

**POLICYLAB**

RESEARCH AT A GLANCE | SPRING 2022

A SYNOPSIS OF EMERGING POLICYLAB RESEARCH

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# REDUCING STIs THROUGH EQUITABLE CHLAMYDIA SCREENINGS IN PEDIATRIC SETTINGS

**WHAT IS THE PROBLEM:**

Rates of chlamydia screening in pediatric care settings are both too low and often inequitable,<sup>1</sup> despite clinical practice guidelines.

*Chlamydia trachomatis* now has the highest prevalence ever recorded with **1.8 million cases in 2019.**<sup>2</sup>

Nearly half of infections occurred in youth ages **15-24.**<sup>3,4</sup>



2019 marked the sixth consecutive year<sup>2</sup> of rising rates of sexually transmitted infections (STIs) in the United States. *Chlamydia trachomatis*, the most commonly reported<sup>2</sup> bacterial disease in this country, now has the highest prevalence ever recorded with 1.8 million cases in 2019<sup>2</sup> and nearly half of infections occurred in youth ages 15–24.<sup>3,4</sup>

Routine population-based screening is a key strategy to reducing the morbidity and transmission of chlamydia. The Centers for Disease Control and Prevention (CDC), U.S. Preventive Services Task Force (USPSTF) and American Academy of Pediatrics (AAP) all recommend annual screening of sexually active cisgender females. Routine screening can lead to early identification and treatment of asymptomatic infections, thereby lowering the risk of continued transmission and pelvic inflammatory disease.

Though screening is intended to be universal, there is a great deal of variation among pediatric practices in how these guidelines have been implemented. In order to improve routine chlamydia screening for all adolescents, we must better understand and reduce the drivers of inequitable screening practices.

**WHAT WE ASKED:**

How variable are chlamydia screening rates across a large pediatric primary care system?

Are there racial, socioeconomic or practice-based factors associated with screening?

Does racial bias impact rates of chlamydia screening among adolescent females?

