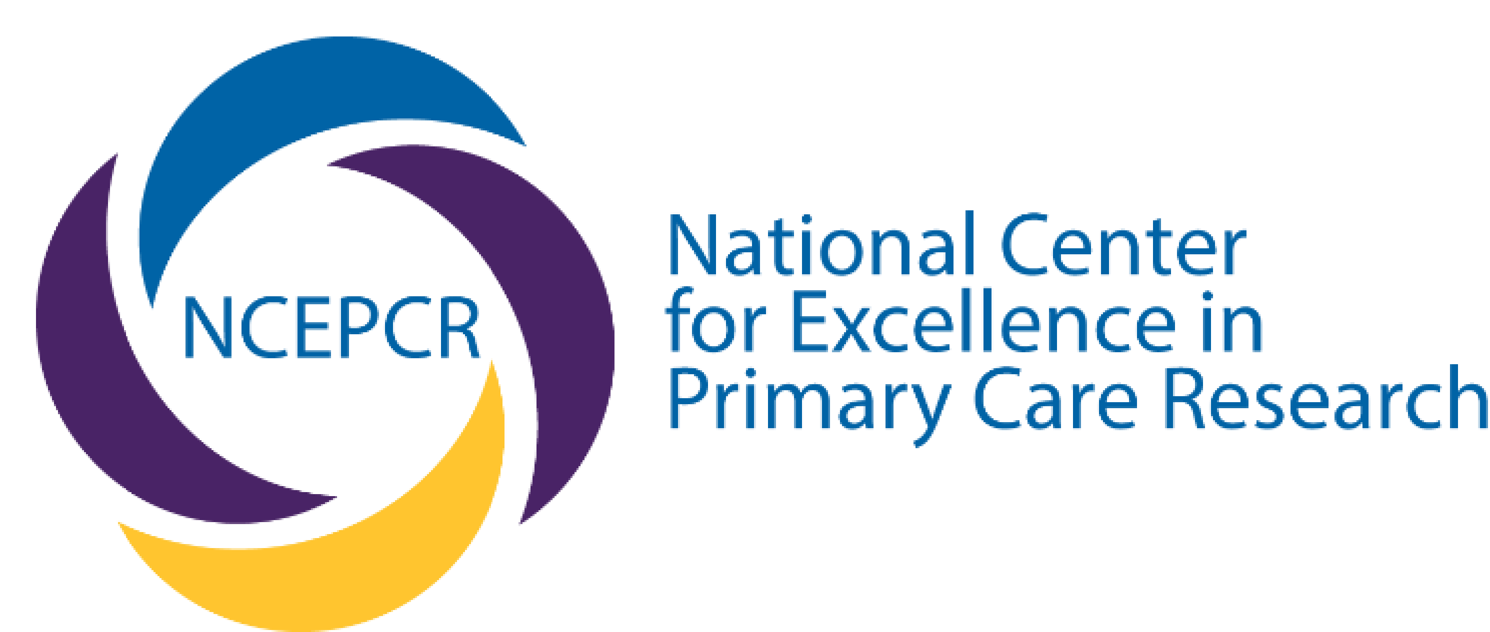
AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
AHRQ


NCEPCR
National Center
for Excellence in
Primary Care Research

National Center for Excellence in Primary Care Research
Presents

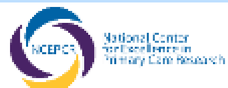
Practice-Based Research Networks: The Value of Research in Real Primary Care Practices

April 9, 2026

Presented by:
Melinda Davis, PhD, MCR
Alexander G. Fiks, MD, MSCE, FAAP
Jacqueline Britz, MD, MPH
Asta Sorensen, MA

Moderated by:
Sebastian Tong, MD, MPH

The views expressed in this webinar do not represent official views of the U.S. Department of Health and Human Services or the Agency for Healthcare Research and Quality.

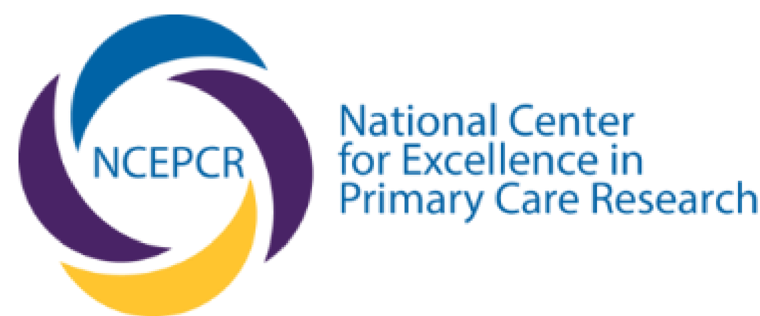


Welcome

Aimee R. Eden, PhD, MPH
Director, National Center for Excellence in Primary Care Research (NCEPCR), AHRQ

Mission

Enhancing the quality, appropriateness, and effectiveness of health services and access to such services, through scientific research and the promotion of improvements in clinical and health system practices, including the prevention of diseases and other health conditions.



Supporting transformative primary care research, tools & methods for implementation, and the next generation of primary care researchers, to improve the delivery of primary care.

AHRQ…Improving health outcomes for the American people.

NCEPCR's Activities

COMMUNICATE important primary care findings

CULTIVATE a robust primary care research workforce

CURATE & synthesize primary care research across HHS

CONVENE primary care stakeholders

COORDINATE primary care research activities across AHRQ

CATALYZE innovative primary care research

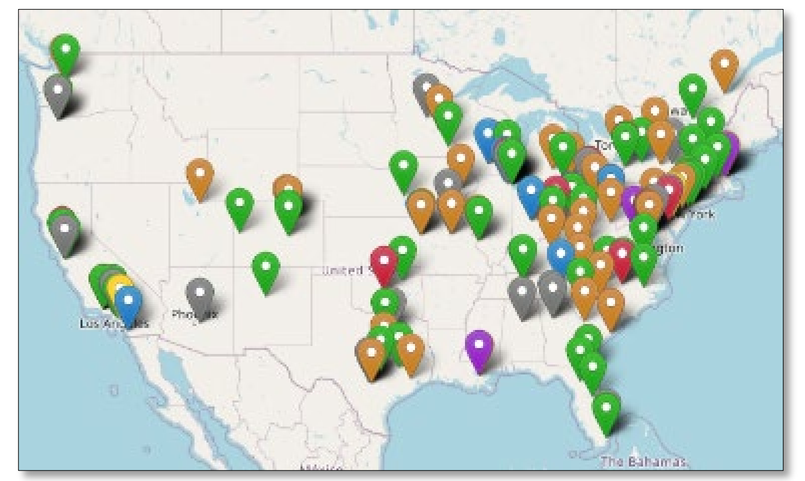
NCEPCR National Center for Excellence in Primary Care Research

NCEPCR Website

https://www.ahrq.gov/ncepcr/index.html

Resources for Practice-based Research Networks (PBRNs)

- **PBRN Registry** and **Registry Map**
- **PBRN Learning Series**
  - Building a Newer PBRN
  - Managing & Growing an Established PBRN
  - Highlighting & Promoting the Value of PBRNs
- **PBRN Impact Profiles**
- **PBRN IRB Tip Sheet**
- **PBRN Synthesis Report** and publication database

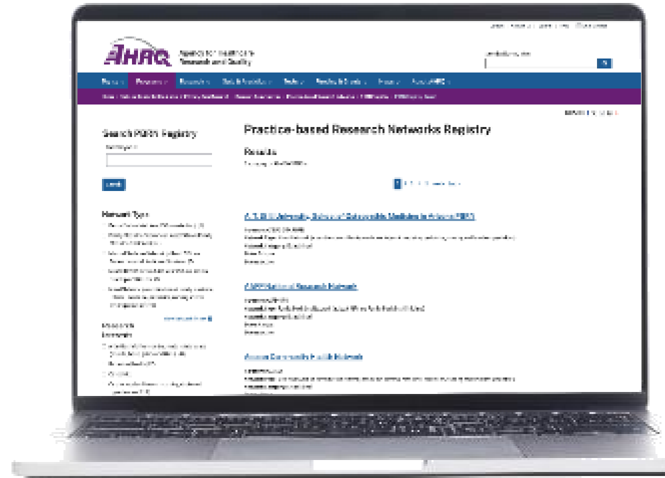


PBRN Registry

- Search the online repository of currently registered PBRNs.

- Register a PBRN for the first time.

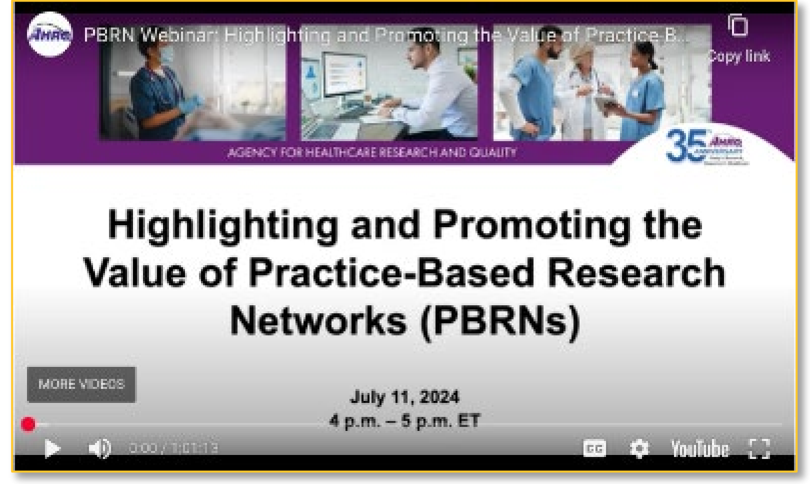
- Update registered PBRN data.



