



ACEs LA
Lunch and Learn

**UCAAN iLab Evaluation Team: Impacts and Patterns of
ACE Screening in Los Angeles Health Services**

November 21, 2024

Agenda

- *Amy Shekarchi, MD MPH*
- *Andrew Nguyen, MPH*
- *Morgan Ye, MPH*
- *India Gill, MPH PhD*
- *Q&A Session & Closing Statements*

Please remain muted

Session will be recorded

Use chat for Q&A



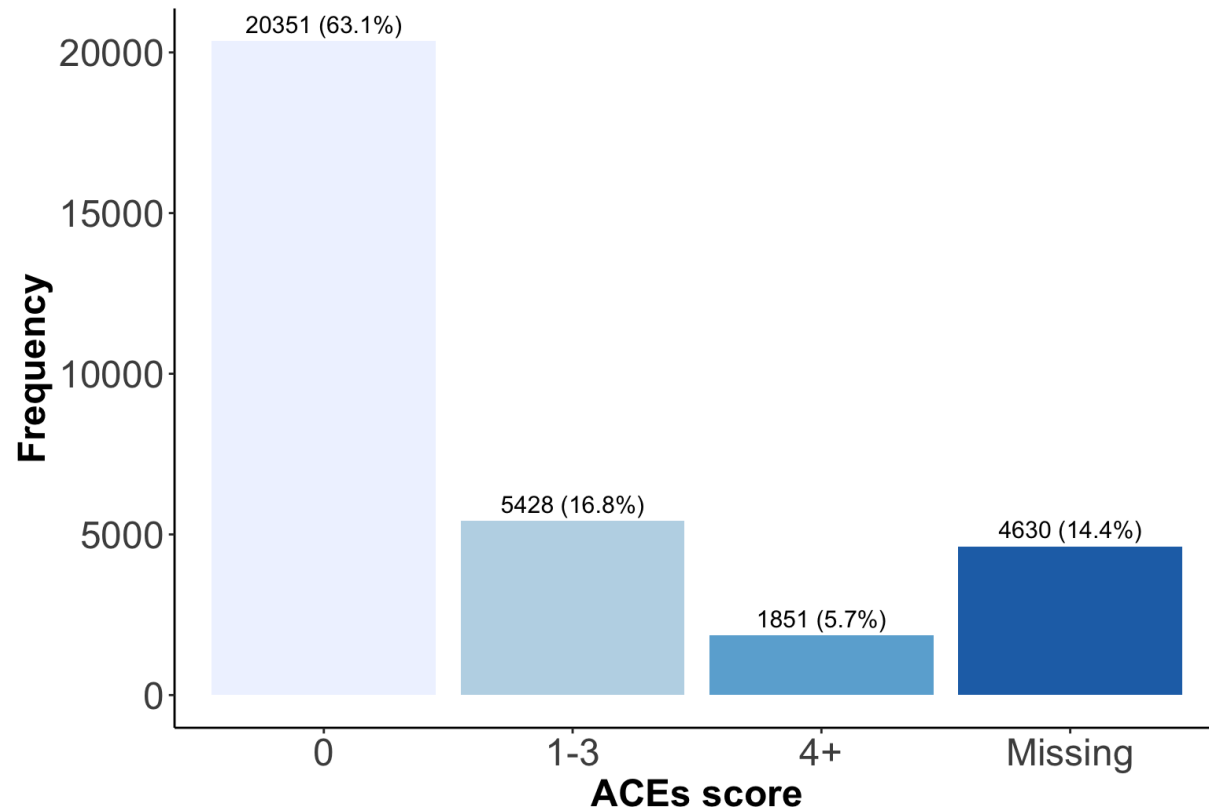
Amy Shekarchi
MD MPH

Amy Shekarchi, MD, MPH, is a pediatrician at several Los Angeles County Health Services clinics, and is the Interim Director of Pediatrics for the High Desert Health Group. She attended medical school at Texas Tech University Health Sciences Center, pediatric residency at UCLA, and completed a Maternal-Child Health fellowship and MPH program while working for Los Angeles County. She has dedicated her non-clinical work to clinical improvements and projects that address social and behavioral health needs for children and families in Los Angeles. Through this work, she became a clinical leader in the California ACEs Learning and Quality Improvement Collaborative (CALQIC), Co-founder and co-director of the ACEs-LA group tasked with instituting ACE screening and network building across LA County Health Services clinics and helped lead the formation of UCAAN.

Background

- ACE screening and response activities began in 2019
- The ACEs-LA Network of Care has built an infrastructure to support connections between patients, health care providers, and community-based organizations to help address ACEs and toxic stress
- More than 50,000 screens have been conducted across 15 clinical settings
- More than 5,000 internal referrals for social work and behavioral health services and almost 11,000 referrals to community programs have been identified after ACE screening, of which over 1,400 being closed-loop referrals.
- Since 2023, a team of researchers has reviewed hundreds of reports to identify impacts and patterns to ACE screening and response at LA DHS

ACE score distribution in LA County Health Services patients who were screened for ACEs from 2020 to 2023



UCAAN iLab Evaluation team



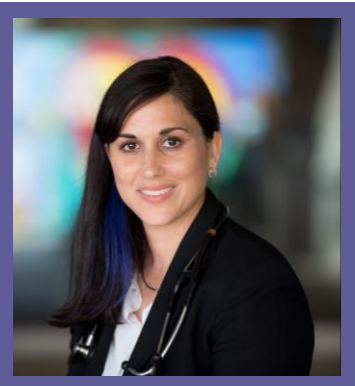
Dayna Long, MD



Danielle Hessler, PhD



Matt Pantell, MD



Neeta Thakur, MD MPH



India Gill, PhD, MPH



Adali Martinez MD, MPH



Andrew Nguyen MPH



Morgan Ye MPH



University of California
San Francisco



Andrew Nguyen
MPH

Andrew Nguyen is a Research Data Analyst at UCSF CLEAR Lab, with a strong interest in the relationship between the built environment and urban community health outcomes. Andrew completed a Master's in Public Health from UC Berkeley with a focus on Epidemiology and Biostatistics.



