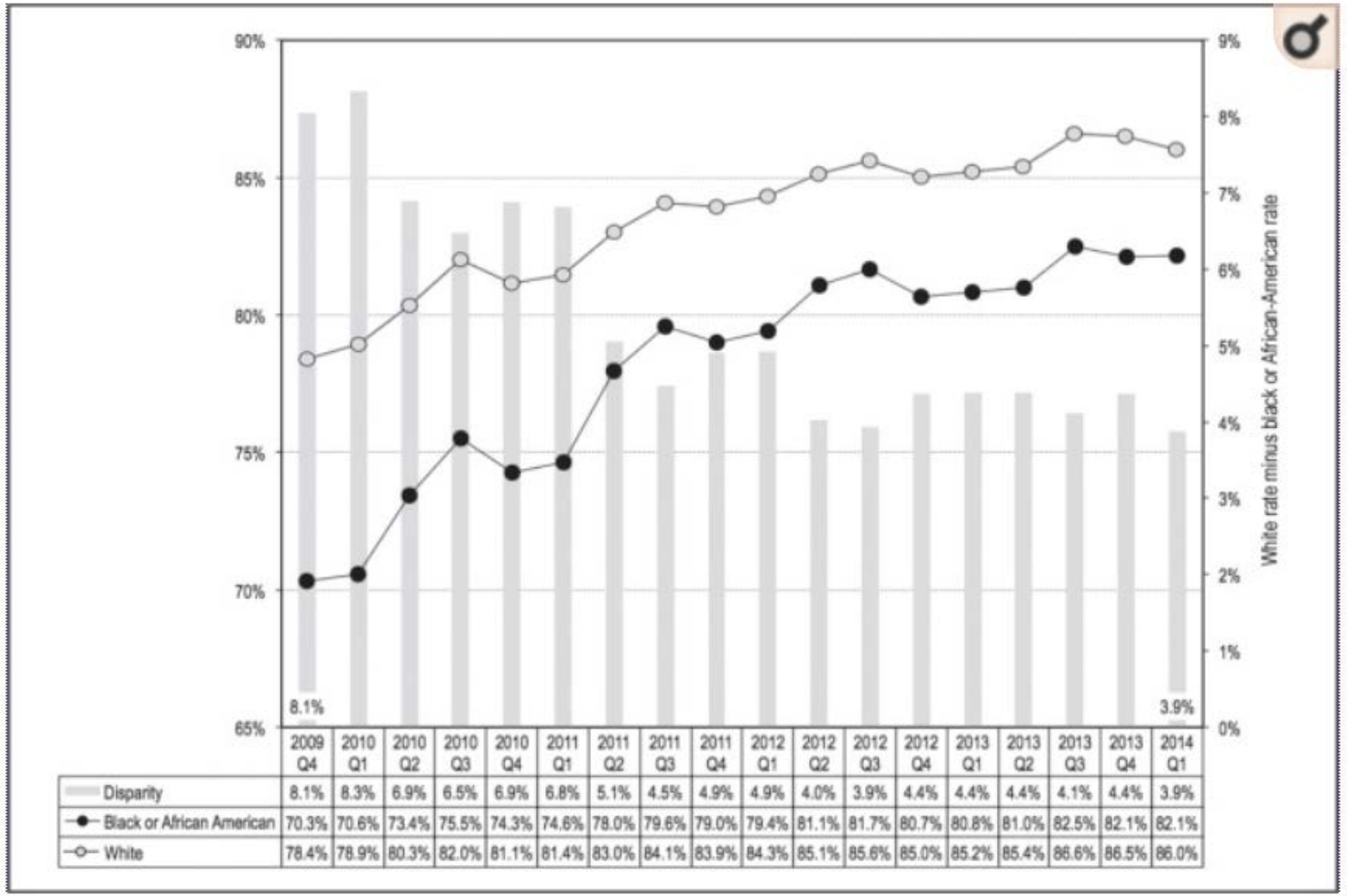

	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1
Disparity	8.1%	8.3%	6.9%	6.5%	6.9%	6.8%	5.1%	4.5%	4.9%	4.9%	4.0%	3.9%	4.4%	4.4%	4.4%	4.1%	4.4%	3.9%
Black or African American	70.3%	70.6%	73.4%	75.5%	74.3%	74.6%	78.0%	79.6%	79.0%	79.4%	81.1%	81.7%	80.7%	80.8%	81.0%	82.5%	82.1%	82.1%
White	78.4%	78.9%	80.3%	82.0%	81.1%	81.4%	83.0%	84.1%	83.9%	84.3%	85.1%	85.6%	85.0%	85.2%	85.4%	86.6%	86.5%	86.0%

Platt ST. Kaiser Permanente Programwide Quarterly ECHO (Equitable Care Health Outcomes) Report (unpublished). Oakland, CA: Center for Healthcare Analytics, Hospitals, Quality and Care Delivery Excellence; 2014.

Kaiser Hypertension Program

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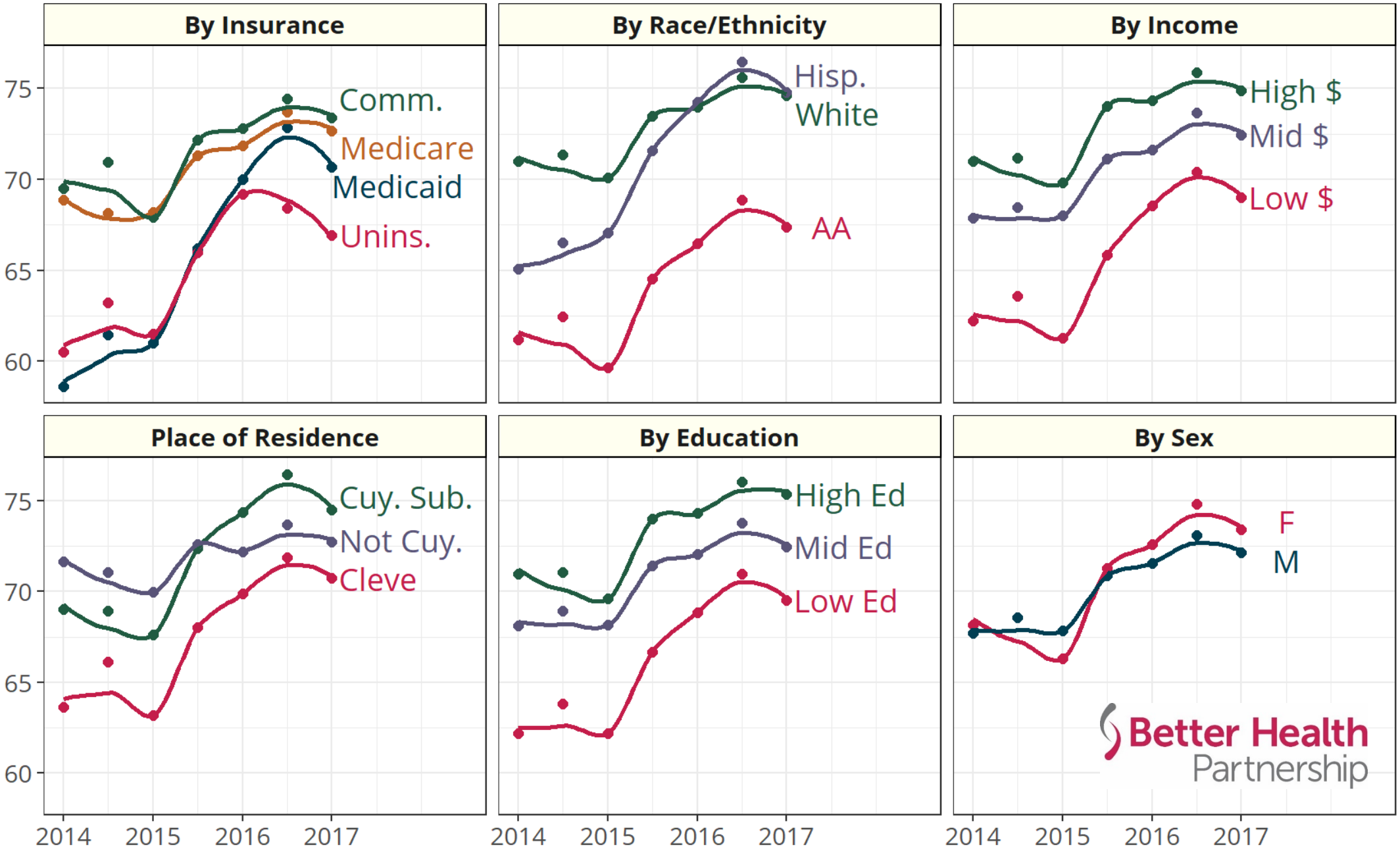
- Accurate BP Measurement by staff, including repeating BP if first elevated
- Monthly staff-led hypertension visits until BP is controlled
- Treatment algorithm prioritizing low cost once daily medications
- Coordinated outreach to patients with elevated blood pressure
- Enhanced communication focused on building trusting relationships with patients

