

Pediatrician Experience: Participating in the AAP
PROS Network Research
(and answering your burning practice questions)

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American Academy of Pediatrics
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PLAN FOR TODAY

- Identify key features of the PROS model
- Showcase the pediatrician/pediatric office experience of participating in PROS research
- Invite participation in active PROS studies that are partnering with PCC
 - Telehealth
 - Long COVID



PEDIATRIC RESEARCH IN OFFICE SETTINGS (PROS)

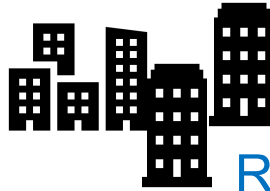
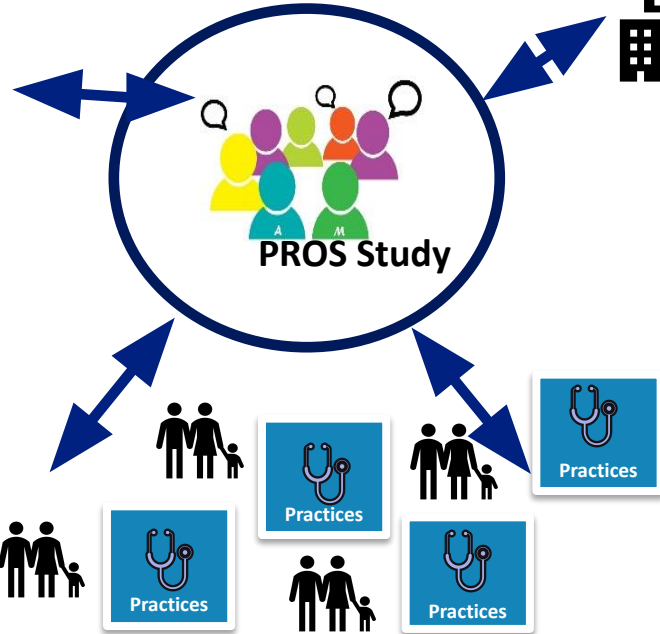
- Mission:
 - To improve the health of children and enhance primary care practice by conducting and fostering national collaborative practice-based research
- Founded 1986 by the American Academy of Pediatrics (AAP)
(37 years strong!)
- Studies bring together:
 - Community-based pediatricians
 - Parent representatives
 - Pediatric researchers



PROS IS UNIQUE IN HOW WE PARTNER WITH STAKEHOLDERS



Pediatrician
Leaders and
AAP Staff



Researchers
and Partnering
Institutions,
such as PCC

Practices, Families,
and Children



TYPES OF RESEARCH CONDUCTED, 1986-2008

- Descriptive studies of unanswered questions
- Randomized trials testing interventions (intervention studies) to improve care in real world settings
- Studies of how to implement new evidence and disseminate successful interventions



EXAMPLES OF MAJOR DESCRIPTIVE AND INTERVENTION STUDIES CONDUCTED BY PROS

- Vision screening of preschool-age children
- Child abuse reporting patterns
- Child safety and injury prevention
- Febrile infants
- Maternal/newborn experiences around their hospital discharge



IN 2009, VERMONT'S MORT WASSERMAN HAD A VISION

“...opening the possibility of using electronic data about the health care process and outcomes to conduct both randomized multi-site interventions and large-scale observational studies of comparative effectiveness.”



PROS EXPANDED THE TYPES OF STUDIES TO INCLUDE EHR-BASED STUDIES

- **2010: ePROS**
 - Consolidated electronic health records from a subset of PROS practices
 - **PCC and PROS became research partners**
- **2015: CER² Comparative Effectiveness Research *through* Collaborative Electronic Reporting**
 - Today CER² has data from 8 systems, 222 practice sites in 27 states, 2,119 Pediatricians and Nurse Practitioners, and >2 million children



EHR-BASED RESEARCH STUDIES IN PROS

ARTICLE | DECEMBER 01 2016

Preschool ADHD Diagnosis and Stimulant Use Before and After the 2011 AAP Practice Guideline ✓

Alexander G. Fiks, MD ✉; Michelle E. Ross, PhD; Stephanie L. Mayne, PhD; Lihai Song, MS; Weiwei Liu, MS; Jennifer Steffes, MSW; Banita McCarn, MEd; Robert W. Grundmeier, MD; A. Russell Localio, PhD; Richard Wasserman, MD