Morgan Ye
MPH

Morgan Ye is a Research Data Analyst. She conducts statistical analysis and data management for Dr. Neeta Thakur's CLEAR Lab and Dr. Katrina Abuabara's Research Group. She received a Master's in Public Health from the University of California Berkeley, with a concentration in epidemiology and biostatistics.



India Gill
MPH PhD

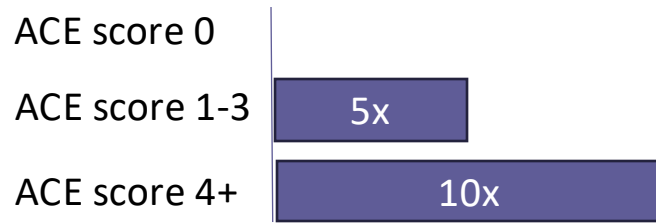
India Gill is a postdoctoral fellow at the Social Interventions Research and Evaluation Network at the University of California, San Francisco. She earned her Master of Public Health in Socio-medical sciences from Columbia University Mailman School of Public Health and completed her Doctorate in Epidemiology and Biostatistics at Case Western Reserve University. India's research interests lie in the intersection of social risks, adverse childhood experiences, and primary care.

Key Findings

Referrals

ACE Screening and Social Work Referrals

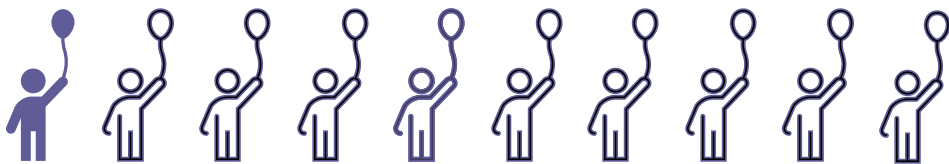
Likelihood of children being referred to social work at time of ACE screening



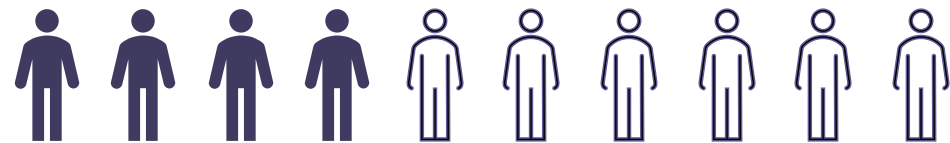
Likelihood of adult being referred to social work at time of ACE screening



Approximately 90% of children with ACE score of 4+ did not receive a social work referral



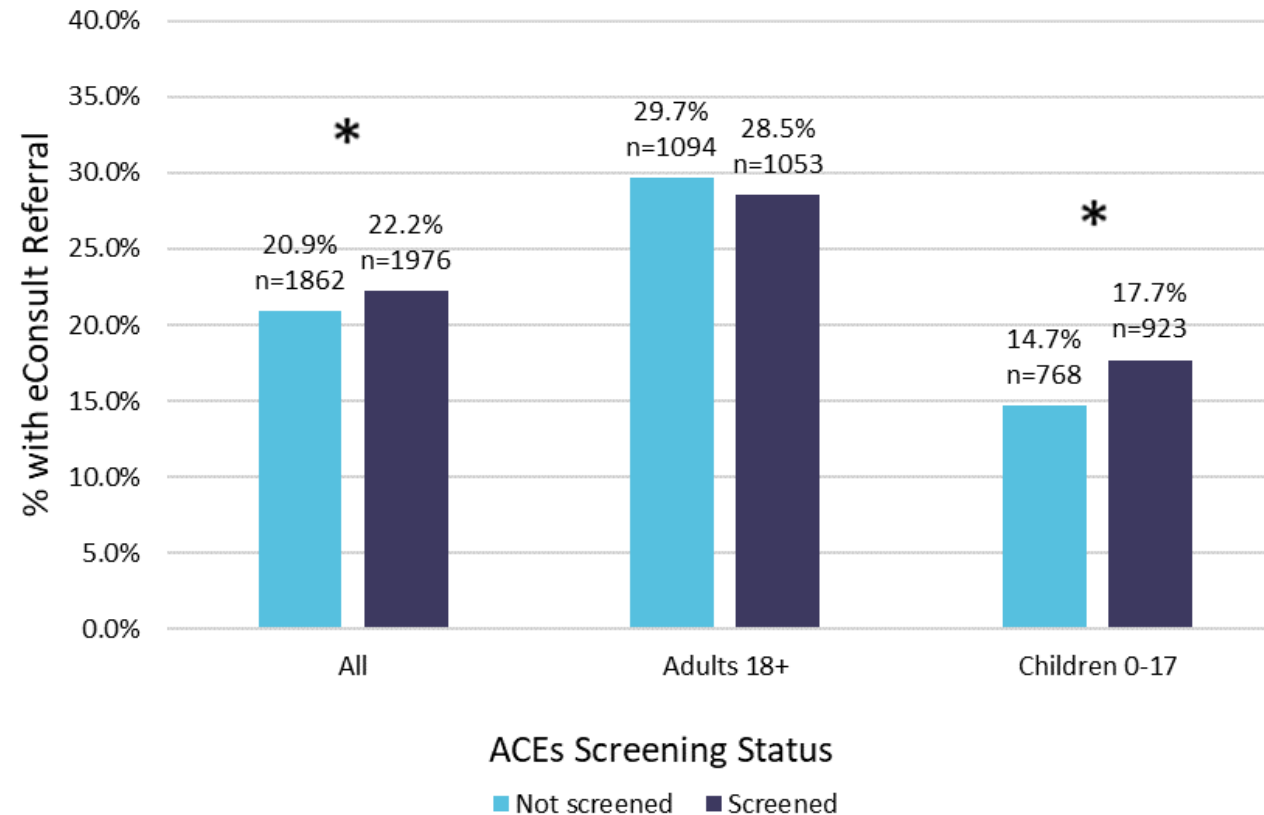
Approximately 60% of adults with ACE score of 4+ did not receive a social work referral



