# CAPNET: Improving Child Abuse Care and Outcomes Through Multicenter Research

## Statement of Problem

Child physical abuse is a significant source of childhood morbidity, mortality and preventable health care costs. Each year, child protective service (CPS) agencies determine that more than 120,000 children in the U.S. have been victims of physical abuse, however, true incidence is likely much higher as these data have been shown to capture only a fraction of cases.

The health care costs associated with child abuse are staggering due to increased injury severity, longer lengths of hospital stays, higher fatality rates and worse outcomes compared to children with accidental injuries. Even greater are the long-term costs and trauma associated with increased rates of risky health behaviors, mental illness, chronic illness and early mortality among abuse survivors.

In addition, research shows disparities in the rates of evaluation for and diagnosis of physical abuse based on a patient's racial background and/or socioeconomic status. Recent publications indicate Child Abuse Pediatrics (CAP) physicians are not immune from implicit biases that influence diagnostic decision-making in cases of possible physical abuse. These disparities raise concern for both under-evaluation and under-diagnosis in some groups of children, as well as over-evaluation and over-diagnosis in other groups of children. Research has also demonstrated variation across hospitals in clinical practices to identify and evaluate victims of physical abuse. CAP research capacity has been relatively limited, given the impact of abuse on child health and well-being.

## Description

### CAPNET: Improving Child Abuse Care and Outcomes Through Multi-center Research

veloping a ri
abused child
d ✓ fair.

veloping a ri
abused child
d ✓ fair.

Relevant, reliable research in child physical abuse is urgently needed to improve the evaluation and protection of abused children.

In response to this deficit of resources and investigators in the field of child abuse research, the Child Abuse Pediatrics Network (CAPNET) was established to facilitate robust, multicenter research. It is a rich data resource that can be utilized by investigators to perform child abuse-related research, making the care of potentially abused children and their families more effective, safe and fair.

Children's Hospital of Philadelphia (CHOP), which serves as the Data Coordinating Center, along with the two other main network hubs (University of Utah and Children's Hospital of Colorado) created a common data collection form with uniform definitions that is used to codify all consultations for concern of child physical abuse at each participating site. Since launching in February 2021, this centralized database has served as a secure space for data collection, storage, quality assurance and sharing. Details on CAPNET data collection and quality assurance processes can be found here. CAPNET currently has eleven participating centers, and has processes in place to allow for future expansion into additional sites. To date, CAPNET has over 70 team members and more than 5,500 cases entered in the database.

An overview of the first eleven months of data was peer reviewed and published in *Academic Pediatrics*; descriptive findings showed that most presenting concerns were for either bruises or fractures, and primarily for children ages three or younger. There are currently several studies utilizing CAPNET data underway.

CHOP, as the Data Coordinating Center, is responsible for maintaining the centralized database and creating large de-identified datasets that will be made available to participating sites and external, credentialed researchers who are interested in investigating the prevention, diagnosis, and treatment of child abuse and neglect. Improving the outcomes of child physical abuse requires that we understand the child in the context of their family, community and nation. Thus, CAPNET also plans to link the data with longitudinal, county-level data to facilitate research related to the impact of the economy, policy and other events on child abuse rates.

## Next Steps

Relevant, reliable research in child physical abuse is urgently needed to improve the evaluation and protection of abused children and, concurrently, to guard against misdiagnoses that introduce harm by disrupting families and delaying diagnosis of rare diseases. Historically, this research has faced significant barriers, including relatively low numbers of patients in any single center, wide variability in symptoms displayed by patients when receiving care, inconsistency and bias in clinical evaluations, and lack of uniform data measures. CAPNET is establishing a reliable data infrastructure, uniform definitions, and a structured process of career development and data sharing. It is currently being used to simultaneously address multiple, practice-altering research questions, thus helping to protect the health and safety of children.

*This project page was last updated in August 2022.*

## Suggested Citation

Children's Hospital of Philadelphia, PolicyLab. *CAPNET: Improving Child Abuse Care and Outcomes Through Multi-center Research* [Online]. Available at: http://www.policylab.chop.edu. [Accessed: plug in date accessed here].

