# Latest Findings from the AAP Pediatric Research in Office Settings (PROS) Network

Featuring AAP PROS/PCC Research Collaborations to Advance Child Health

Alexander G. Fiks, MD, MSCE, FAAP PROS Director, American Academy of Pediatrics July 17, 2025







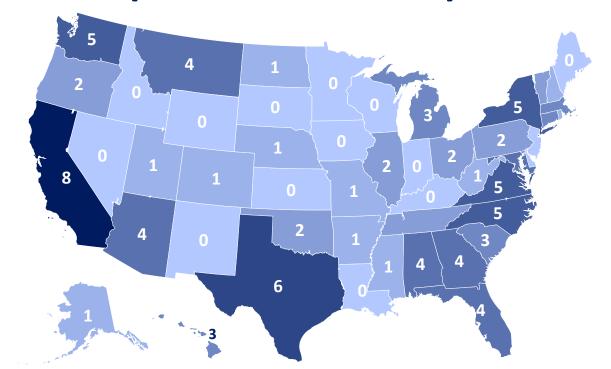
### **Objectives**

#### You will learn about:

- How PCC and AAP PROS are partnering on current studies.
- Why PROS participation is valuable Dr Hiral Lavania.
- Opportunities to participate in PROS research.



# Practices in current PROS studies (N=98, 5 studies)



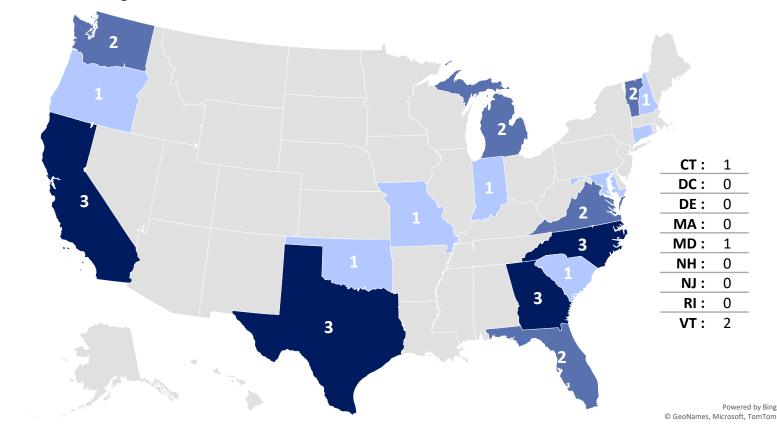
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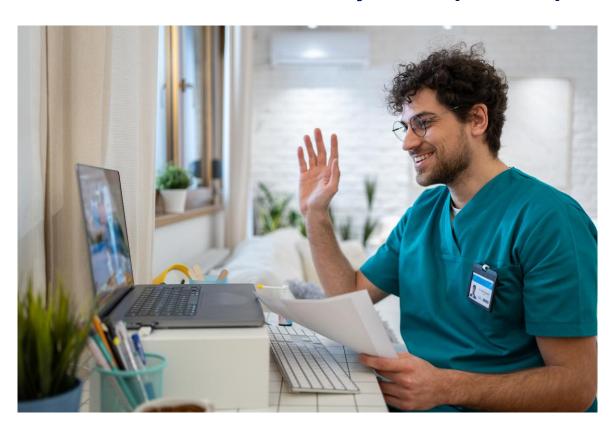
### **30 PCC practices in current PROS studies**



### **Telemedicine Integrated into Pediatric Primary Care (TIPP-C)**

How can telemedicine best be used to improve child health?





## **Key Findings: Evolving Clinical Use of Telemedicine (TM) Visits in Primary Care for Children**

**Objective:** Describe the evolving patterns of TM use for problem-based visits in primary care for children, across six clinical domains and on a national scale.

Behavioral health	Respiratory	Endocrine
Infectious disease	Dermatology	Digestive health

Sample: 13,903,723 problem-based visits during the study period (2019-2023).