PBRN Learning Series

Visit the PBRN learning webpage to access three sessions:

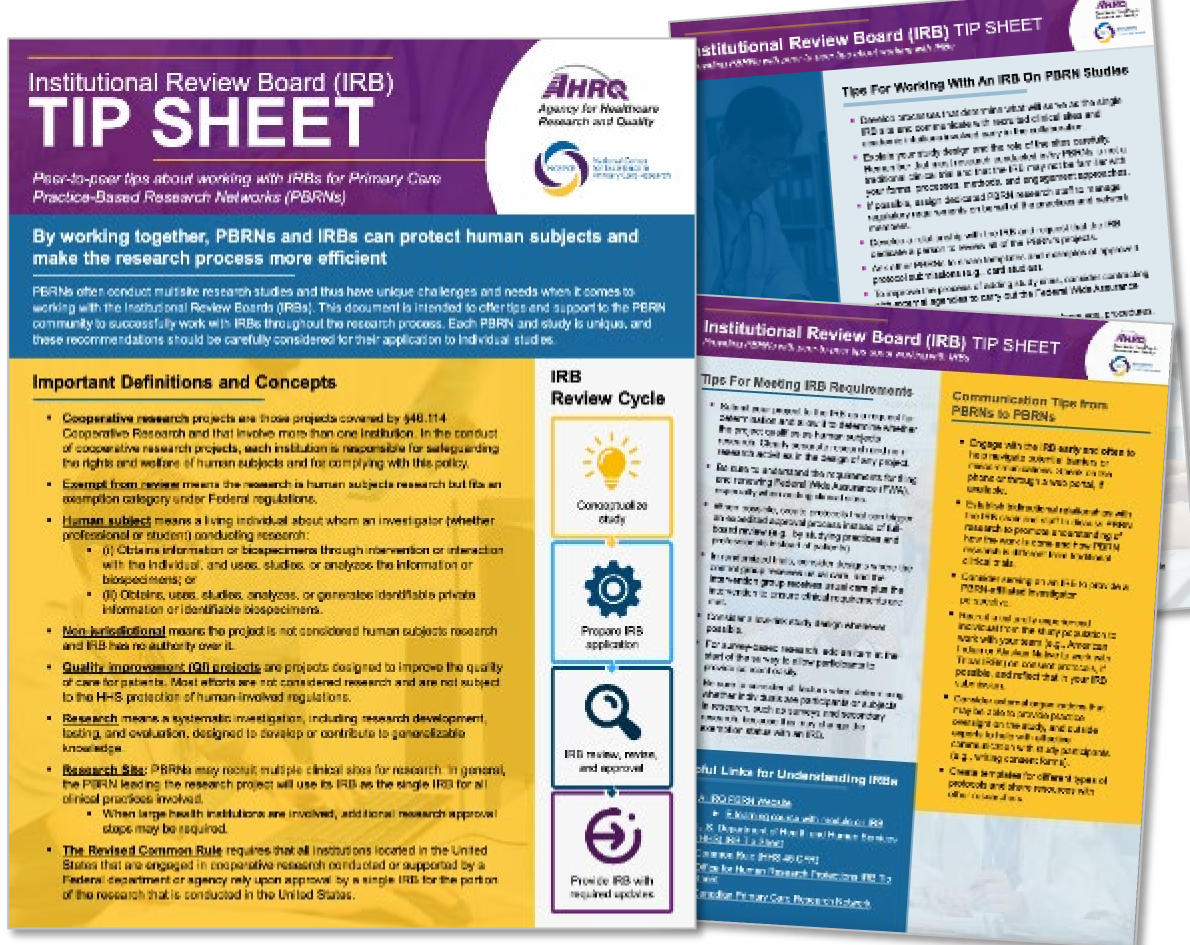
- **E-learning course:** Building a New PBRN
- **Webinar:** Managing & Growing an Established PBRN
- **Webinar:** Highlighting & Promoting the Value of PBRN



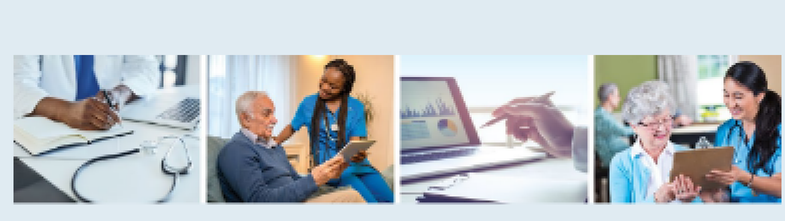
PBRN Resources

PBRN Impact Profiles

PBRN IRB Tip Sheet



Primary Care PBRN Publications, 2014–2023: Synthesis Report



The National Center for Excellence in Primary Care Research presents:

Primary Care Practice-Based Research Networks and Publications, 2014–2023: Synthesis Report

Identifying and Supporting the Needs of Primary Care Practice-Based Research Networks

The full list of publications synthesized in the report can be found in the [PRBN Publication Database](#) (XLSX, 1.5 MB)

Today’s Webinar Objectives

1. To learn about AHRQ’s *Primary Care Practice-Based Research Networks Publications, 2014–2023: Synthesis Report*
2. To highlight three PBRNs and the impact of their work

Moderator

Sebastian Tong, MD, MPH

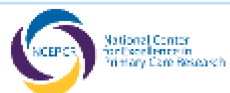
Associate Director, WWAMI Region (Washington, Wyoming, Alaska, Montana, and Idaho) Practice & Research Network (WPRN)

Assistant Professor, Family Medicine, University of Washington

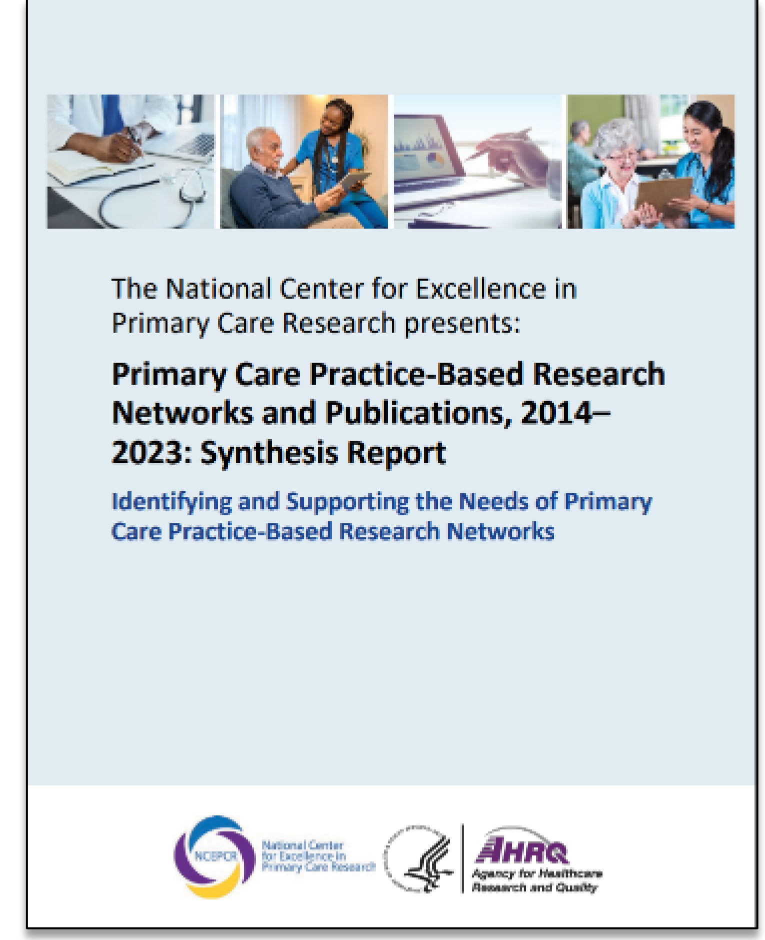
Today’s Webinar Presenters

- **Asta Sorensen, MA**, Independent Consultant
- **Melinda Davis, PhD,** Oregon Health & Science University; Oregon Rural Practice-based Research Network (ORPRN)
- **Alexander G. Fiks, MD, MSCE, FAAP,** University of Pennsylvania; AAP Pediatric Research in Office Settings (AAP PROS)
- **Jacqueline Britz, MD, MPH,** Virginia Commonwealth University; Virginia Ambulatory Care Outcomes Research Network (ACORN)

Asta Sorensen, MA
Independent Consultant



AHRQ's *Primary Care Practice-Based Research Networks Publications, 2014–2023: Synthesis Report*

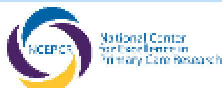


The full list of publications synthesized in the report can be found in the accompanying *PRBN Publication Database*

Authors

- Sorensen A.V., Kelly A.M., DiMilia P.R., Arellano O., Rahman M., O'Connor J.C., Boardman, M., Simpson M.J., Eden A.R.

► Funded by the Agency for Healthcare Research and Quality, contract number GS-00F-101CA



Goal & Approach

- Goal
  - ► Describe research trends, topic domains, and citation impacts of US-based primary care PBRN publications 2014- 2023
- Approach
  - ► Scan using PubMed and direct outreach
  - ► Review of citations using automated deductive abstraction
  - ► PBRN characteristics using AHRQ Registry
  - ► Web of Science to identify citation impact
- Identified 939 publications representing 100 primary care PBRNs
  - ► More than half authored by 19 PBRNs that responded to direct outreach

PBRN Publications Over Time

Year	PBRNs with complete data (n=21)	All PBRNs (n=100)
2014	43	84
2015	51	92
2016	53	85
2017	44	74
2018	52	85
2019	44	89
2020	55	90
2021	76	110
2022	71	116
2023	79	108

Primary Care Transformation Topics

Topic	Count
Advanced Care Planning	1
Coordination of Care	7
Assessing Health Policy Needs	12
Care Management	14
Access and Continuity	17
Planned Care and Population Health	28
Patient and Caregiver Engagement	30
Training Future Primary Care Researchers and Building Practice Analytic Capability	32
Patient Safety	35
Organizational Culture, Teamwork, and Communication	37
Health IT and EHR Improvements	63
Community Engagement	83

0 10 20 30 40 50 60 70 80 90

Clinical Practice Topics

Topic	Count
Chronic Obstructive Pulmonary Disease (COPD)	2
Multiple Chronic Conditions	4
Obesity	32
COVID-19 Pandemic Response	38
Cardiovascular Health	46
Diabetes	48
Nutrition	49
Obstetrics and Gynecology	54
Cancer Screening	62
Hypertension	62
Mental and Behavioral Health	108

Funding Sources

Funding source	Count
NIH	479
NCATS†	199
AHRQ	138
CDC	31
PCORI	12
VA	8
HRSA	7
Foundations	6

Other Findings

- PBRNs with larger networks, longer tenure, and academic affiliations were more likely to produce a higher volume of peer-reviewed publications

- Citations impact
  - ► Published 2014- 2019: 44 cited 50 or more times
  - ► Published 2020- 2023: 17 cited 20 or more times

Note: As of October 2024, Web of Science provided citations for 400 of the 939 identified publications

Examples of Highly Cited PBRN Publications

Article Title	PBRN	Number of Citations
Burnout and Health Care Workforce Turnover	San Francisco Bay Collaborative Research Network	250
Motivational Interviewing and Dietary Counseling for Obesity in Primary Care: An RCT	Pediatric Research in Office Settings (PROS)	181
Electronic Health Record Functionality Needed to Better Support Primary Care	Virginia Ambulatory Care Outcomes Research Network (ACORN)	116
Engaging Primary Care Patients to Use a Patient-Centered Personal Health Record	Virginia Ambulatory Care Outcomes Research Network (ACORN)	74
Weight Loss in Underserved Patients—A Cluster-Randomized Trial	Ochsner Primary Care Research Network	71
The Association of Health Literacy and Blood Pressure Reduction in a Cohort of Patients With Hypertension: The Heart Healthy Lenoir Trial	Eastern Carolina Association for Research & Education	51

Future Considerations

- Sustainability and impact of PBRNs might benefit from
  - Collaborations
  - Support for infrastructure
  - Diversified funding streams
  - Publishing beyond primary care journals, and
  - Consistent attribution to PBRN work in publications

Two-Decades of Development with the Oregon Rural Practice-based Research Network (ORPRN)

AHRQ Agency for Healthcare Research and Quality

Melinda Davis, PhD, MCR

Director, Oregon Rural Practice-based Research Network (ORPRN)

Director, Oregon Clinical & Translational Research Institute (OCTRI) Community Program

Professor, Oregon Health & Science University (OHSU)

National Center for Excellence in Primary Care Research

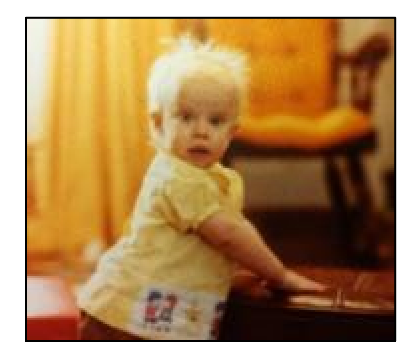
Alternative Titles & Tribute

- *"I didn't know this career was possible, and I'm so grateful for ORPRN, AHRQ and the PBRN community."*
- *"You don't need to know where you're going, you just need to take the next best step."*
- *"What Would David Meyers Do?"*

David Meyers – AHRQ & PBRN Legend

About Me

- Rural upbringing in Columbia River Gorge; now back in rural NE Oregon (where I started with ORPRN)!
- Training
  - BA in biology-environmental studies
  - PhD in social-developmental psychology
- Research interest(s):
  - Topics: Rural health, preventive care, cancer screening & treatment, practice facilitation
  - Methods: Participatory implementation science, mixed methods, practice-based research, community engaged research
  - Goal: Improve access to and quality of care for rural and low-resourced populations



THE LATEST RESEARCH SHOWS THAT WE REALLY SHOULD DO SOMETHING WITH ALL THIS RESEARCH

Oregon Rural Practice-based Research Network (ORPRN)

We are a statewide network founded at OHSU in 2002.