Shaded icon = child or adult referred to social work at the time of ACE screening. Non-shaded icon = child or adult NOT referred to social work at the time of ACE screening

ACE Screening and eConsult Referrals for Medical Specialty Care

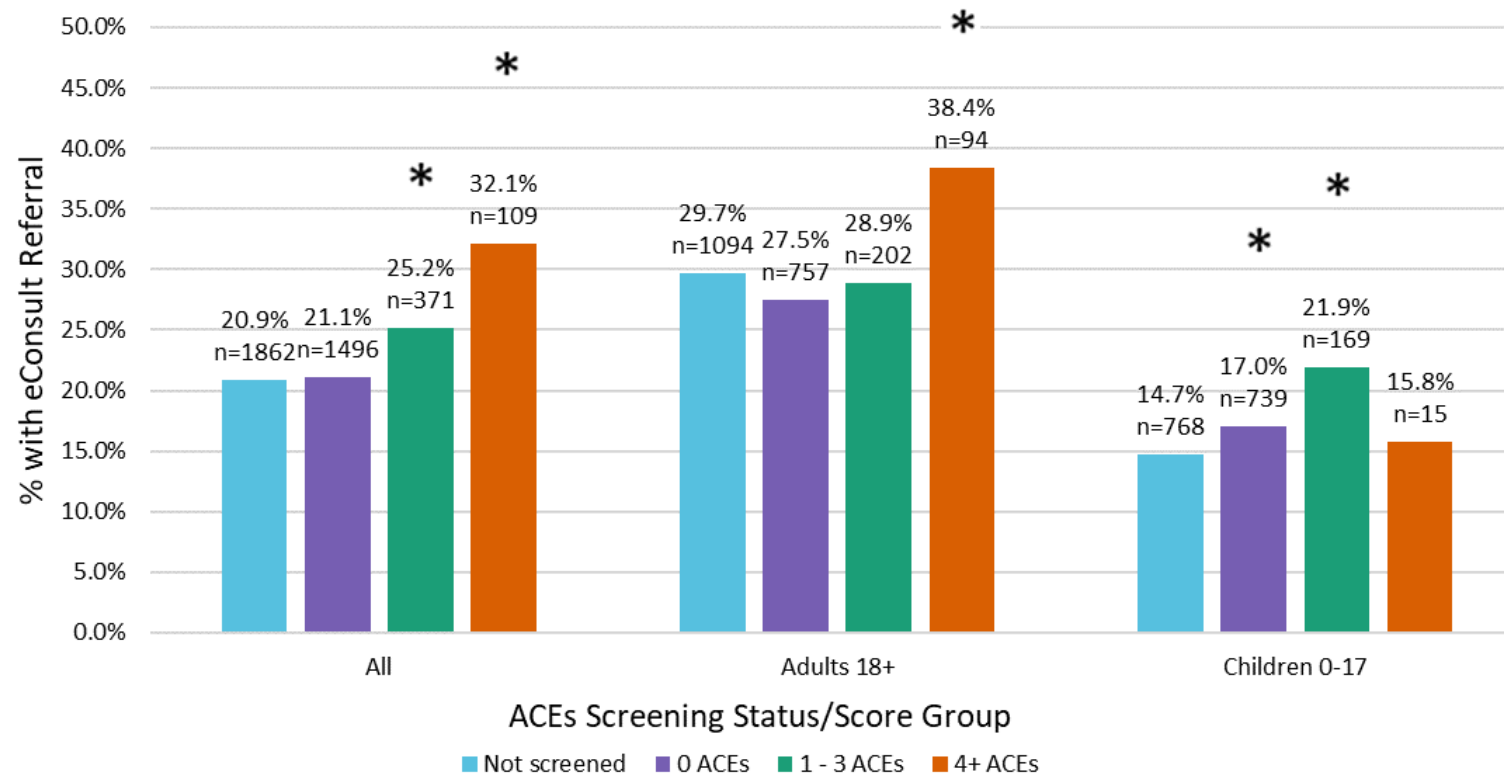
21.5% of all primary care patients from screening clinics in the propensity score matched dataset had an eConsult referral within 6 months of ACEs screening (n = 3,838).



* Significance using logistic regression and odds ratio. Adjusted results were statistically significant at $P < 0.05$. Reference group is not screened for ACEs part 1. Patients were adjusted on age, gender, clinic, insurance (line of business as proxy), visit date quartile, appointment type, and # of primary care visits.

When examining by ACE score, patients with **any ACEs** were more likely to get an **eConsult** referral compared to those not screened