Jaffe et al. Improved Blood Pressure Control Associated With a Large-Scale Hypertension Program. JAMA 2013; 310(7): 699-705.

% with BP below 140/90 by subgroup, 2014 to 2017



Colleague's Story

- "I saw a patient this week who has not followed up with me in over 2 years.
- He recently came into see an eye doctor who found his blood pressure was elevated.
- He got scheduled in a nurse visit in primary care a few weeks later where his blood pressure was still high.
- He then got scheduled to see me where his blood pressure was high, and I tested his A1C which was 11.1."

"Population Health Here We Come!"

Health Coaches Improve BP Control

- Randomized 237 patients to health coaches +/- home titration of meds
- Mainly Hispanic, AA and Asian low income patients from one family practice clinic
- Received an average of 10 health coach visits in 6 months (range 0-27)
- SBP decreased on average 22 mmHg pre-post for both groups combined ($p<0.001$)

Margolius D, Bodenheimer T, Bennett H et al. **Health coaching to improve hypertension treatment in a low-income, minority population.** Ann Fam Med. 2012 May-Jun;10(3):199-205.
Photo labelled for reuse. Wikimedia commons. File:Future families - Hope, a Community Health Worker (7497778302).jpg

Culturally Appropriate Storytelling Reduces Blood Pressure in Low Income Populations