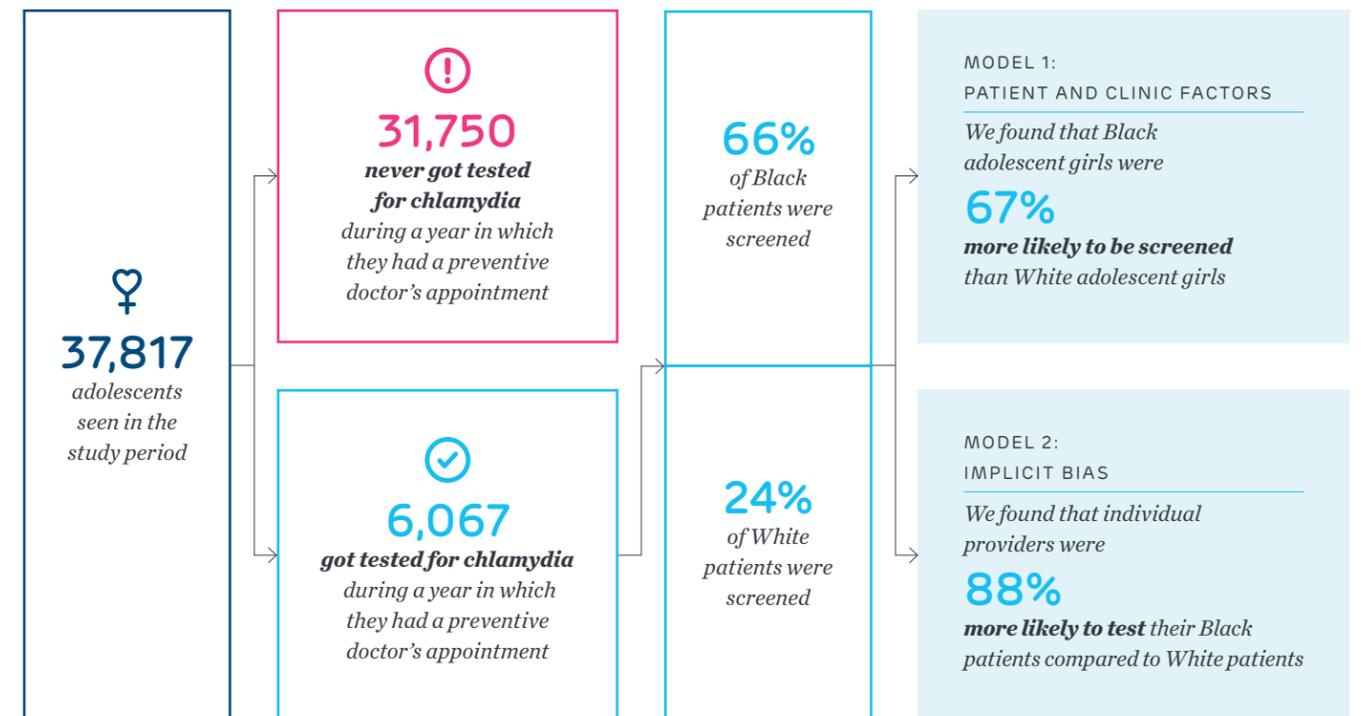
**WHAT WE DID:**

We used electronic health record data from 31 clinics within Children’s Hospital of Philadelphia’s Primary Care Network to identify annual chlamydia screening rates among females ages 15–19. Our target outcome was a chlamydia test order on the day of the well visit or in the year prior. To identify whether race, insurance, and clinic characteristics like practice size and Title X funding were associated with screening rates, we used multi-level regression modeling. We then created a separate model to look at the potential effect of racial bias, as higher screening rates for Black patients in our first model could be due to having a higher proportion of Black patients in the practice. In this model, we created variables for the mean proportion of Black patients of each provider and each practice, and then looked at these effects separately.

**WHAT WE FOUND:**

In our first model, after accounting for insurance, previous chlamydia screening and infection, clinic size, and clinic characteristic (urban, suburban and Title X funding), we found that Black adolescent girls were 67% more likely to be screened than White adolescent girls.

To then explore whether provider implicit bias was at play, we looked at individual clinicians’ screening practices, we found that providers were 88% more likely to test their Black patients compared to White patients.



**WHAT IT MEANS:**



## STUDY METHODS

This retrospective cohort study included adolescent females ages 15–19 receiving primary care within a 31-practice academic, pediatric, primary care network serving Pennsylvania and New Jersey. Two practices receive federal Title X family planning funding and provide confidential family planning services. Patients were included in the study if they were assigned female sex at birth and attended an annual well visit from July 2015–December 2019.

## RELATED POLICYLAB WORK

Children’s Hospital of Philadelphia, PolicyLab. Identifying Disparities in Chlamydia Screening for Teen Girls [Online]. Available at: <https://policylab.chop.edu/our-research/pilot-grants/identifying-disparities-chlamydia-screening-teen-girls>

## PUBLICATION

Wood S, Min J, Tam V, Pickel J, Petsis D, Campbell K. Inequities in *Chlamydia trachomatis* screening between Black and White adolescents in a large pediatric primary care network, 2015–2019. *Am J Public Health*. 2022;112(1):135–143. doi: [10.2105/AJPH.2021.306498](https://doi.org/10.2105/AJPH.2021.306498)

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2. Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2019. <https://www.cdc.gov/std/statistics/2019/default.htm>. Accessed June 14, 2021.
3. Centers for Disease Control and Prevention. Chlamydia–CDC Fact Sheet (Detailed). <https://www.cdc.gov/std/chlamydia/stdfact-chlamydia-detailed.htm>. Accessed April 6, 2021.
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The mission of PolicyLab at Children’s Hospital of Philadelphia (CHOP) is to achieve optimal child health and well-being by informing program and policy changes through interdisciplinary research. PolicyLab is a Center of Emphasis within the Children’s Hospital of Philadelphia Research Institute, one of the largest pediatric research institutes in the country.

### PolicyLab

Children’s Hospital of Philadelphia  
2716 South Street  
Roberts Center for Pediatric Research,  
10th Floor  
Philadelphia, PA 19146

**P** 267-426-5300  
**F** 267-426-0380  
PolicyLab@chop.edu  
[policylab.chop.edu](mailto:policylab.chop.edu)  
 @PolicyLabCHOP