## **Key Findings: Evolving Clinical Use of Telemedicine (TM) Visits in Primary Care for Children**

#### TM usage by domain 2020 vs. 2024

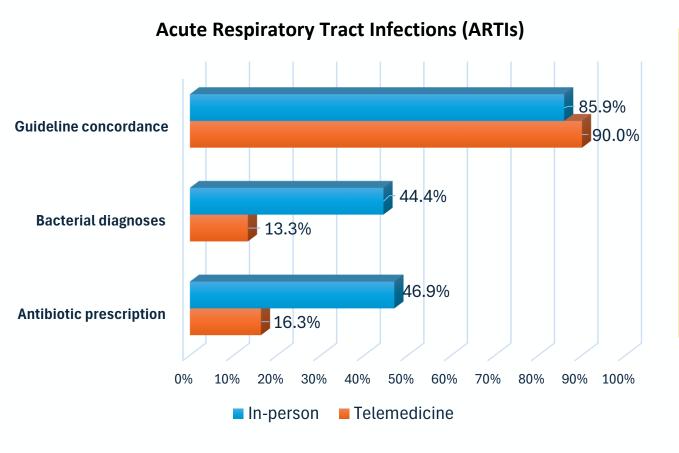
	April 2020		2024	
#1	Behavioral Health	80%	Endocrine	20%
#2	Dermatology	66%	Behavioral Health	15%
#3	Endocrine	56%	Digestive Health	6%
#4	Infectious Disease	56%	Infectious Disease	4%
#5	Digestive Health	53%	Dermatology	4%
#6	Respiratory	51%	Respiratory	3%

#### Take away:

In 2024, 1 out of every 16 problem-based visits in our sample was TM.



#### **Key Findings: Antibiotic Management**



Take away: We found evidence of judicious antibiotic prescribing for children during TM integrated within primary care practices.



### Text4Vax: Understanding the Effectiveness and Implementation of Text Message Reminders for Pediatric COVID-19 and Influenza Vaccines

#### Text message reminders were refined based on parent feedback:

- Messages were developed based on behavioral science principles.
- 4 PROS practices/18 parents took part in interviews (English/Spanish).
- Parents were asked to assign letter grades (A-F) based on how motivating the messages were.
- Messages were iteratively refined and messages with lower grades discarded.
- An abstract about this process was presented at PAS in April 2025.

#### **Overview of Parent Feedback on Text Message Reminder Content**

#### **Elements to include**

- Practice's name and phone number.
- A link to schedule appt.
- Child's name
   (unless >1 child
   then combine into
   one text).

#### **Preferred themes**

- Planning prompts.
- Not "missing out."
- How vaccines help get a body ready to challenge a virus.
- Being "healthier" when everyone is vaccinated.

### Themes that did NOT resonate

- Protecting the community.
- Low vaccine supply.
- Metaphors related to software updates.



# REsearching COVID to Enhance Recovery (RECOVER)



What is long COVID in children?



### Most common prolonged symptoms associated with a history of COVID in young children

### **Infants and Toddlers** (0-2 years old)

- Trouble sleeping
- Fussiness
- Poor appetite
- Stuffy nose
- Dry cough
- Wet cough

### **Preschool-Age Children** (3-5 years old)



• Daytime tiredness/sleepiness or low energy









### Most common prolonged symptoms associated with a history of COVID in children

Common Symptoms in School-Age Children (6 to 11 years)

#### Feelings and behavior

- · Fear about specific things
- · Refusing to go to school

#### Heart and lungs

 Palpitations during exercise

#### Skin, hair, and nails

· Itchy skin or skin rash



Common Symptoms In Both School-Age Children and Adolescents

#### General symptoms

- · Trouble sleeping
- · Tired after walking
- Poor appetite
- Daytime tiredness/sleepiness or low energy

#### Feelings and behavior

- · Feeling depressed
- · Feeling anxious
- · Fear of crowds or enclosed spaces

#### Nerves and brain

- Headache
- · Trouble with memory or focusing

#### Heart and lungs

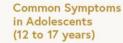
· Feeling lightheaded or dizzy

#### Stomach and intestines

- · Stomach pain
- Nausea or vomiting

#### Muscles and bones

- Body, muscle, or joint pain
- · Back or neck pain



#### Feelings and behavior

· Panic attacks

#### Ears, eyes, nose, and throat

- Change or loss of smell or taste
- Stuffy nose



# The STOP-HPV Trial 2018-2024

How can we best prevent cancer?