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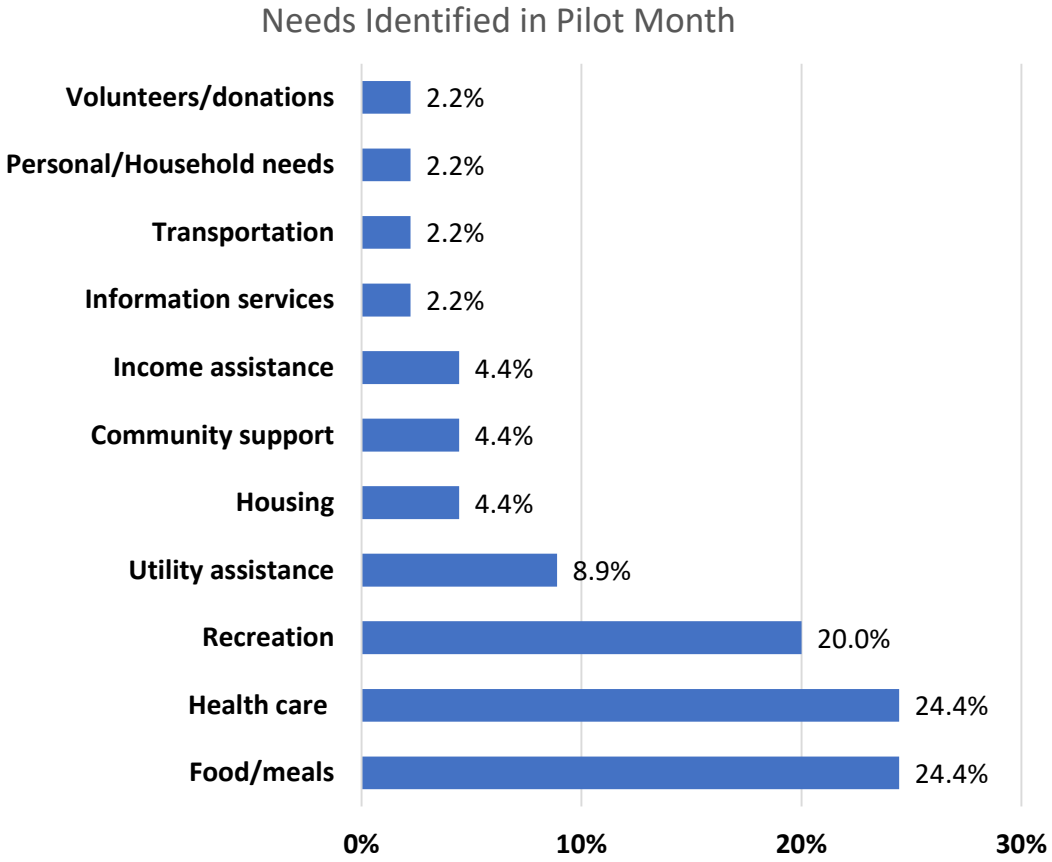
- RCT in one inner-city safety-net hospital of adults with hypertension
- 3 DVDs of patient stories + learn more sections vs attention DVD
- Of those with uncontrolled BP, 11 mmHg greater reduction in the patient stories DVD group (95% CI 3 to 20 mmHg)

Thomas K. Houston, MD, MPH; Jeroan J. Allison, MD, MSc; Marc Sussman, MHA et al. Culturally Appropriate Storytelling to Improve Blood Pressure: A Randomized Trial. *Ann Intern Med.* 2011;154:77-84. Photo labelled for reuse. Wikimedia Commons. File:Beatrice Birra Storytelling at African Art Museum.jpg.

Community Organizations as Part of the Team

- Medical Assistants referred 25 (49%) of the 51 patients with elevated BP to 2-1-1
- The 2-1-1 Navigation specialist reached 15 patients (4 were being contacted, and 6 were unreachable)
- Median number of needs/patient = 4 (range 1-8)



See separately a recent paper in Annals of Family Medicine describing screening for SDOH at 3 clinics. Gold et al. *Ann Fam Med* 2018;16:399-407

Motivating Teams

- **Communication** with staff and providers
- Pilot the change with motivated staff
- **Don’t let small barriers stop or change the process** when it works for the majority
- Bake QI into annual reviews and performance improvement projects
- Reward all sites but also reward high performers
- **Show your team you value them**

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Resources Available to Assist with Implementation of QI programs for Hypertension

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- Medicaid-funded Hypertension Quality Improvement Project (**Wave 2** begins **April 15, 2019**; Contact: Shari Bolen)
- AHA Target BP Program (Contact: Lisa.Wheeler-Cooper@heart.org)
- Ohio Association of Family Practice (https://www.ohioafp.org/education/abfm-family-medicine-certification/)
- Regional health improvement collaboratives

If interested in hearing more, e-mail me at sdb73@case.edu. We will be happy to describe and connect you with any of these programs.

Summary

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- Team-based care models work to improve BP control and reduce clinician burden
- Implementation of models requires time and effort but can be done successfully within safety net practices
- Resources exist to assist with implementation
- Our payment models need to better support team-based approaches
  - the evolution toward total cost of care should assist clinics

Questions or Comments

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U.S. Air Force photo/Airman 1st Class Jessica Gilbert
https://www.af.mil/News/Photos/igphoto/2000502381/

"When Young Children "Hate" School" (CC BY 2.0) by wecometolearn