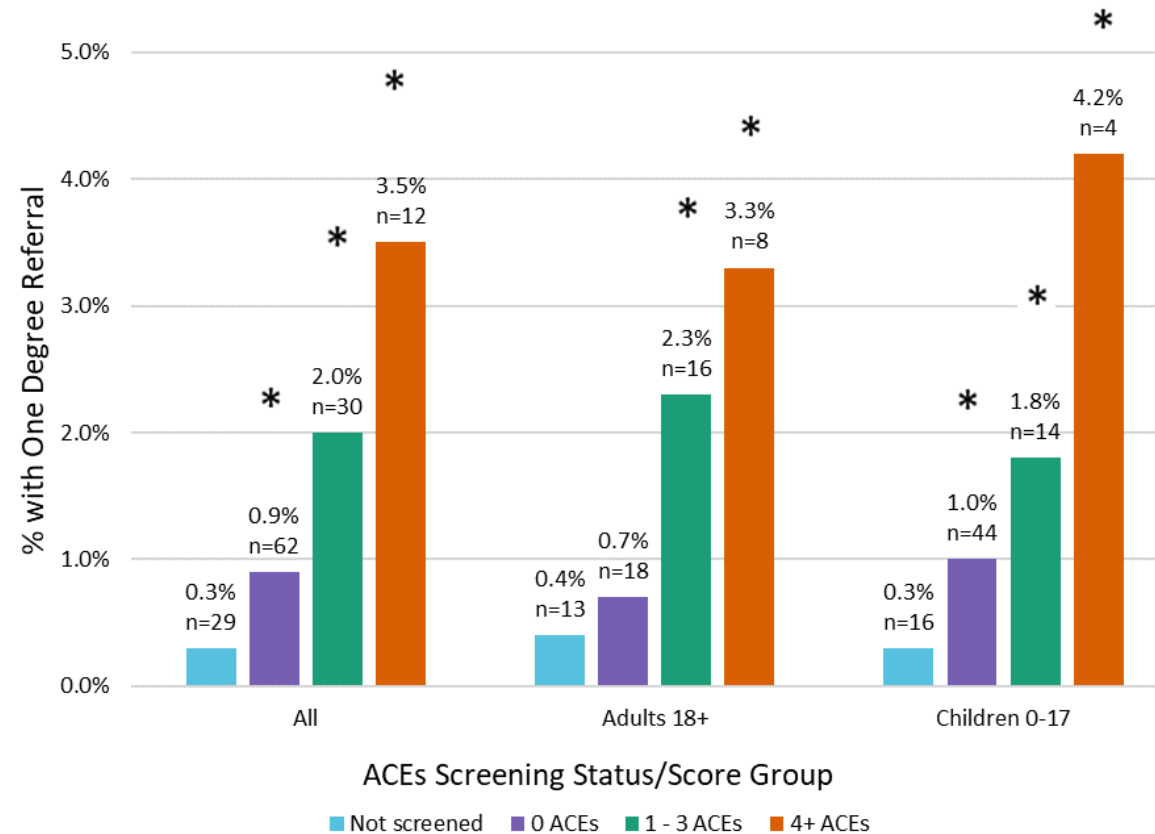
21.5% of all primary care patients from screening clinics in the propensity score matched dataset had an eConsult referral within 6 months of ACEs screening (n = 3,838).



* Significance using logistic regression and odds ratio. Adjusted results were statistically significant at P<0.05. Reference group is not screened for ACEs part 1. Patients were adjusted on age, gender, clinic, insurance (line of business as proxy), visit date quartile, appointment type, and # of primary care visits.

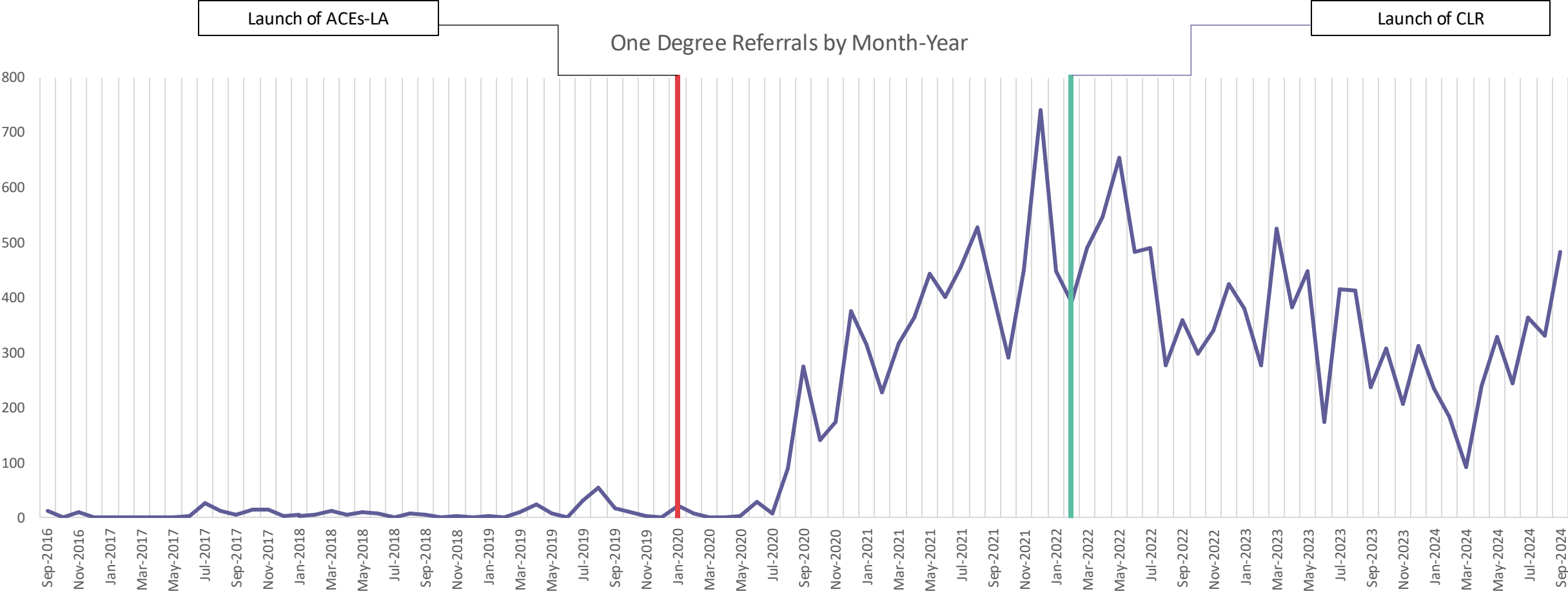
ACE Screening and One Degree Community Referrals

0.7% of all primary care patients from screening clinics in the propensity score matched dataset had a One Degree referral within 6 months of ACEs screening (n = 133).



* Significance using logistic regression and odds ratio. Adjusted results were statistically significant at $P < 0.05$. Reference group is not screened for ACEs part 1. Patients were adjusted on age, gender, clinic, insurance (line of business as proxy), visit date quartile, appointment type, and # of primary care visits.