Visit Type
Well-Child Car

**Control Group** 

Interv. vs Control

Acute/Chronic

Intervention

**Control Group** 

Interv. vs Control

Group

# **Intervention Group**

### Percent of Office Visits with a Missed Opportunity (MO) for HPV vaccination Baseline Period 57.5% 55.0%

98.3%

98.4%

**Initial HPV Dose** 

Intervention

Period

48.7%

53.0%

97.9%

98.1%

**Communication Period** 

Baseline

Period

13.8%

10.3%

86.0%

88.6%

Change in MOs

(95% CI)

-8.8%

-2.0%

-6.8%

-0.3%

-0.3%

(-0.6%, 0.7%)

-9.7%, -3.9%)

**Subsequent HPV Dose** 

Change in MOs

(95% CI)

-3.8%

-1.3%

-2.5%

(-5.5%, 0.5%)

+2.7%

+1.6% +1.1%

(-1.5%, 3.7%)

Interventio

n Period

10.0%

8.9%

88.7%

90.1%



# **AAP PROS Working with State Title V Programs**



#### A new type of project in AAP PROS:

- We partnered with Michigan and Alabama Title V programs to disseminate the successful STOP-HPV communication skills training modules.
- Trainings originally developed for pediatric clinicians were adapted and shared with a broad range of health professionals.



#### 2018-2024 STOP-HPV Study: HPV Clinician Communication Skills Training designed for pediatricians



#### Year 1 (2023-2024) Michigan Title V: Tailored training for all health professionals

Michigan Department of Health and **Human Services** (MDHHS) Child and Adolescent **Health Centers** & School Wellness

**Programs** 

**MDHHS Immunizations** Program / Michigan State **Medical Society** / Immunization **Action Plan** 

**MDHHS** Local Maternal **Child Health Program** 

**Federally** Qualified Health Centers

**American Cancer Society** Michigan HPV Cancer Prevention **Alliance Summit** 

Michigan Association of **Local Public Health-Nurse** 

Administrator

Forum

/ in-person Vaccine Champions

MDDHS virtual

Year 2 (2024-2025) Michigan and Alabama Title V: Added dental professional module Shared training with oral health, pharmacist and perinatal groups

**Alabama Department** of Public Health **Cancer Control Communicable Disease Epidemiology Immunizations Family Health** Nursing **Pharmacy** 

**Examiners**; **AL Academy** of Pediatric **Dentistry:** AL & MI **Oral Health Coalitions** 

AL Board of

Dental

AL & MI **Primary** Care Assns.

AL Breast & **Cervical Cancer** Early Detection **Program** (ABCCEDP);

Operation

**Wipe Out** 

AL & MI **County Health Departments** 

AL Board of Nursing

**Cancer Society: UAB** Comprehensive **Cancer Center**;

**American** 

Mitchell Cancer Institute

Health; Family **Planning** 

Leadership

**ADPH &** 

**MDHHS** 

Maternal &

Child /

Infant

AL & MI **AAP** 

Chapters



# Building on the successes of the STOP-HPV study: a new study proposal

New proposal aims to increase influenza vaccine uptake by:

- Adapting the effective STOP HPV communication skills training for use with the influenza vaccine.
- Testing 4 best practice office system changes.





# The Comparative Effectiveness Research through Collaborative Electronic Reporting Program



CER<sup>2</sup> uses an EHR database with >3 million children to explore patterns and trends in child health.



The Allergic March Study 2022-23

How do allergic conditions unfold in childhood?







# **Confirming Allergic Disease Patterns: The Allergic March**

Question: When are children across the US being diagnosed with common allergies?

#### Findings:

 Confirmed the progression of onset for five common childhood allergies for children 0-18 years of age.

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%

### **Dr. Hiral Lavania**



One Family Pediatrics
Cumming, GA

Joined PROS in 2018
Became Georgia PROS Coordinator 2025

#### Participated in 5 studies:

- STOP-HPV (Cancer prevention)
- RECOVER (Long COVID)
- TIPP-C (Telemedicine use)
- Text4Vax (Influenza and COVID vaccine uptake)
- HEART+ (Teen suicide prevention)



# Multiple studies are in the pipeline



# Can pediatrician-delivered guidance around nighttime device use help improve adolescent sleep?

Developing Routines for Early Adolescent Media and Sleep (DREAMS)

# Secure firearm storage

Can pediatrician-delivered anticipatory guidance improve secure firearm storage behaviors of parents?



### Addressing decreasing rates of early childhood vaccination



Proposal will focus on receipt of:

Нер В	Rota
DTaP	Hib
MMR	IPV
Pneumococcal	Varicella

The proposal will take a two-tiered approach to communication with parents:

- Begin with presumptive approach
- For hesitant parents, engage in Motivational Interviewing-based conversation to address their concerns and build trust



# **Obesity and Injury Prevention**

AAP PROS is developing new study separate proposals about obesity and injury prevention.

### Questions?