Our **mission** is to improve health for all Oregonians through community partnered research, education and health system transformation.

REACH & IMPACT

Since 2019, we've worked with:

- Over **400** primary care clinics
- **All** of Oregon's Coordinated Care Organizations (CCOs)
- Over **5,200** unique learners in education programs
- Nearly **70,000** individual patients
- Partners and professionals in all **36** Oregon Counties

ORPRN Team – Then and Now

2010

~ 13 staff (3 regionally based)
Serving 49 clinics and 157 member clinicians

1 Program

2025

~ 55 staff (20 regionally based)
Serving >250 clinics and >3000 members (clinicians, public health, health plan, community partners)

3 Programs: Research, Education, Health System Transformation

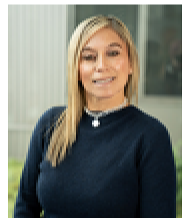
ORPRN's Field Team – Community Research Facilitators

Kayla Warner

North Coast

Priscilla Castellanoz

Portland-Metro

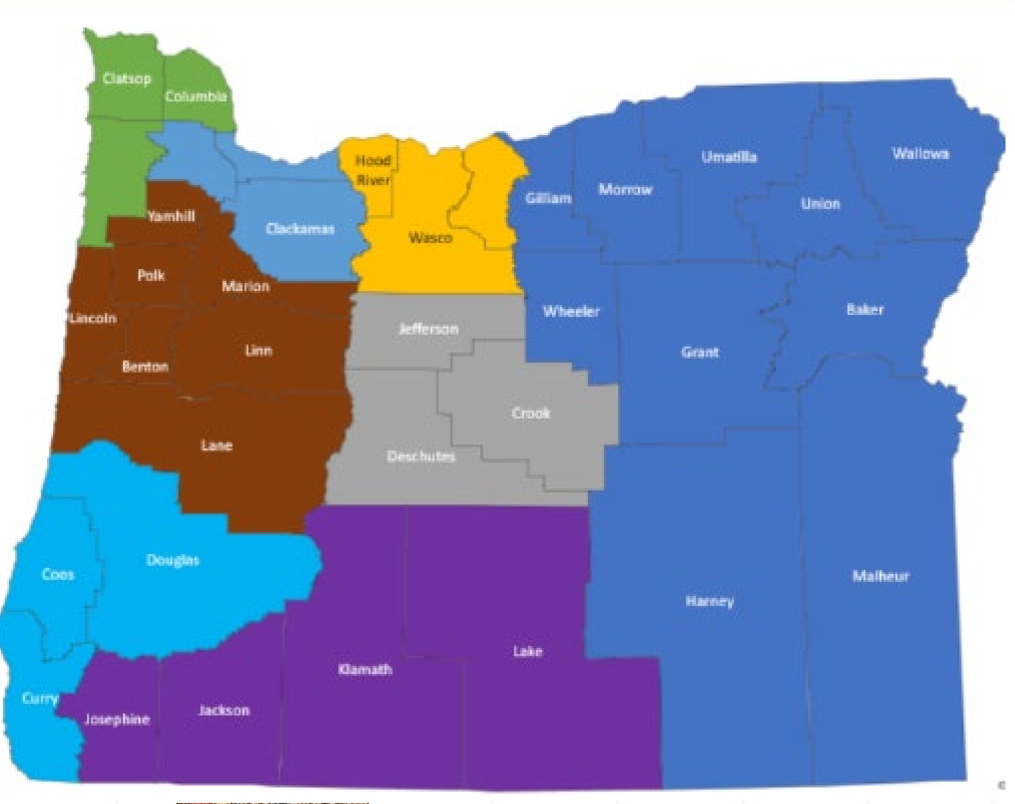


Liliana Will

Portland-Metro

Kaitlin Greene

Central



Danita Tracy Carter

South Coast

Roni Hyde

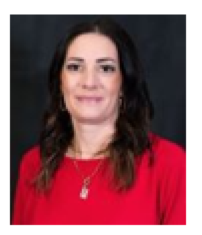
Columbia Gorge

Kylie Lanman

Eastern

Lynda Crocker Daniel

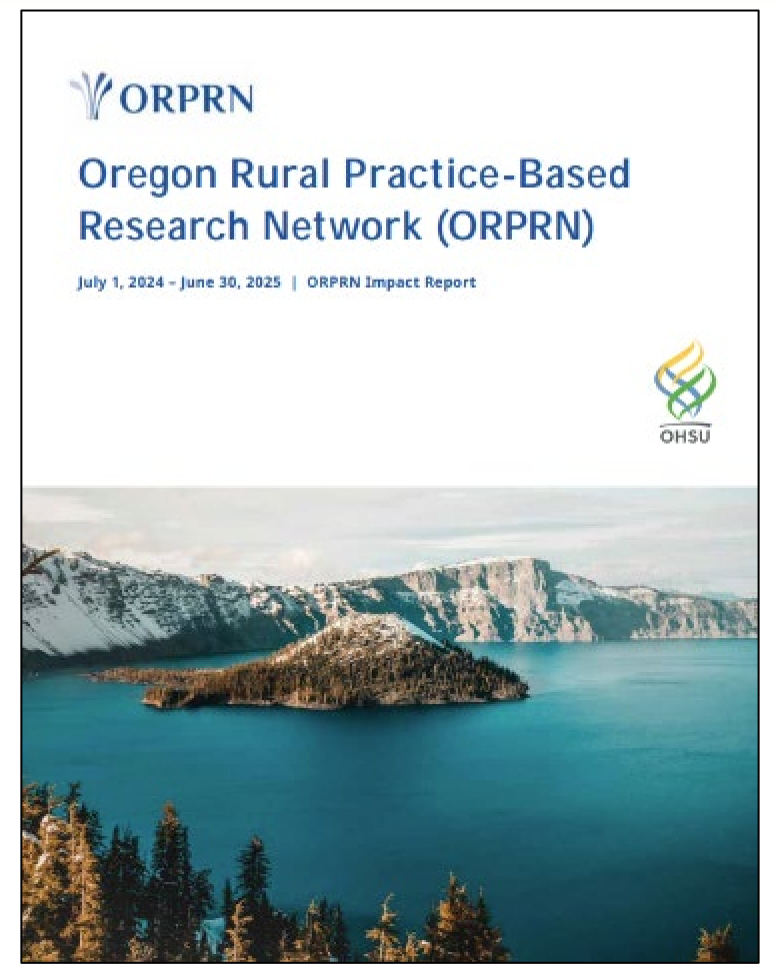
Southern

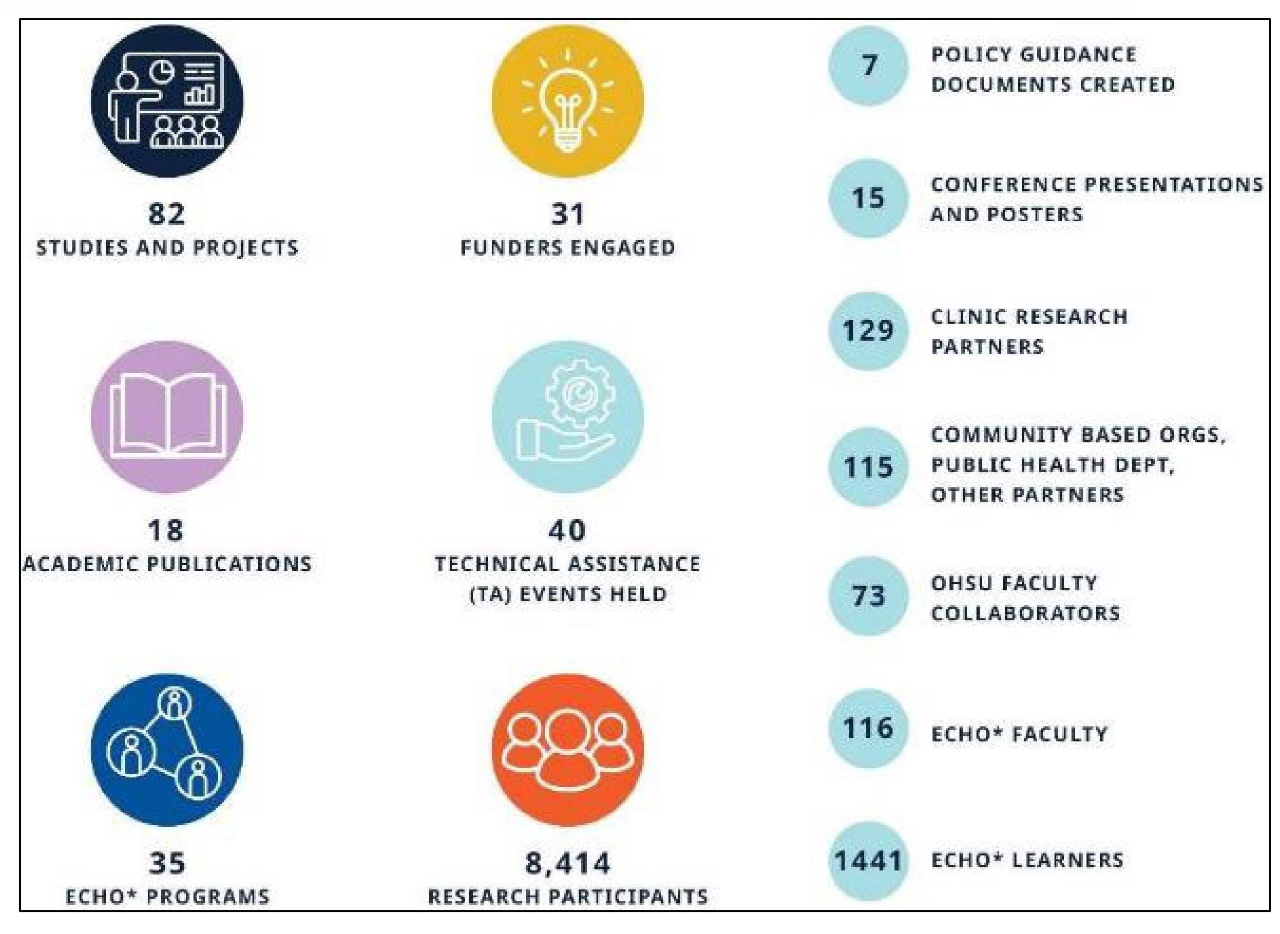


Megan Roemmich

Southern & South Coast

ORPRN Impact Report(s)