ARTICLE | OCTOBER 01 2020

Persistent Hypertension in Children and Adolescents: A 6-Year Cohort Study ✓

David C. Kaelber, MD, PhD, MPH ✉; A. Russell Localio, PhD; Michelle Ross, PhD; Janeen B. Leon, MS, RDN, LD; Wilson D. Pace, MD; Richard C. Wasserman, MD, MPH; Robert W. Grundmeier, MD; Jennifer Steffes; Alexander G. Fiks, MD, MSCE

RESEARCH BRIEFS | OCTOBER 07 2022

HPV Vaccinations at Acute Visits and Subsequent Adolescent Preventive Visits ✓

Alexander G. Fiks, MD, MSCE ✉; Chloe Hannan, MS; Russell Localio, PhD; Mary Kate Kelly, MPH; Alisa J. Stephens-Shields, PhD; Robert W. Grundmeier, MD; Laura P. Shone, PhD, MSW; Jennifer Steffes, MSW; Abigail Breck, BA; Margaret Wright, PhD; Cynthia M. Rand, MD, MPH; Christina Albertin, MPH, BSN; Sharon G. Humiston, MD, MPH; Greta McFarland, MD; Dianna E. Abney, MD; Peter G. Szilagyi, MD, MPH

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EHR-BASED RESEARCH STUDIES IN PROS

ARTICLES | SEPTEMBER 01 2020

Reducing Antibiotic Prescribing in Primary Care for Respiratory Illness **FREE**

Matthew P. Kronman, MD, MSCE ✉; Jeffrey S. Gerber, MD, PhD; Robert W. Grundmeier, MD; Chuan Zhou, PhD; Jeffrey D. Robinson, PhD; John Heritage, PhD; James Stout, MD; Dennis Burges, BA; Benjamin Hedrick, BA; Louise Warren, MPH; Madeleine Shalowitz, MD, MBA; Laura P. Shone, DrPH, MSW; Jennifer Steffes, MSW; Margaret Wright, PhD; Alexander G. Fiks, MD, MSCE; Rita Mangione-Smith, MD, MPH

ARTICLE | MAY 01 2016

Variations in Mental Health Diagnosis and Prescribing Across Pediatric Primary Care Practices ✓

Stephanie L. Mayne, MHS; Michelle E. Ross, PhD; Lihai Song, MS; Banita McCarn, MEd; Jennifer Steffes, MSW; Weiwei Liu, MS; Benjamin Margolis, PhD; Romuladus Azuine, DrPH; Edward Gotlieb, MD; Robert W. Grundmeier, MD; Laurel K. Leslie, MD; Russell Localio, PhD; Richard Wasserman, MD; Alexander G. Fiks, MD ✉

PEDIATRICS PERSPECTIVES | MAY 01 2017

Beyond the Label: Steering the Focus Toward Safe and Effective Prescribing ✓

Angela S. Czaja, MD ✉; Alexander G. Fiks, MD; Richard C. Wasserman, MD; Robert J. Valuck, PhD; for the Comparative Effectiveness Research Through Collaborative Electronic Reporting (CER2) Consortium

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MANY PROS STUDIES HAVE IMPACTED POLICY AND PRACTICE:

Contributing studies:

- Febrile infants



FROM THE AMERICAN ACADEMY OF PEDIATRICS | CLINICAL PRACTICE GUIDELINE | AUGUST 01 2021

Clinical Practice Guideline: Evaluation and Management of Well- Appearing Febrile Infants 8 to 60 Days Old ✓

Robert H. Pantell, MD, FAAP ✉; Kenneth B. Roberts, MD, FAAP; William G. Adams, MD, FAAP; Benard P. Dreyer, MD, FAAP;
Nathan Kuppermann, MD, MPH, FAAP, FACEP; Sean T. O'Leary, MD, MPH, FAAP; Kymika Okechukwu, MPA;
Charles R. Woods, Jr., MD, MS, FAAP; SUBCOMMITTEE ON FEBRILE INFANTS