1D Referrals 2016 - Present

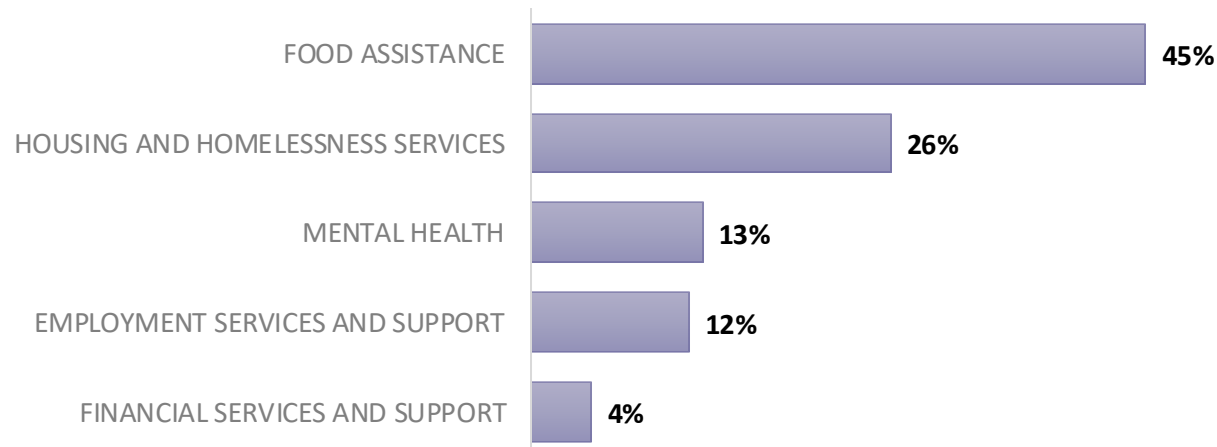


Proportion of 1D Referrals by Service Domain

Timeline: 1/1/2020* – 3/31/2022

SERVICE DOMAIN	TOTAL REFERRALS
FOOD ASSISTANCE	2,180
HOUSING AND HOMELESSNESS SERVICES	1,273
MENTAL HEALTH	605
EMPLOYMENT SERVICES AND SUPPORT	557
FINANCIAL SERVICES AND SUPPORT	212

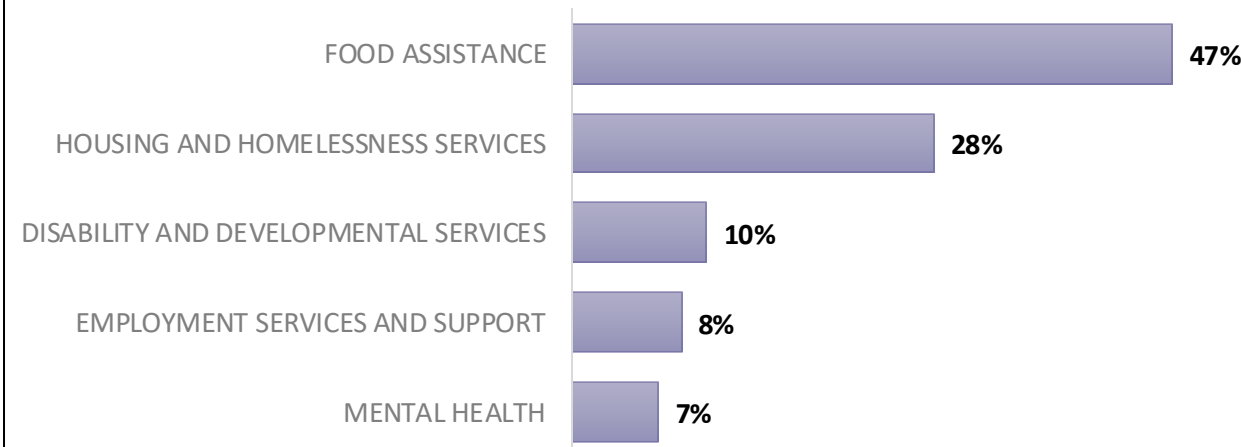
Top 5 Service Domains Referred To: Jan 2020 - Mar 2022



Timeline: 4/1/2022** – 9/30/2024

SERVICE DOMAIN	TOTAL REFERRALS
FOOD ASSISTANCE	3,920
HOUSING AND HOMELESSNESS SERVICES	2,359
DISABILITY AND DEVELOPMENTAL SERVICES	878
EMPLOYMENT SERVICES AND SUPPORT	711
MENTAL HEALTH	562