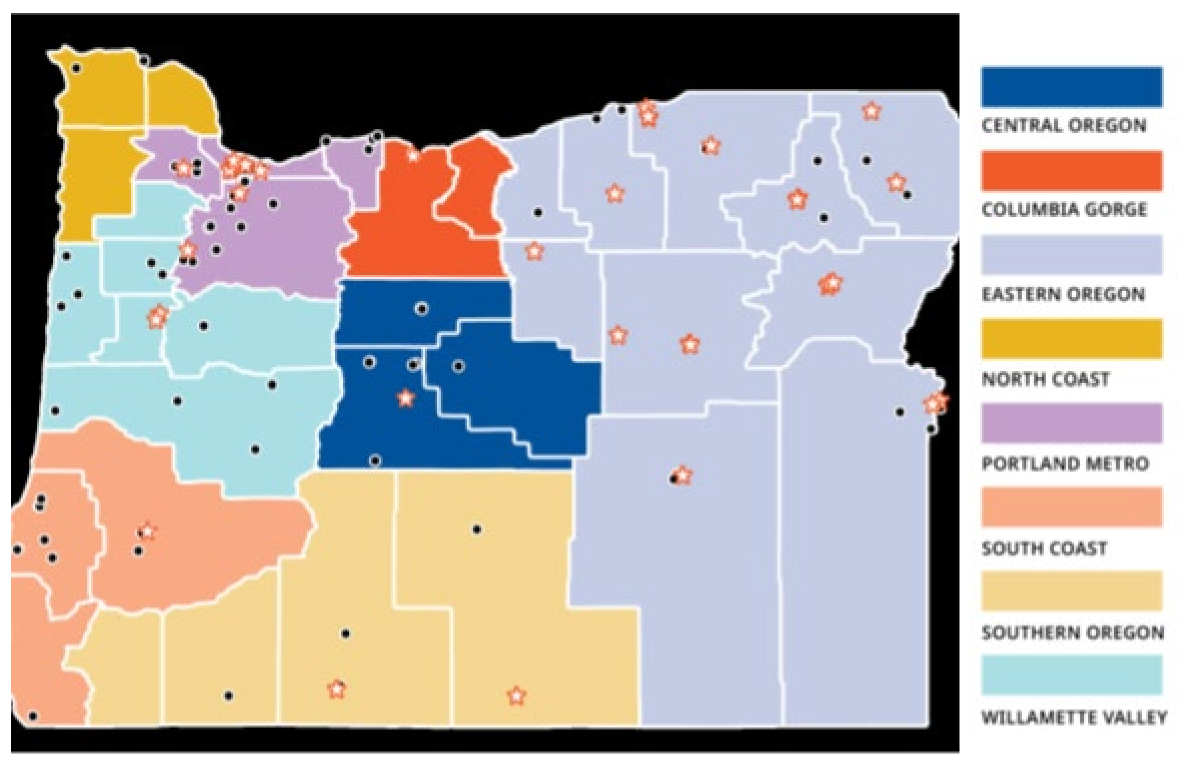




ORPRN's Impact Reports are available at: https://www.ohsu.edu/orprn

ORPRN Funding & Reach 2024-2025

- > $9.3M total funding
  - Federal and foundation grants, state and health plan contracts, OHSU collaborations, and Oregon state legislative funds.
  - Funding mix varies across programs
- Engaged 129 clinical practices and 115 other organizations on 80 active projects.
- Academic Partners: 11 research investigators, 14 academic collaborators (21 OHSU departments/schools), 48 ECHO faculty experts



Davis Pathway To Independence (Simplified)

Community Engagement:

* CHARA Topic Selection

* Finding the Right FIT

Identifying Contextual Determinants:

* Clinic workflow observations

* Claims Analyses

Selecting & piloting Interventions:

* Systematic Review

* CCO/Clinic Collaboration Study

* Modeling & Mailed FIT Pilot

Implementing and Scaling Interventions (ACCSIS Moonshot):

* Intervention adaptation

* Multilevel, pragmatic trial to improve CRC screening

* Scale up study

Rural Primary Care Network (CARE™ for Health)

- Rural and Frontier Clinical Trials Center - PRaCTICe
- Clinic & Community Engagement
- Matched NIH Studies
- Co-Designed Studies

Davis Pathway To Independence (Actual)

"Careers only look linear in reverse" – Kurt Stange, MD, PhD

2011-2014 ACT (SUD/BH) (TCHF)

2013-2016 SDHS (SUD/BH) (Helmsley)

2014-2015 InteGREAT! (PacificSource)

2019-2023 ANTECEDENT (SUD/BH) (AHRQ)

2023-2028 VA Chronic Pain (CORPS)

2010-2014 Academy for MH & PC (AHRQ)

2016 SRCH Eval (OHA)

2019-2026 CARAVAN (VRHRC)

2011-2012 CPAST (ORCATECH)

2014 CAMPS (Moore Inst)

2016 – 2020 CRCCP Eval (OHA)

2022 – 2025 Screenwise (OHA)

2025 – 2026 IPA (AHRQ)

2000 | 2005 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 | 2024 | 2026 | 2028

2007 – 2011
- MEADERS
- NCM and TOPMED
- PCPCI-TA
- Unmet Dental
- Cancer Prevention in Pts w/ Disability
- SDM in Primary Care
- Betty Gray
- PCP Expectations re: Aging

2010-2012 CLEMENTE – CBPR (AHRQ)

2011-2013 CREED – CBPR (CTSA)

2014-2017 K12 (OHSU/AHRQ)

2015 Finding the Right FIT (Knight CPP)

2016 CRC Disparities (Knight)

2014-2017 CHARA x3 (PCORI)

2014-2019 CPCRN Modeling (CDC/NCI)

2017-2021 K07 (NCI)

2019-2024 SMARTER CRC (NCI Moonshot)

2016 – 2025 CRC TA Contract(s) (OHA)

2018 – 2020 LDCT Pilot x2 (Knight)

2018 – 2019 Tobacco TA (OHA)

2018 – 2021 RAVE (ACS)

2017 – 2023 Int Conf PF (AHRQ x2)

2023-2027 OCTRI Community (NCATS)

2024-TBD PRaCTICe (NIH Office of Director)

2023 – ~~2028~~ 2026 SAINTS (AHRQ)

2026-2032 BUNDLE (NCI)

2024 – 2025 PCCP4P MCC (AHRQ)

Davis Pathway To Independence (Actual)

AHRQ

"Careers only look linear in reverse" – Kurt Stange, MD, PhD

Above the timeline:

- 2011-2014 ACT (SUD/BH) (TCHF)
- 2013-2016 SDHS (SUD/BH) (Helmsley)
- 2014-2015 InteGREAT! (PacificSource)
- 2019-2023 ANTECEDENT (SUD/BH) (AHRQ)
- 2023-2028 VA Chronic Pain (CORPS)
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- 2016 – 2020 CRCCP Eval (OHA)
- 2022 – 2025 Screenwise (OHA)
- 2025 – 2026 IPA (AHRQ)

Timeline: 2000 | 2005 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 | 2024 | 2026 | 2028

Below the timeline:

- 2007 – 2011
  - MEADERS
  - NCM and TOPMED
  - PCPCI-TA
  - Unmet Dental
  - Cancer Prevention in Pts w/ Disability
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- 2010-2012 CLEMENTE – CBPR (AHRQ)
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- 2016 CRC Disparities (Knight)
- 2014-2017 CHARA x3 (PCORI)
- 2017-2021 K07 (NCI)
- 2019-2024 SMARTER CRC (NCI Moonshot)
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- 2024-TBD PRaCTICe (NIH Office of Director)
- 2023 – ~~2028~~ 2026 SAINTS (AHRQ)
- 2026-2032 BUNDLE (NCI)
- 2024 – 2025 PCCP4P MCC (AHRQ)
- 2017 – 2023 Int Conf PF (AHRQ x2)

Key Impacts of ORPRN (and AHRQ) on My Work

- A foundation on which to build my career
- Connections with clinics and communities that extend beyond individual projects (relational)
- Connections with academic, clinic and community partners that anchor projects to local needs
- Community, belonging and impact

Key Impacts of ORPRN's Work

- Better access to care for rural and low-resourced patients
- Increased quality, safety, and efficiency
- Reduced variations in care
- Improved provider retention in rural areas
- Rapid dissemination of best practices
- Identifying and addressing questions from practice and relevant to practice

Case Example 1 (No PBRN)

A seasoned researcher seeks to enhance diversity in their pragmatic clinical trial. They start cold calling Federally Qualified Health Centers (FQHCs) across the state. After 6 months, they enroll one clinic. After 12 months over 200 patients have been eligible for the study, but only 5 were recruited. Moreover, the researcher is unable to access data from the electronic health record (EHR) on enrolled patients. The clinic medical director is frustrated and advocates to avoid studies with the researcher's institution.

Case Example 2 (With a PBRN)

The same researcher has a new idea – but now realizes working with community clinics is outside their expertise. They present their idea at the CTSA's design studio and are referred to a PBRN. The PBRN team helps refine the study design, data collection strategies, clinic impact fees and transition participant recruitment to both visit-based and population outreach strategies. The researcher adds the PBRN director as study MPI and funds regional PBRN staff. Based on input from the PBRN's advisory board, they align outcomes with a state quality incentive metric.

Using PBRN data, the team identifies and approaches 4 clinics. Within 1 month, the same FQHC agrees to participate. Within 3-months, PBRN staff are embedded in the clinic supporting participant enrollment and data collection activities in alignment with clinic workflows. The PBRN team has also helped refine EHR documentation to support process and outcomes reporting. Within 9 months the participant recruitment target has been met - despite transitions in the Medical Director and multiple clinic staff. The project is celebrated by FQHC leadership who are eager to partner on the next study.

"Doing primary care research in an academic medical center is like doing forestry research in a lumber yard."
– LJ Fagnan, ORPRN Founder

"I never thought of them as research questions. I just thought of them as something that could wreck your day." – ORPRN Clinical Partner

Thank you!