- Childhood obesity
treatment

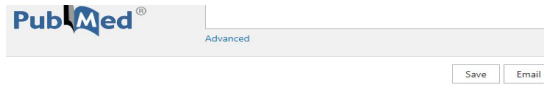


FROM THE AMERICAN ACADEMY OF PEDIATRICS | CLINICAL PRACTICE GUIDELINE | JANUARY 09
2023

Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents With Obesity ✓

Sarah E. Hampl, MD, FAAP ✉; Sandra G. Hassink, MD, FAAP; Asheley C. Skinner, PhD; Sarah C. Armstrong, MD, FAAP;
Sarah E. Barlow, MD, MPH, FAAP; Christopher F. Bolling, MD, FAAP; Kimberly C. Avila Edwards, MD, FAAP;
Ihuoma Eneli, MD, MS, FAAP; Robin Hamre, MPH; Madeline M. Joseph, MD, FAAP; Doug Lunsford, MEd;
Eneida Mendonca, MD, PhD, FAAP; Marc P. Michalsky, MD, MBA, FAAP; Nazrat Mirza, MD, ScD, FAAP;
Eduardo R. Ochoa, Jr., MD, FAAP; Mona Sharifi, MD, MPH, FAAP; Amanda E. Staiano, PhD, MPP;
Ashley E. Weedn, MD, MPH, FAAP; Susan K. Flinn, MA; Jeanne Lindros, MPH; Kymika Okechukwu, MPA

- Innovative method to
correct growth data in
EHRs



> J Am Med Inform Assoc. 2017 Nov 1;24(6):1080-1087. doi: 10.1093/jamia/ocx037.

Automated identification of implausible values in growth data from pediatric electronic health records

Carrie Daymont ¹, Michelle E Ross ², A Russell Localio ², Alexander G Fiks ^{3 4 5 6 7},
Richard C Wasserman ^{7 8}, Robert W Grundmeier ³



AAP IMPLEMENTATION AND DISSEMINATION

Guidelines, clinical policy

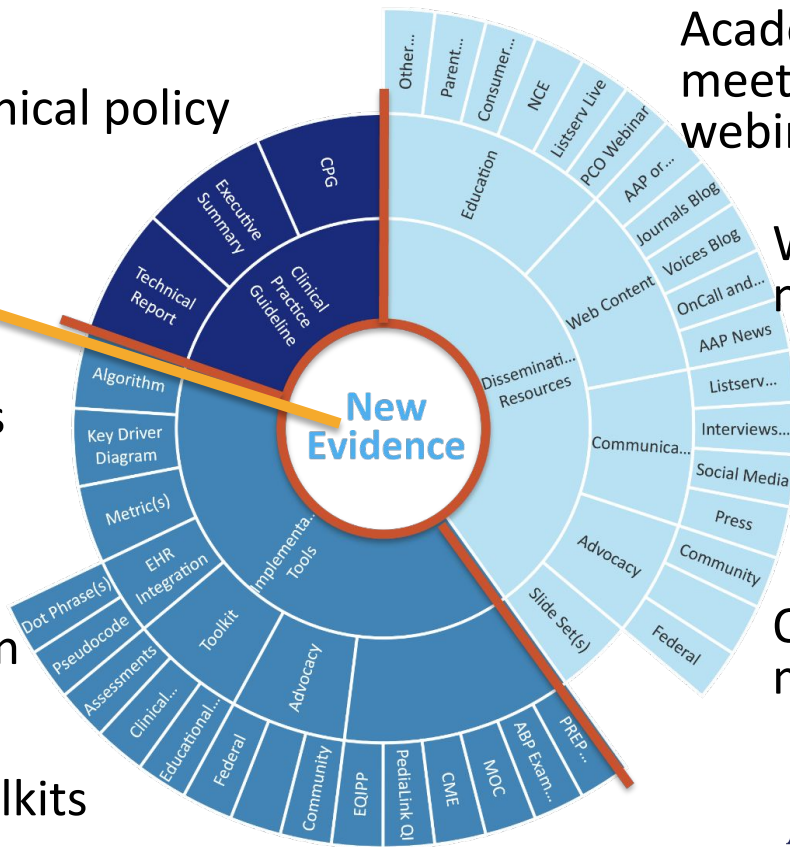
*New Evidence from
PROS and others*



Metrics

EMR integration

Clinical training, toolkits



Academic & professional meetings, brochures, books, webinars

Website, blog, and news products

Media, press, and member communications

Organization and member advocacy



Figure adapted from V. Shorte: AAP Guideline Dissemination and Implementation Framework

SUMMARY

- Over 40 intervention and EHR based studies developed and implemented in partnership with pediatricians and pediatric practices.
- Many studies have impacted pediatric practice and policy.
- All studies have happened with the input of multiple stakeholders and pediatric practices.