**PolicyLab Leads**

# Joanne Wood
# MD, MSHP

### Faculty Member

Joanne N. Wood (she/her) is a faculty member at PolicyLab at Children's Hospital of Philadelphia (CHOP), an associate professor of pediatrics at the University of Pennsylvania Perelman School of Medicine, and an attending physician in the Division of General Pediatrics. She is also the director of research and the Child Abuse Pediatrics Fellowship director for Safe Place: Center for Child Protection and Health at CHOP.

Since her medical training at the University of Pennsylvania, Dr. Wood has committed to improving quality of care and outcomes for vulnerable children, especially abused and neglected children. Her current work includes supporting families and decreasing risk of maltreatment through positive parenting interventions. Dr. Wood is also interested in strategies to improve the timely and accurate diagnosis of abuse in young children. She one of the principal investigators on a Eunice Kennedy Shriver National Institute of Child Health and Human Development funded project to establish CAPNET, a multi-center child abuse research network.

Dr. Wood attended the University of Pennsylvania School of Medicine, where she earned her medical degree in 2002. She was an intern and resident in pediatrics at CHOP, where she subsequently served as chief resident. In 2006, she participated in the Child Abuse Pediatrics Fellowship at CHOP. From 2007 to 2010, Dr. Wood was a Robert Wood Johnson Foundation clinical scholar at the University of Pennsylvania and earned her Master in Health Policy Research. Dr. Wood is board certified in General Pediatrics, Pediatric Hospital Medicine and Child Abuse Pediatrics.



Joanne Wood
MD, MSHP
Email:  WoodJO@chop.edu

**Team**

M. Kate Henry, MD, MSCE

Jan Leonard, MPH

Brandden Irizarry

Nathaly Perez Rojas

Patricia Villanueva

Kristine Campbell, MD, MSc

Daniel M. Lindberg, MD

## Funders of Project

## Project Contact

Joanne Wood, MD, MSHP

WOODJO@chop.edu

## Related Tools & Publications

- Missed Opportunities to Protect Kids: The Importance of Screening for Child Abuse
  Blog Post
  Jul 14, 2015

- Reducing Disparities in Child Abuse Evaluations
  Blog Post
  Jul 21, 2016

- Prevalence of Abuse Among Young Children With Rib Fractures: A Systematic Review
  Article
  Oct 2016

- Quality Improvement Initiative to Improve Abuse Screening Among Infants With Extremity Fractures
  Article
  Dec 2018

- Prevalence of Abuse and Additional Injury in Young Children With Rib Fractures as Their Presenting Injury
  Article
  Mar 2020

- [Improving Child Physical Abuse Detection & Reducing Disparities Within and Between Hospital Settings](#)
[Evidence to Action Briefs](#)
Feb 2022

- [The CAPNET Multi-center Data Set for Child Physical Abuse: Rationale, Methods and Scope](#)
[Article](#)
Jun 2022

- [Child Abuse Pediatrics Research Network: The CAPNET Core Data Project](#)
[Article](#)
Jul 2022

- [Predictors of Making a Referral to Child Protective Services Prior to Expert Consultation](#)
[Article](#)
May 2023

- [Yield of Skeletal Surveys in National Network of Child Abuse Pediatricians: Age is Key](#)
[Article](#)
Nov 2024

- [Development, Contributions, and Future Directions of a Multicenter Child Abuse Research Network](#)
[Article](#)
Mar 2024

- [Variation in Use of Neuroimaging in the Care of Infants Undergoing Subspecialty Evaluations for Abuse: A](#)
[Multicenter Study](#)
[Article](#)
Oct 2024

- [Ophthalmology Examinations in Children With Skull Fractures and Underlying Focal Hemorrhage](#)
[Article](#)
Mar 2025

- [Changes in Child Placement After Child Abuse Pediatrics Consultation for Suspected Physical Abuse](#)
[Article](#)
Sep 2025

- [Factors Associated With Child Protective Services Referrals in Young Children With Isolated Skull](#)
[Fractures](#)
[Article](#)
Dec 2025

- [Testing for Bleeding Disorders in Child Abuse: AAP Recommendation Adherence and Testing Results](#)
  [Article](#)
  May 2025

- [Occult Abdominal Trauma Screening in the Evaluation of Suspected Child Physical Abuse](#)
  [Article](#)
  Feb 2025

Related Projects

[Ensuring that Hospitals Adequately Screen for Child Abuse Injuries](#)
[Health Equity](#)