Melinda

davismel@ohsu.edu

(541) 891-7236

Selected ORPRN References

- Tong ST, Davis MM, Cole AM. Conducting Research That Matters to Rural Practice and Communities. J Am Board Fam Med. 2025 Sep 15;38(3):603-606. doi: 10.3122/jabfm.2024.240358R1.
- Simpson EL, Michaels LC, Ramsey K, Fagnan LJ, Nease DE, Henningfield M, Dolor RJ, Lapidus J, Martinez-Ziegenfuss X, Vu A, Ferrara L, Zuckerman KE, Morris CD, Williams HC; CASCADE Consortium. Emollients to Prevent Pediatric Eczema: A Randomized Clinical Trial. JAMA Dermatol. 2025 Jul 23;161(9):957–65. doi: 10.1001/jamadermatol.2025.2357.
- Coronado GD, Petrik AF, Leo MC, Coury J, Durr R, Badicke B, Thompson JH, Edelmann AC, Davis MM. Mailed Outreach and Patient Navigation for Colorectal Cancer Screening Among Rural Medicaid Enrollees: A Cluster Randomized Clinical Trial. JAMA Netw Open. 2025 Mar 3;8(3):e250928. doi: 10.1001/jamanetworkopen.2025.0928.
- Davis MM, Gunn R, Kenzie E, Dickinson C, Conway C, Chau A, Michaels L, Brantley S, Check DK, Elder N. Integration of Improvement and Implementation Science in Practice-Based Research Networks: a Longitudinal, Comparative Case Study. J Gen Intern Med. 2021 Jun;36(6):1503-1513. doi: 10.1007/s11606-021-06610-1.
- Steeves-Reece AL, Elder NC, Graham TA, Wolf ML, Stock I, Davis MM, Stock RD. Rapid Deployment of a Statewide COVID-19 ECHO Program for Frontline Clinicians: Early Results and Lessons Learned. J Rural Health. 2021 Jan;37(1):227-230. doi: 10.1111/jrh.12462.
- Davis MM, Howk S, Spurlock M, McGinnis PB, Cohen DJ, Fagnan LJ. A qualitative study of clinic and community member perspectives on intervention toolkits: "Unless the toolkit is used it won't help solve the problem". BMC Health Serv Res. 2017 Jul 18;17(1):497. doi: 10.1186/s12913-017-2413-y.
- Davis MM, Keller S, DeVoe JE, Cohen DJ. Characteristics and lessons learned from practice-based research networks (PBRNs) in the United States. J Healthc Leadersh. 2012 Sep;4:107-116. doi: 10.2147/JHL.S16441. PubMed PMID: 26213481; PubMed Central PMCID: PMC4512302.
- Fagnan LJ, Handley MA, Rollins N, Mold J. Voices from left of the dial: reflections of practice-based researchers. J Am Board Fam Med. 2010 Jul-Aug;23(4):442-51. doi: 10.3122/jabfm.2010.04.090189.
- Westfall JM, Mold J, Fagnan L. Practice-based research--"Blue Highways" on the NIH roadmap. JAMA. 2007 Jan 24;297(4):403-6. doi: 10.1001/jama.297.4.403. PMID: 17244837.

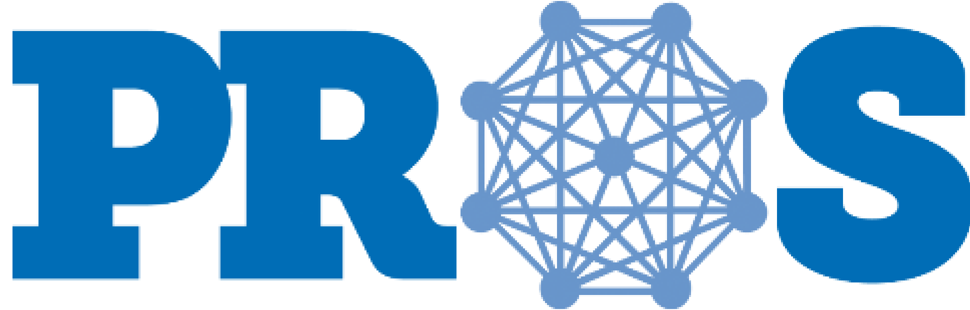
American Academy of Pediatrics, Pediatric Research in Office Settings (AAP PROS): Changing Pediatric Care and Improving Child Health 1986-2026

Alexander G. Fiks, MD, MSCE, FAAP

Director, American Academy of Pediatrics Pediatric Research in Office Settings (PROS) PBRN

Professor of Pediatrics, Children's Hospital of Philadelphia and Perelman School of Medicine, University of Pennsylvania

American Academy of Pediatrics Pediatric Research in Office Settings (AAP PROS)



American Academy of Pediatrics
Pediatric Research in Office Settings (AAP PROS)

- A program of the American Academy of Pediatrics.
- Focus is on primary care pediatrics.
- Mission: To improve the health of children and enhance primary care practice by conducting and fostering national collaborative practice-based research.
- PROS is celebrating its 40th anniversary in 2026!

MINUTES

TASK FORCE ON COLLABORATIVE RESEARCH NETWORK

JULY 10, 1985

WILLIAM T. GRANT FOUNDATION, 919 THIRD AVENUE
NEW YORK, NEW YORK 10022

Members present:	Evan Charney, M.D., Chairman
	Robert Black, M.D. Richard Narkewicz, M.D. Lawrence Nazarian, M.D. Richard C. Wasserman, M.D. David Bergman, M.D. Barbara Starfield, M.D., Consultant
President of AAP:	Robert Haggerty, M.D.
Staff:	Gretchen V. Fleming, Ph.D.
Representatives of of Other Networks:	Frank M. Reed, M.D., ASPN John Kirk, M.D., Dartmouth Co-op

American Academy of Pediatrics
Pediatric Research in Office Settings (AAP PROS)

- 50+ studies since 1986.
- 135 peer-reviewed manuscripts since 1986, 26 since 2020.
- Informed national clinical guidelines for antibiotic stewardship, obesity, hypertension, and other health conditions.
- Improved child health and clinical practice in primary care in areas such as:
  - Child abuse screening
  - Child safety / injury prevention
  - Obesity treatment
  - Discovery of earlier timing of puberty
  - Treatment of fever in infants
  - Vision screening

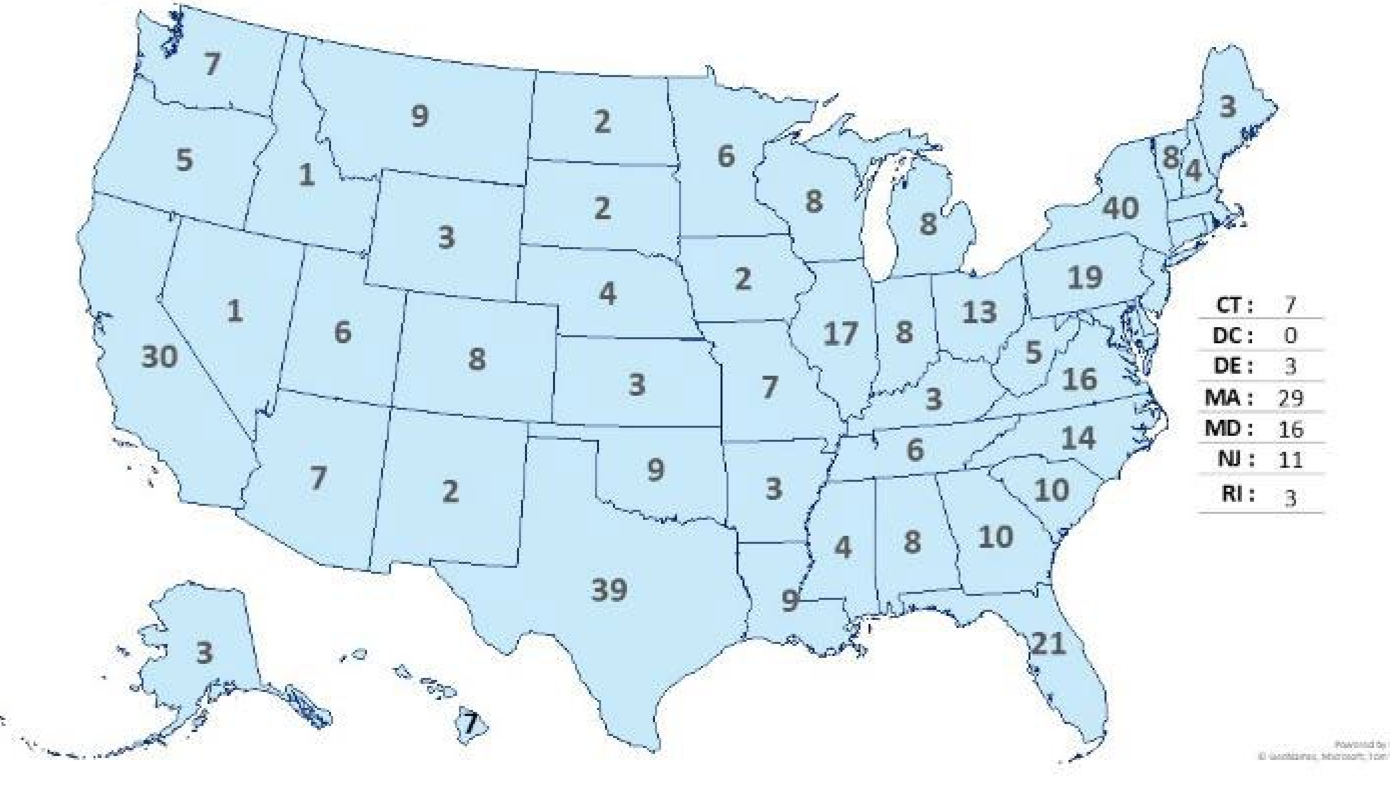
American Academy of Pediatrics
Pediatric Research in Office Settings (AAP PROS)

AAP PROS practices:

- Represent all 4 US regions
- Located in urban, suburban and rural settings
- Over 450 pediatric primary care practices, largely independent o medical centers

AAP PROS patients/families:

- Similar to 2020 U.S. Census



American Academy of Pediatrics
Pediatric Research in Office Settings (AAP PROS)

Unique stakeholder engaged process:

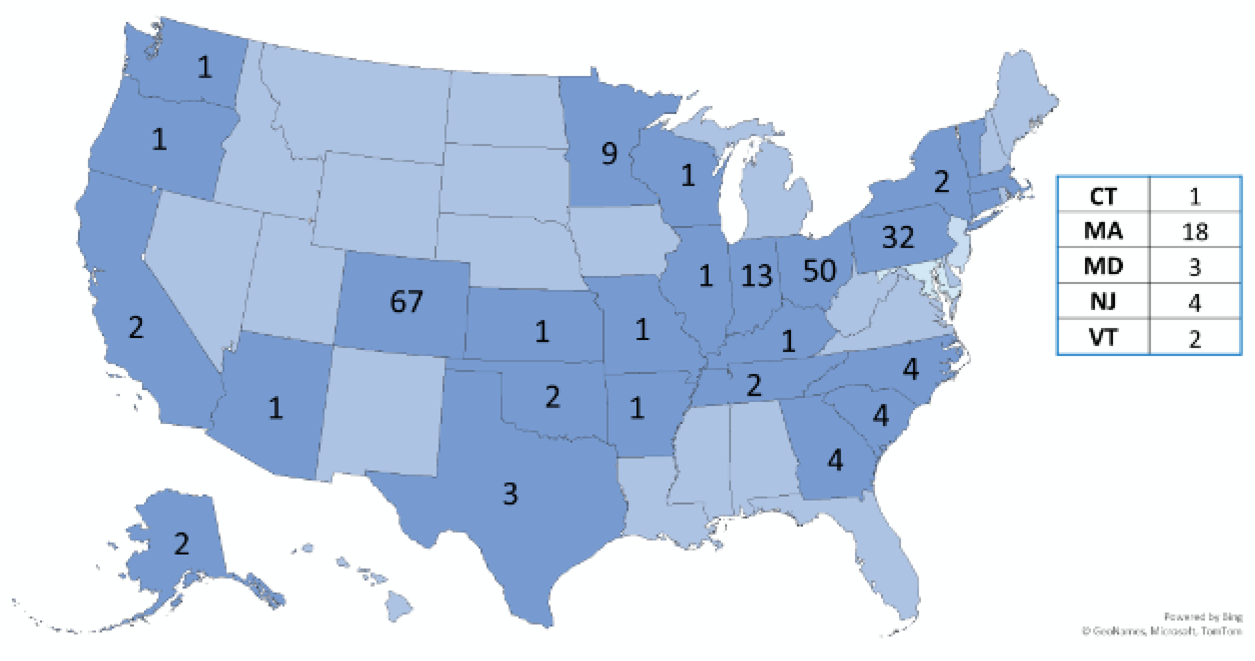
- Guided by an interdisciplinary 15-person Steering Committee
- Pediatrician Coordinators from 41 states
- These groups review and vote on study proposals:
  - Provide feedback
  - Advise study teams
  - Help guide the network's agenda

Pediatric Allergy

Comparative Effectiveness Research *through* Collaborative Electronic Reporting (CER^2)

About the CER^2 dataset:

- Electronic health record (EHR) from > 3 million children
- Pediatric primary care an family medicine practices (N=223)



Includes EHR data from MetroHealth, Boston University, Children's Hospital of Philadelphia and practices in the AAP PROS network.