Top 5 Service Domains Referred To: Apr 2022 - Sep 2024

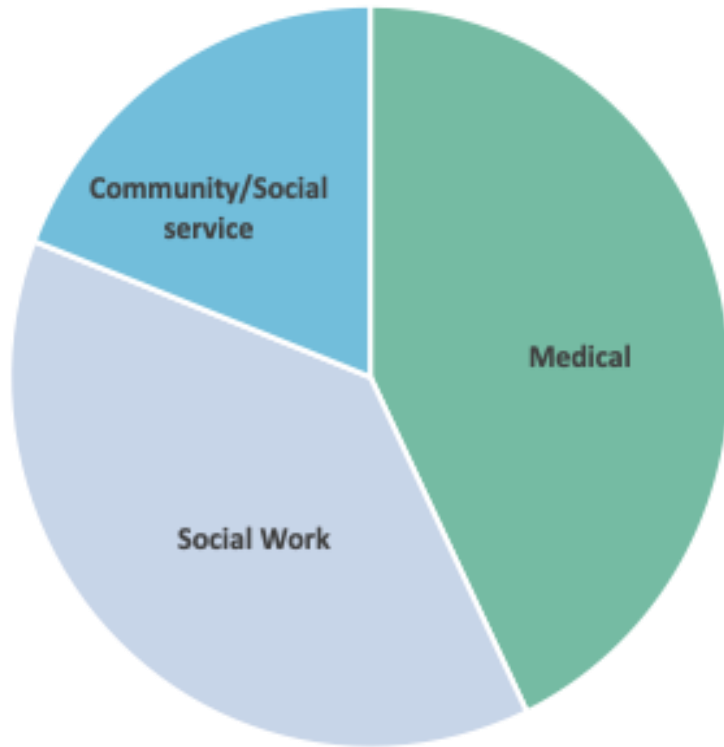


*Launch of ACEs-LA Screening and Response Implementation

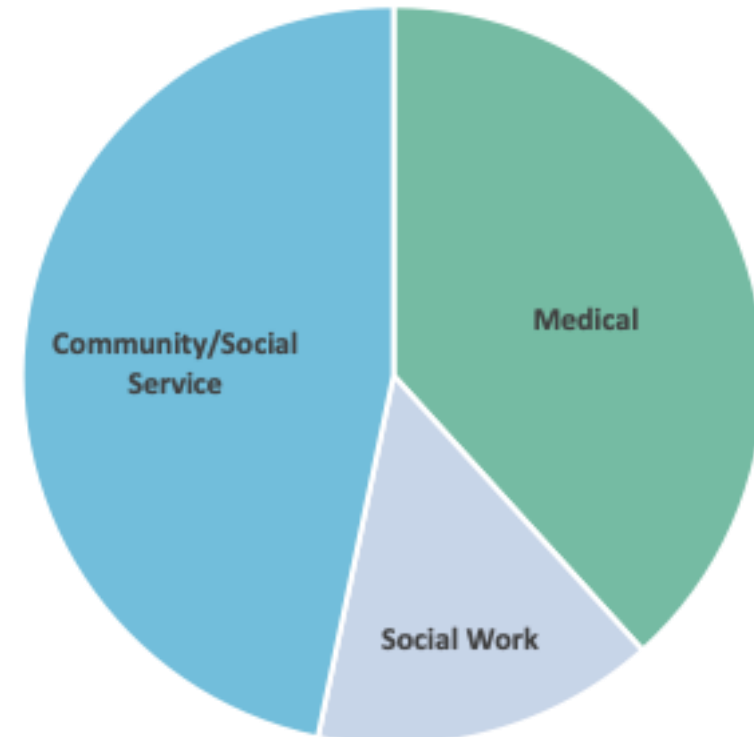
**Launch of One Degree Closed Loop Referral and ACEs-LA One Degree training & CBO Engagement