WHY PARTICIPATE IN A PROS RESEARCH STUDY?

Since the network's inception:

- “Primary care practice-based research prevents or delays burnout or the ‘dissatisfied pediatrician syndrome.’ It turns just another otitis media or case of pharyngitis into an opportunity to resolve an unanswered question that has direct relevant to your practice.” –PROS Pennsylvania Coordinator, 1998
- “Participating in research livens up practice.” –PROS VT Coordinator, 1998



WHY PARTICIPATE IN A PROS RESEARCH STUDY?

Intervention Studies:

- To have an opportunity to use treatments or interventions before they are broadly available.
- To make practice improvements with support from a study team.
- To have a role in how research is adapted and integrated into pediatric practice.
- To potentially learn techniques that can help support value-based care goals.

EHR-Based Studies:

- To help researchers access data needed to more definitively answer important pediatric questions from across the US—guiding practice and policy.
- Very low burden--most of the work is done behind the scenes.
- PROS can share data gathered and analyzed back with the practice to provide insights into key pediatric concerns.



What is it like to participate in a PROS study: PCC Practices' Experiences



SPOTLIGHT ON THE STOP HPV STUDY



An intervention to support clinicians in taking advantage of opportunities to offer the HPV vaccination for children ages 11-17:

- 3 online clinician communication skills training modules
- Clinician performance feedback reports (created from EHR data)
- Integration of HPV vaccine clinician prompts into routine clinical practice



CLINICIAN FEEDBACK ABOUT THE STOP HPV STUDY



Clinicians found participation to be an efficient way to learn:

- *“Easy to do”*
- *“Practical tips you can use right away”*
- *“Length was good”*
- *“A lot of content in a brief amount of time”*

All interviewees indicated the study made a *“lasting impact”* and that they continue to use strategies learned in the study:

- As one person said about a particular communication strategy, *“Now use [the approaches we learned] not only for HPV but for all vaccines”*



ADDITIONAL BENEFITS OF PARTICIPATING IN PROS STUDIES

Most studies offer:

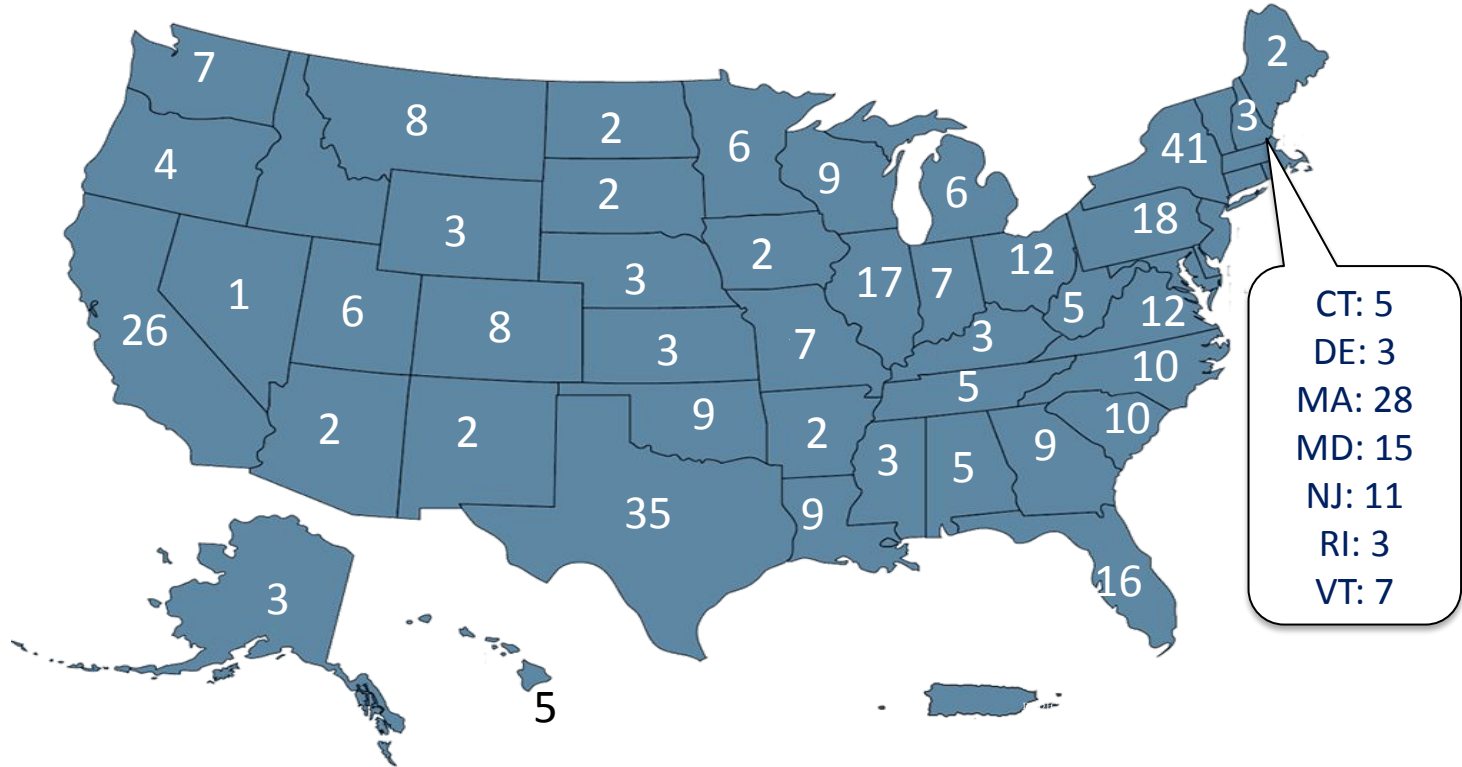
- MOC Part II or IV and/or CME credits
- Honoraria
- Opportunities to be recognized in publications and presentations of study results



PROS CURRENT STUDIES



>400 UNIQUE PRACTICES IN PROS STUDIES 2010-2023





TWO PROS STUDIES ARE IN NEED OF PRACTICES!

- Telemedicine Integrated into Pediatric Primary Care (TIPP-C)
- Researching COVID to Enhance Recovery (RECOVER)



TIPP-C



- Telemedicine Integrated into Pediatric Primary Care
- Starting now!
- Goal is to identify actionable strategies for promoting the use of telemedicine in primary care in ways that improve child health, health equity, and possibly pediatrician quality of life.
- Aim #1: Examine visit level quality of primary care telemedicine visits relative to primary care in-person visits.
- Aim #2: Compare health outcomes for children (unit of analysis is the child/patient) who receive care in practices with high, mid, and low telemedicine use.



TIPP-C STUDY DETAILS

- An EHR based study with ~2 data pulls a year over the course of four years, with the chance to participate in an interview about telemedicine in year 3.
- Very little you or your practice would have to do!



RESEARCHING COVID TO ENHANCE RECOVERY (RECOVER)

- RECOVER seeks to understand, prevent, and treat long-term health effects related to SARS-CoV-2 infection.
- Large, national, multi-center descriptive study to answer the question of what Long COVID looks like in children, not an intervention or EHR study.
- Community pediatric practices fill a unique role in the study because many are referring families from **communities not well represented in national research studies.**
- We want the results from children in your practice to inform this relatively simple study.

RESEARCHING COVID TO ENHANCE RECOVERY (RECOVER)

- We are looking for pediatric practices willing to refer families (English or Spanish speaking) to the study enrollment team at Rutgers to be consented (remotely).
- The vast majority of families will participate remotely (surveys, test kits sent home).
- A smaller number may agree to receive a home visit from a nurse.
- Very few would be asked to travel.
- We want the results from children in your practice to inform this relatively simple study.

READY TO JOIN A PROS STUDY?



Contact us at:

- afiks@chop.edu
- kdavis@aap.org
- tim@pcc.com



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- PROS current studies receiving funding from:
 - National Institute of Health
 - *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD)
 - National Cancer Institute (NCI)
 - National Institute of Alcohol Abuse and Alcoholism (NIAAA)
 - Patient-Centered Outcomes Research Institute (PCORI)



Thank you!



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