Pediatric Allergy

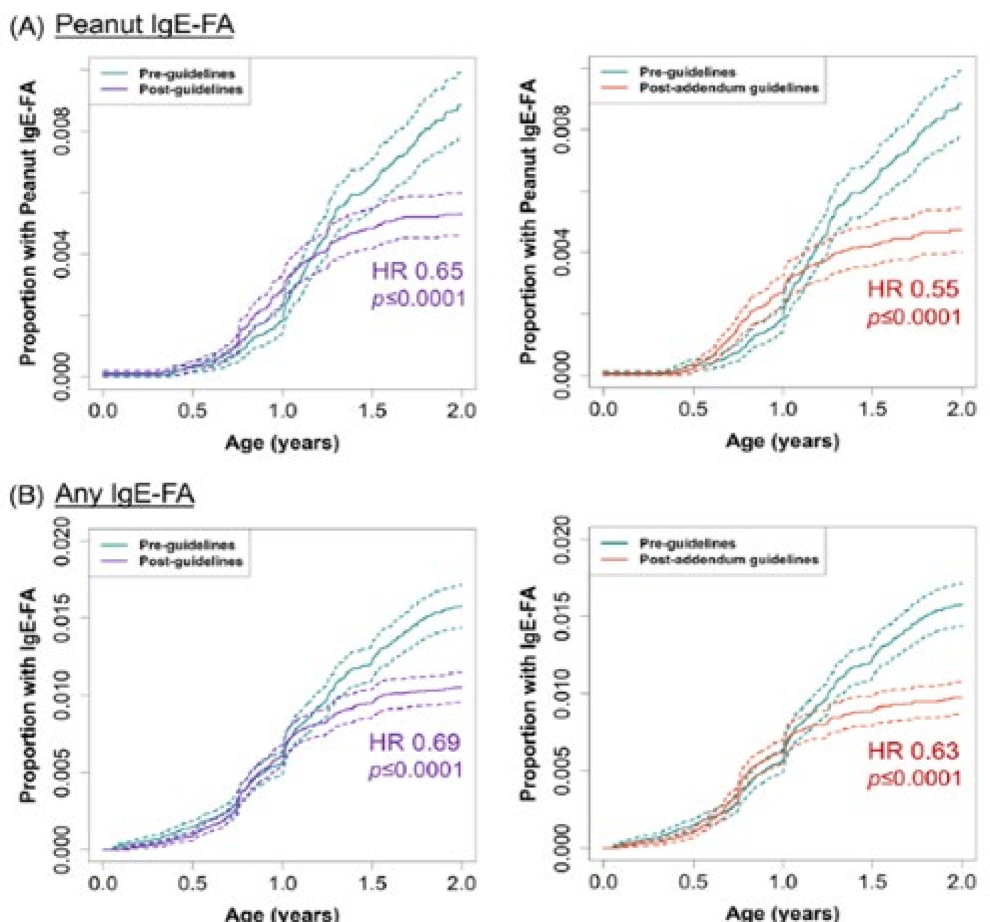
Study Goal:
Identify the incidence and onset of 5 early childhood allergies:

1. Atopic Dermatitis
2. IgE Mediated Food Allergy
3. Asthma
4. Allergic Rhinitis
5. Eosinophilic Esophagitis

Incidence of Allergic Conditions by Age (Months): Percentage of Children with Each Condition

Allergic Disease	Peak Age of Incidence	Cumulative Incidence
Atopic Dermatitis	4 months	10.3%
IgE Mediated Food Allergy	13 months	4.0%
Asthma	13 months	20.1%
Allergic Rhinitis	26 months	19.7%
Eosinophilic Esophagitis	35 months	0.1%

Pediatric Allergy



Gabryszewski et al. Guidelines for Early Food Introduction and Patterns of Food Allergy. *Pediatrics*. 2025;156(5):e2024070516.

FIGURE 2.
Cox proportional hazards modeling. Proportion of children with diagnosis of (A) peanut IgE-FA or (B) any IgE-FA during the postguidelines (or postaddendum guidelines) vs the preguidelines periods. Results are shown for models adjusted for age at cohort entry, sex, race, and ethnicity. Dashed lines represent 95% CIs.
Abbreviations: HR, hazard ratio; IgE-FA, immunoglobulin E–mediated food allergy.

Pediatric Allergy

The New York Times

Peanut Allergies Have Plummeted in Children, Study Shows - The New York Times

Doctors have long recommended that infants avoid peanut products. But in 2017, experts officially reversed that guidance, and food allergies...

Oct 23. 2025

The Washington Post

A big study links feeding babies peanuts to lower allergy risk. When to do it.

Experts recommend introducing peanuts to infants to prevent allergies, with a new study showing a 43 percent lower association with...

Oct 26, 2025

AAP PROS Obesity Research

- Early PROS Obesity Studies:
  - Healthy Lifestyles Pilot: Reducing Pediatric Obesity, 2003-2004;
  - Motivational Interviewing and Dietary Counseling for Obesity: Reducing Pediatric Obesity/BMI, 2007-2014; Funder: NIH National Heart, Lung, and Blood Institute

- Brief Motivational Interviewing for BMI (BMI^{2+}): Reducing Obesity, 2016-2022; Funder: NIH National Heart, Lung, and Blood Institute

Brief Motivational Interviewing to Reduce Child BMI (BMI²)

- Pediatricians and Registered Dieticians (RDs) trained in brief Motivational Interviewing (MI)
- 3 arm trial:
  - Pediatricians delivered MI
  - Pediatricians and *local* RDs delivered MI
  - Usual care
- 645 children 2-8yrs (baseline BMI 85th-97th percentile)
- After 2 years, all groups had some reduction in mean BMI score.
- The group counseled by pediatricians and RDs had a significant decrease in BMI score compared to Usual care.

Brief Motivational Interviewing (MI) for Body Mass Index (BMI2+)

Study Goal: To reduce BMI among children 3-12 years old whose BMI percentile is above the 85th percentile.

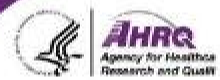
Methods: Cluster-randomized effectiveness trial, with 18 PROS practices randomized to Intervention or Usual Care.

Intervention:

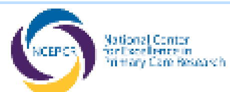
- In-office brief pediatrician Motivational Interviewing (MI) / counseling
- Centralized registered dietitian MI by phone (after in-office pediatrician counseling)
- Text messaging to parents about diet/physical activity goals

Primary Outcome: Reduction in BMI (using BMI measures collected from EHRs).

Brief Motivational Interviewing (MI) for Body Mass Index (BMI2+)



- Brief MI offered by pediatricians and *centralized* dietitians did not work to achieve healthy weight.
- Results contrary to 2 prior studies.
- Both groups gained weight. On average, intervention group children gained 1kg (2.2 lbs.) more during the two-year study than children in the Usual Care group.
- *Note that much of this study took place during the COVID-19 pandemic.*



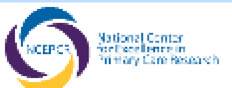
American Academy of Pediatrics Pediatric Research in Office Settings (AAP PROS)

Please feel free to reach out and learn more about AAP PROS!

Our email: PROSops@aap.org

Our website: www.aap.org/pros

Join our mailing list:



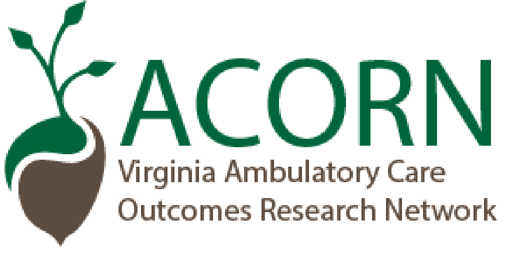
Role of PBRNs in Helping Primary Care Practices and the Communities They Serve

Jacqueline Britz, MD, MPH

Co-Director, The Virginia Ambulatory Care Outcomes Research Network (ACORN)

Department of Family Medicine and Population Health, Virginia Commonwealth University

Ambulatory Care Outcomes Research Network (ACORN)



ACORN

Virgini

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Parkersburg
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Baltimore
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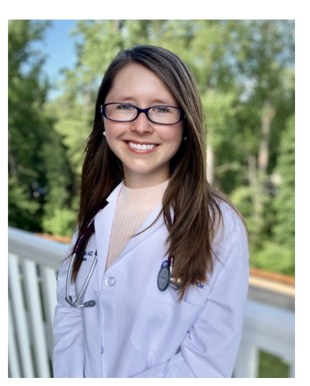
Annapolis
Dover
Del.
Washington
St. Charles
Chesapeake Bay
Charlottesville
Virginia
Lynchburg
Newport News
Hampton
Virginia Beach
Danville

ACORN Overview

- Established in 1996 as one of original Agency for Healthcare Research and Quality PBRNS
- 524 member practices – “non-denominational”
  - Spanning every health system, FQHC, Accountable Care Organization, and census tract in the state
  - Range in size from 1 to 64 clinicians
  - Operate under the full spectrum of ownership and insurance models
  - 52 unique electronic health record instances, spanning 14 systems

Some ACORN Team Members

Alex Krist



Jackie Britz

Steve Woolf

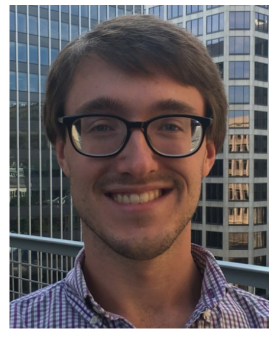
Marshall Brooks

Marie Shoen

Roy Sabo

Scott Strayer

Gaby Villalobos



Ben Webel

Leah Gregory

Adam Funk

Jong Hyung Lee

Evan French

Jenn Gilbert

More ACORN Team Members

- Liz Wolf
- Bergen Nelson
- Bernard Fuemmeler
- Mignonne Guy
- Carrie Miller
- Derek Chapman
- Emily Zimmerman
- Becca Etz
- Martha Gonzales
- Sarah Reves
- Tyler Burton

ACORN Identifies Every Primary Care Clinician and Practice in Virginia

- Statewide effort to support research, policy, and clinical care
- Triangulate state licensure data, National Plan & Provider Enumeration System, and Virginia All-Payers Claims Data
- Manually verify and nest clinicians into practices – process evolving!
- Every 4 years survey every practice

Using State All-Payer Claims Data to Identify the Active Primary Care Workforce: A Novel Study in Virginia

Alison N. Huffstetler, MD[1]
Roy T. Sabo, PhD[2]
Martin Lavallee, PhD[3]
Ben Webel[3]
Paulette Lail Kashiri, MPH[1]
Jacqueline Britz, MD, MPH[1]
Mark Carrozza, MA[3]
Michael Topmiller, PhD[3]
Elizabeth R. Wolf, MD[4]
Beth A. Bortz, MPP[5]
Ashley M. Edwards, MHDS[5]
Alex H. Krist, MD, MPH[1]

[1]Department of Family Medicine and Population Health, Virginia Commonwealth University, Richmond, Virginia
[2]Department of Biostatistics, Virginia Commonwealth University, Richmond, Virginia
[3]Health Landscape, Cincinnati, Ohio
[4]Department of Pediatrics, Virginia Commonwealth University, Richmond, Virginia
[5]Virginia Center for Health Innovation, Richmond, Virginia

ABSTRACT

PURPOSE Primary care is the foundation of the health care workforce and the only part that extends life and improves health equity. Previous research on the geographic and specialty distribution of physicians has relied on the American Medical Association's Masterfile, but these data have limitations that overestimate the workforce.