How ACE Training Shapes Patient Care

Before
ACE Screening and Training



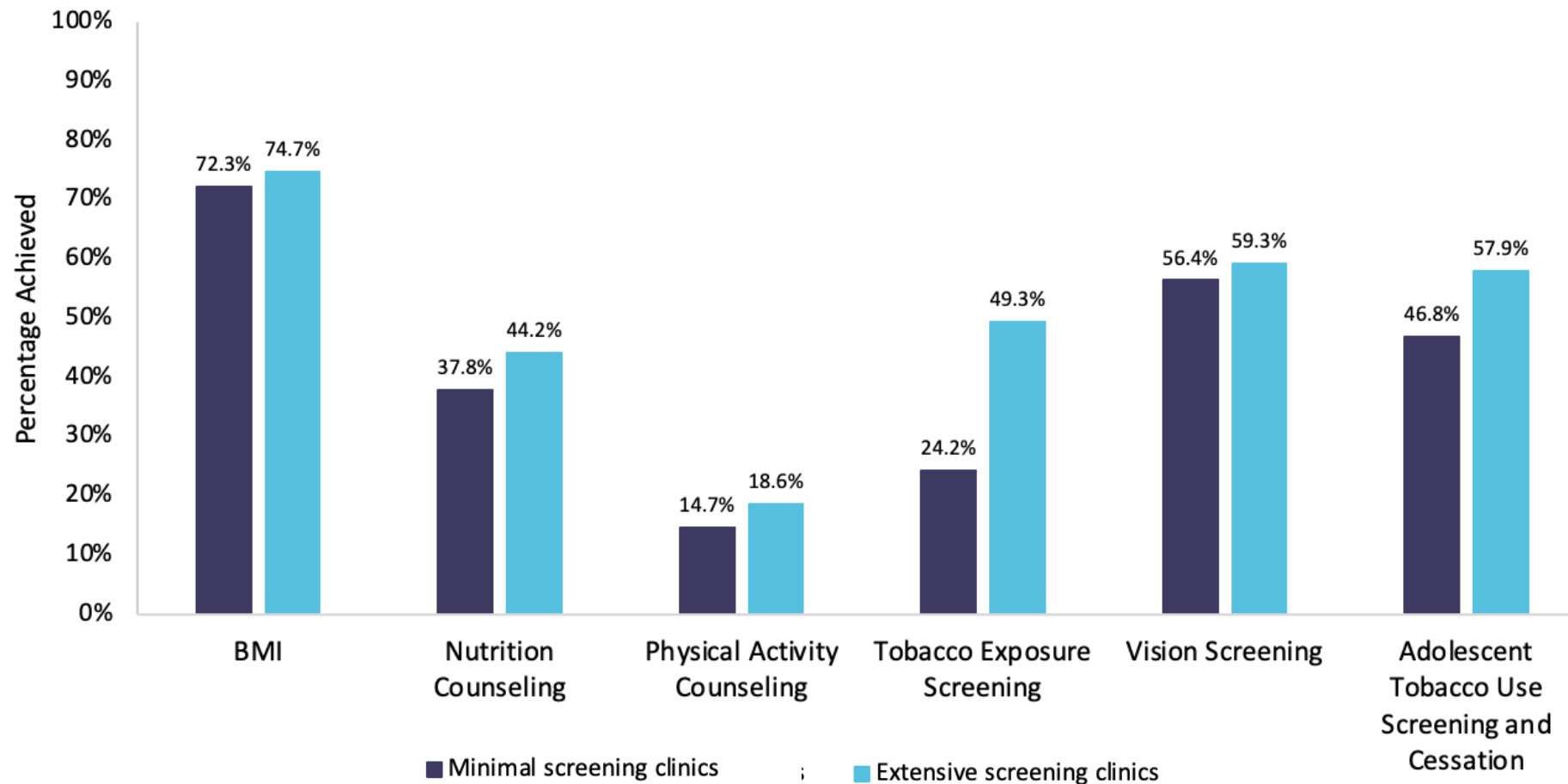
After
ACE Screening and Training



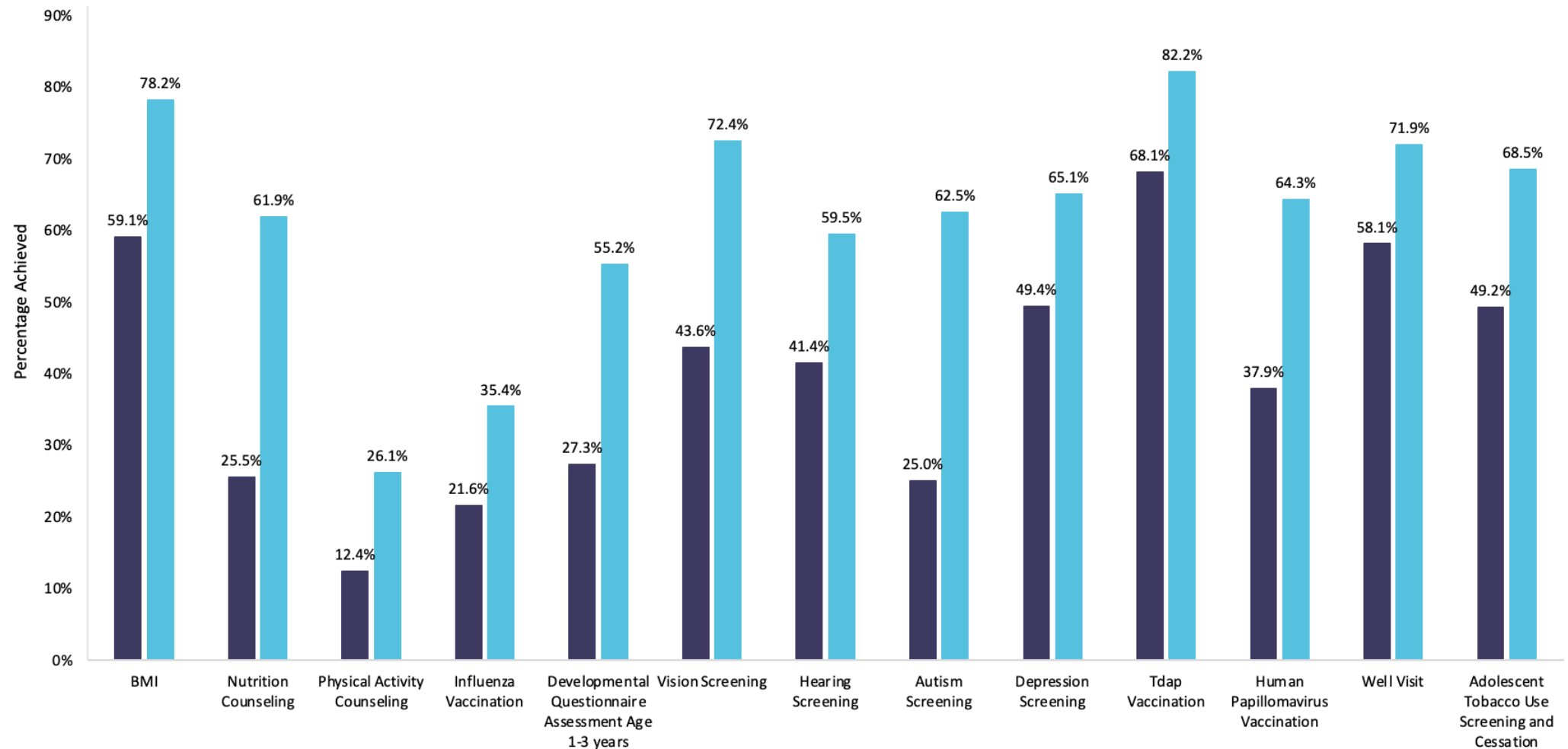
Key Findings

Preventive care metrics – at the CLINIC LEVEL

When compared to minimal ACE screening pediatric clinics, extensively ACE screening pediatric clinics achieved more preventative pediatric care metrics, but many of those achievements are not statistically significant