METHODS We present a pragmatic, systematic, and more accurate method for identifying primary care physicians using the National Plan and Provider Enumeration System (NPPES) and the Virginia All-Payer Claims Database (VA-APCD). Between 2015 and 2019, we identified all Virginia physicians and their specialty through the NPPES. Active physicians were defined by at least 1 claim in the VA-APCD. Specialty was determined hierarchically by the NPPES. Wellness visits were used to identify non–family medicine physicians who were providing primary care.

RESULTS In 2019, there were 20,976 active physicians in Virginia, of whom 5,899 (28.1%) were classified as providing primary care. Of this primary care physician workforce, 52.4% were family medicine physicians; the remaining were internal medicine physicians (16.5%), pediatricians (16.8%), obstetricians and gynecologists (11.8%), and other specialists (0.5%). Over 5 years, the counts and relative percentages of the workforce made up by primary care physicians remained relatively stable.

CONCLUSIONS Our novel method of identifying active physicians with a primary care scope provides a realistic size of the primary care workforce in Virginia, smaller than some previous estimates. Although the method should be expanded to include advanced practice clinicians and to further delineate the scope of practice, this simple approach can be used by policy makers, payers, and planners to ensure adequate primary care capacity.

Ann Fam Med 2022;20:446-451. https://doi.org/10.1370/afm.2854

Conflicts of interest: authors report none.

CORRESPONDING AUTHOR
Alison N. Huffstetler
Department of Family Medicine and Population Health
Virginia Commonwealth University
830 E Main St
Richmond, VA 23219
alison.huffstetler@vcuhealth.org

INTRODUCTION

Primary care is foundational to a high-functioning and equitable health system and is the only part of the health care workforce that extends life and improves health equity.[1,2] The physician specialties that provide primary care typically include adolescent medicine, family medicine, general practice, geriatric medicine, internal medicine, joint internal medicine and pediatrics, and pediatrics.[3] A comprehensive evaluation of the primary care workforce is essential to establish adequate and equitable access to primary care in every community. Additionally, as the population grows and ages, communities should plan for future workforce needs. Finally, to adapt policies that address primary care reimbursement, knowing which physicians provide primary care is essential. By establishing the primary care workforce, it will be possible to further describe the scope, practice setting, and complexity of care provided by primary care physicians. Furthermore, by designating which physicians provide primary care, resources and primary care spending can be more accurately and equitably distributed.

The American Medical Association (AMA) Masterfile has been widely used to describe the physician workforce.[1,3] Not all researchers have access to the Masterfile, so we propose a method that offers a workforce analysis for those states with claims data and that does not have the limitations of the Masterfile. Although the Division of Health Solutions Data Management makes continuous updates, physician reporting is not mandated and specialty designation or addresses may be outdated or inaccurate.[4] Further, the Masterfile is separated into active and inactive physicians, but activity is self-reported by physicians and classified as working

Key ACORN Activities in 2025

- Supporting 16 trials with $55 million funding
- 58 publications
- 8 grants submitted (2 center grants)
- Highly integrated into Wright Regional Translational Science Center
- Calculating delivery of 4Cs for each practice and clinician
- 2 Community Advisory Boards
- Supports Virginia Standing Committee on Primary Care

ACORN Domains of Research

Mission – conduct research that matters to primary care

- Prevention
- Chronic are
- Primary care access
- Opioids / Substance use
- Measurement
- Informatics
- Team-based care
- Whole health
- Addressing social drivers
- Translational science
- Advanced primary care management
- Practice facilitation
- Cancer

ACORN Domains of Research

05 Community

04 Health System

03 Primary Care Practice

02 Primary Care Clinician

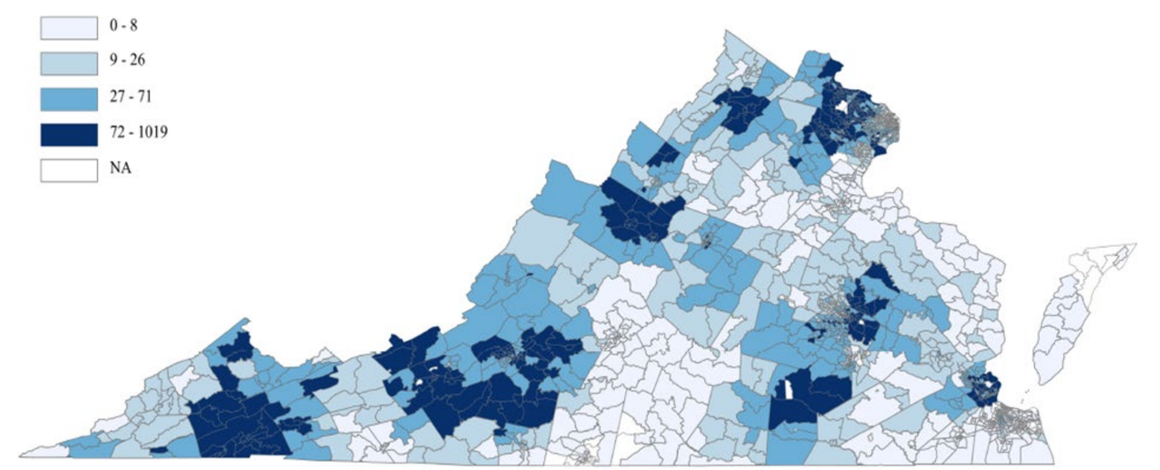
01 Patient

CLINIC

Longitudinal Partnerships and Community Engagement

ACORN Example of Impact: Practice Facilitation for Unhealthy Alcohol Use Screening and Counseling

Efforts Benefit Research: We Use Denominator to Show Broad and Representative Recruitment



In EvidenceNow we enrolled 76 practices

Practices care for people in 97.3% census tracts

- Patients had similar demographics as Virginia generally:
  - Race (21.7% vs. 20.0% Black)
  - Ethnicity (9.5% vs 10.2% Hispanic)
  - Insurance status (6.4% vs. 8.0% uninsured)
  - Education (26.0% vs. 32.5% high school graduate or less)

J Clin Transl Sci. 2023 Apr 14;7(1):e110

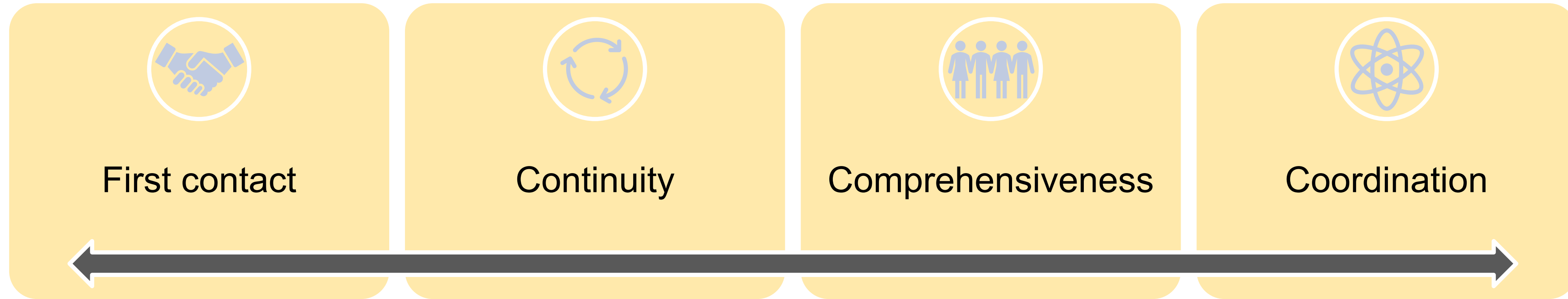
ACORN Example of Impact: Practice Facilitation for Unhealthy Alcohol Use Screening and Counseling

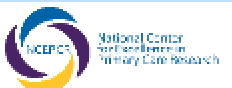
Efforts Benefit Research: Apply Findings to Practice Reach to Assess Public Health Impact

- The practices that completed practice facilitation saw 412,409 unique adults in 2021
- The observed 33.4% increase in screening with recommended screening instruments in intervention practice means 114,604 additional patients will be screened annually (1.2% of Virginians)
- The observed 2.4% increase in unhealthy alcohol use identification means an additional 8,235 patients will be identified and 5,155 will receive brief interventions

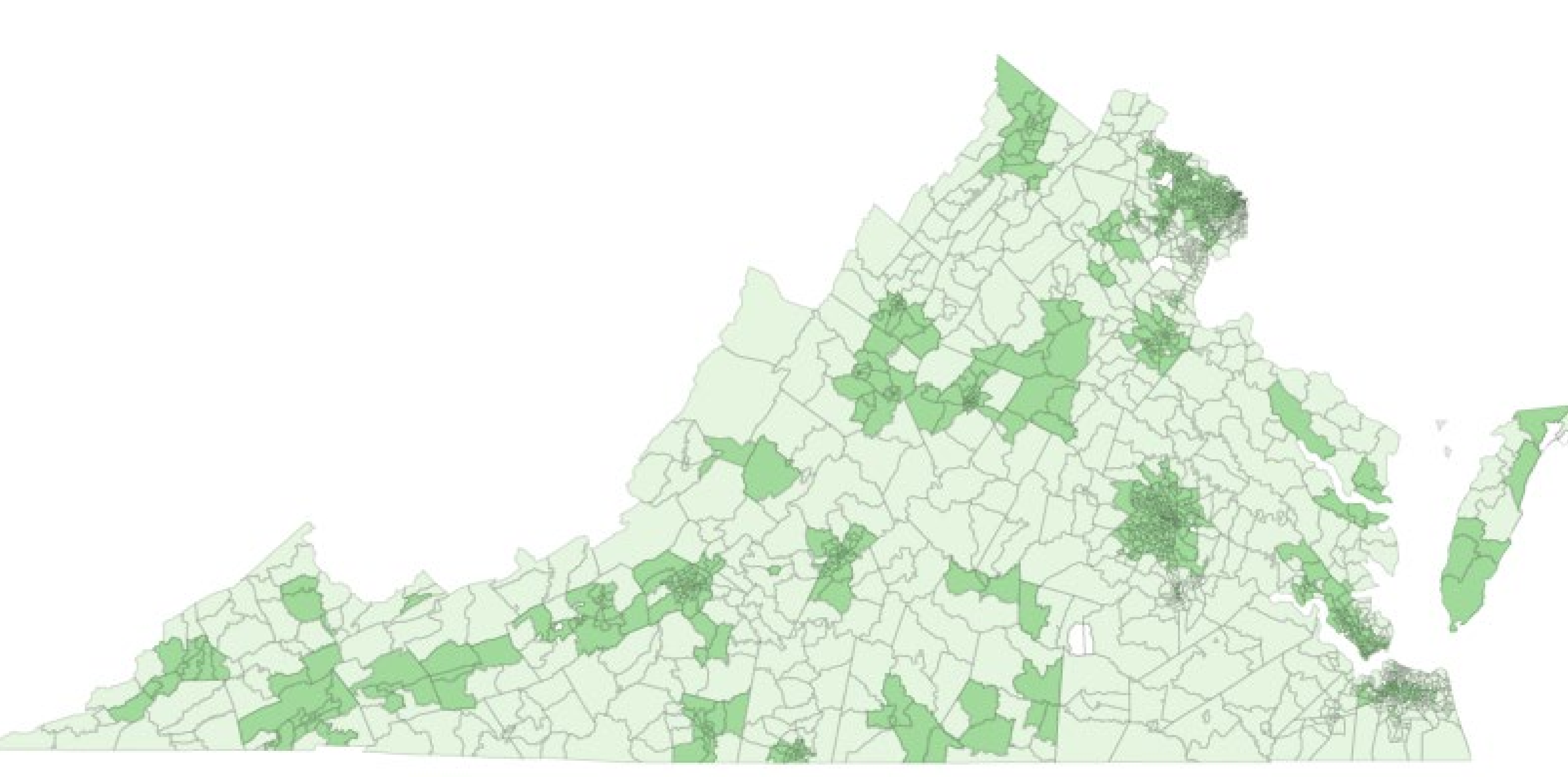
Exploring High Quality Primary Care

- There are many factors impacting the implementation of high-quality primary care, which cause burnout and turnover
- PBRNs can identify frontline successes/challenges to better support primary care
- We explore:





Mapping Primary Care Shortages



Provider capacity within a 30 minute drive that covers 80% or more of the population is considered to be adequate provider coverage. Primary care workforce in 2019 and population counts from ACS 2019 used

'Our systems are broken': ABC 13 investigates doctor shortages

by Danner Evans | Thu, January 29, 2026 at 6:00 PM
Updated Fri, January 30, 2026 at 11:27 AM

Wendy Barnes had to travel to Charlottesville to get testing in a timely manner (Photo: ABC 13)

Provider adequacy

- Deficit of providers
- Adequate providers

Source: Hannah Shadowen, VCU Department of Family Medicine and Population Health, Ambulatory Care Outcomes Research Network

Virginia needs 24% more PCPs Today

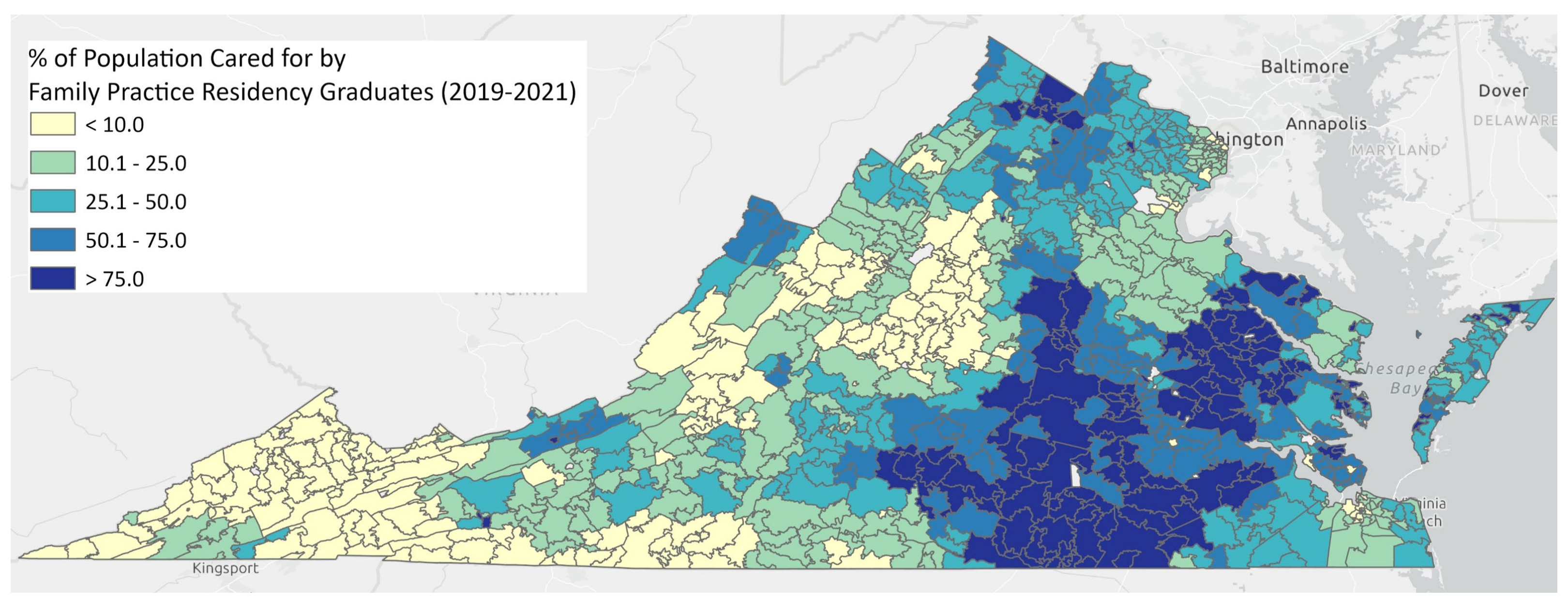
1,203 (24%) more PCPs needed **today** for each Virginian to have a PCP*

Based on current panel sizes & FTE

Currently 4,872 PCPs in VA

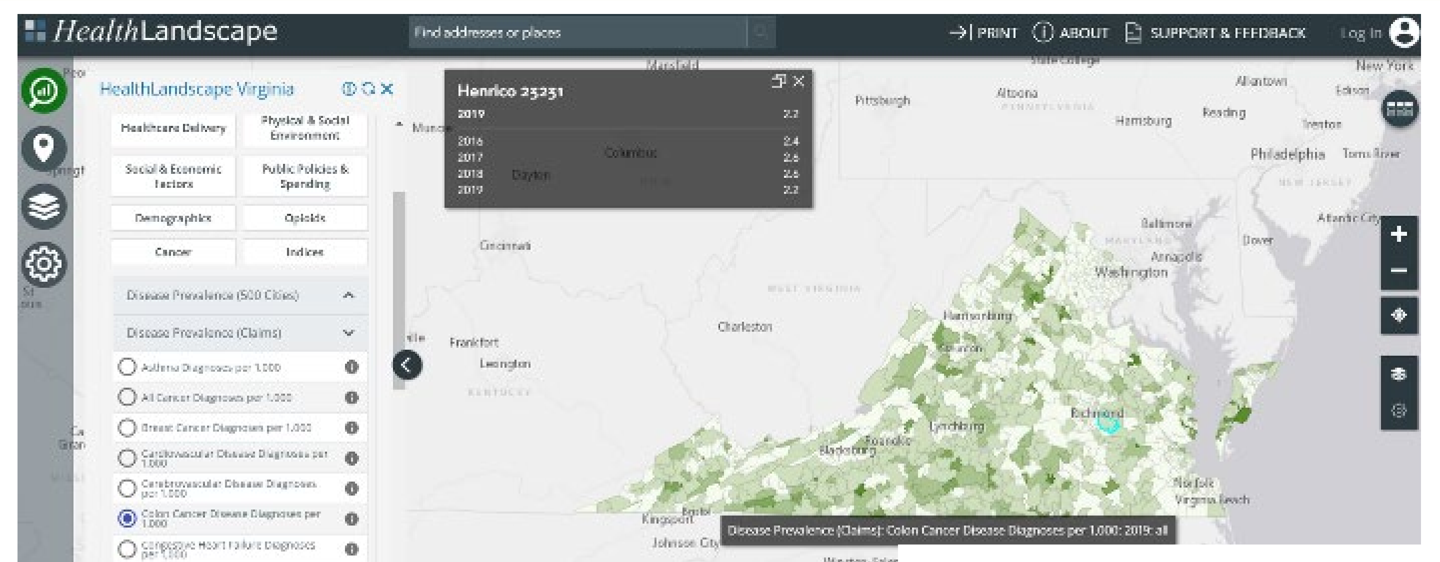
*30% (1,541) PCPs are 60 years or older and may retire or have reduced panel of patients in the next 5 years

The Good News: Virginia Residency Programs Addressing the Gap



- Over 3 years, 833 graduates from VCU Family Medicine residency programs cared for over 1.3 million VA residents (>15% Virginians)
  - Riverside Family Medicine graduates saw over 50% of Newport News City Residents

ACORN Example: Seeking to Understand the Socio-Ecological Context of Each Community



HealthLandscape Virginia utilizes All Payers Claims Data and public health data sources

Brightspot and Community Asset Mapping plus Community Engagement efforts

01 Identification
Identify and prioritize problem and socioecological factors contributing to outcomes

02 Modeling
Create statewide multivariate model to predict outcome

03 Residuals Analysis
Compare actual and predicted outcomes for each census tract to identify Bright and Challenge Spots

04 Asset Mapping
Identify factors, assets, and approaches contributing to Bright and Challenge Spots

05 Dissemination
Design research, transform care, and implement policy to disseminate Bright Spot assets and approaches to other communities

06 Monitoring
Longitudinally track changes in socioecological factors and outcomes.

Identifying and Learning from Bright Spots for Opioid Mortality in Virginia

AHRQ Agency for Healthcare Research and Quality

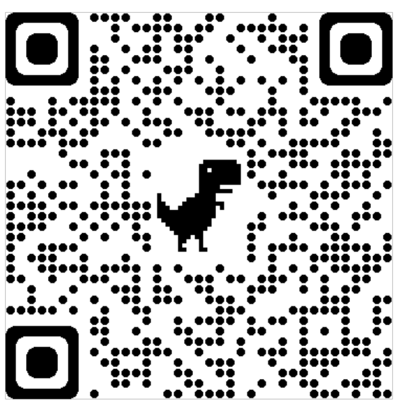
Washington
Wayne National Forest
West Virginia
Charleston
Shenandoah National Park
Richmond
Lynchburg
Roanoke
Virginia Beach
Kingsport
Johnson City
Blue Ridge Parkway

Implications for PBRN Data and Perspectives

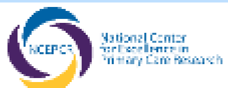
Understand value of primary care	Support primary care practices	Strengthen high-value quality care	Advocacy
• Measures and data to demonstrate true value of primary care • Identify Bright Spots • Tension between 4Cs	• Help clinics interpret measures • Help clinics access resources and tools (e.g., AI) • Monitoring impact of implementation	• Learn from successful models • Design care teams • Reduce burdens on primary care	• Ensure PCPs are represented in policy discussions (e.g., shortages, HPSA, payment reform, tech/AI) • Primary care spend

Serving Primary Care by Knowing Primary Care

Please Visit the ACORN Website!



https://www.acornvirginia.org



Questions

Please post your questions in the chat!

Thank you

We value your feedback.

Please complete the short evaluation poll after this webinar!