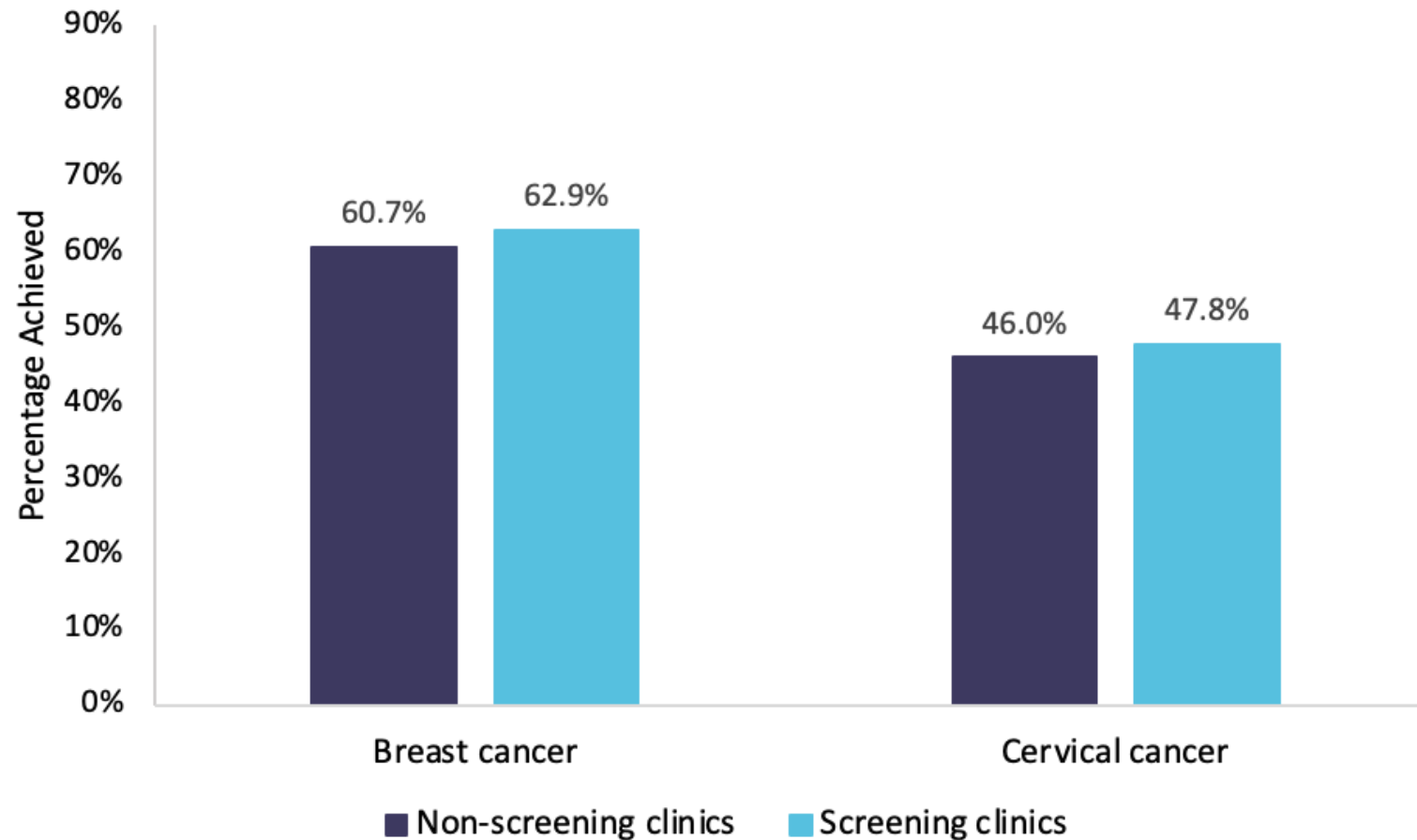
ACE screening family medicine clinics are more likely to achieve pediatric wellness metrics for preventative care when compared to non-ACE screening family medicine clinics



*Models adjusted for age and sex

■ Non-screening clinics ■ Screening clinics

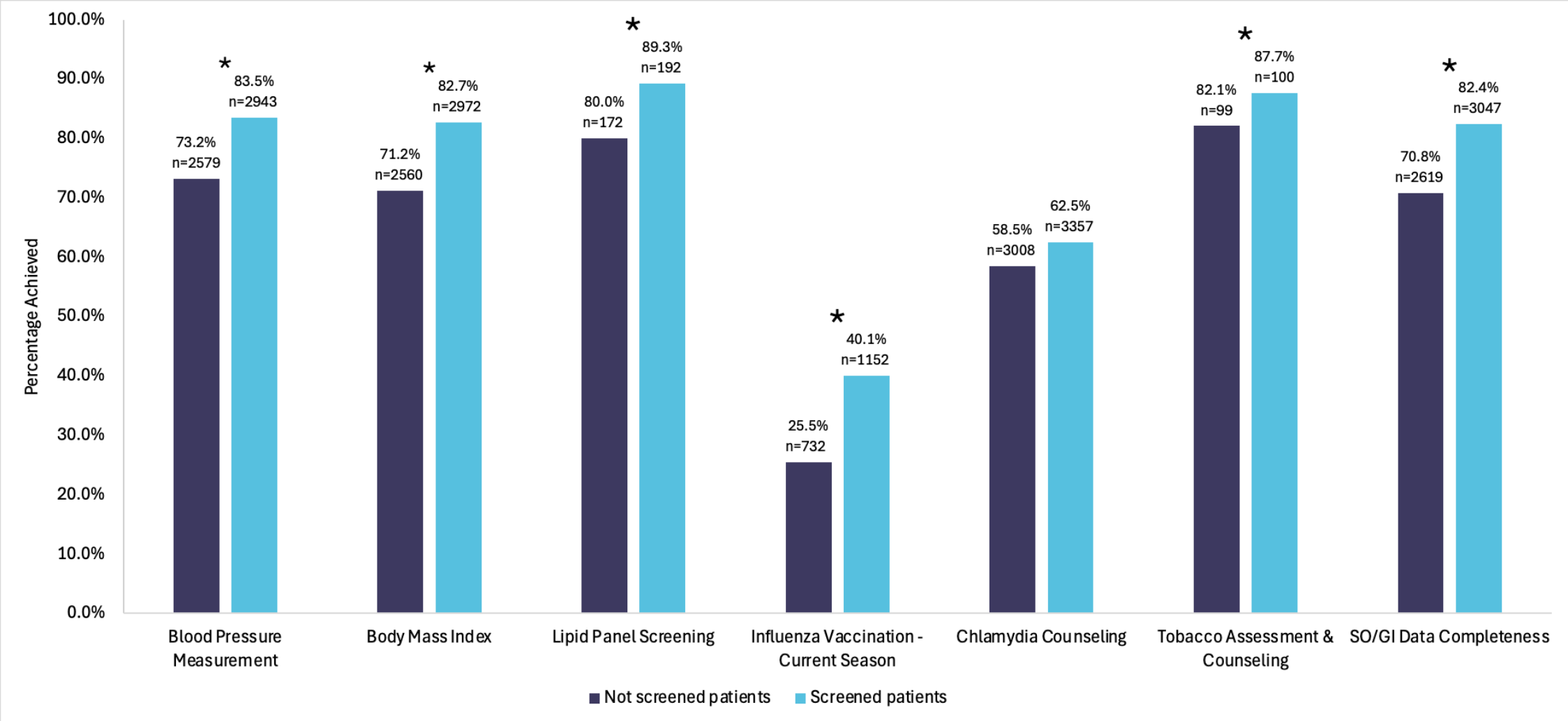
ACE screening family medicine clinics are more likely to complete breast cancer and cervical cancer screening than non-ACE screening family medicine clinics



Key Findings

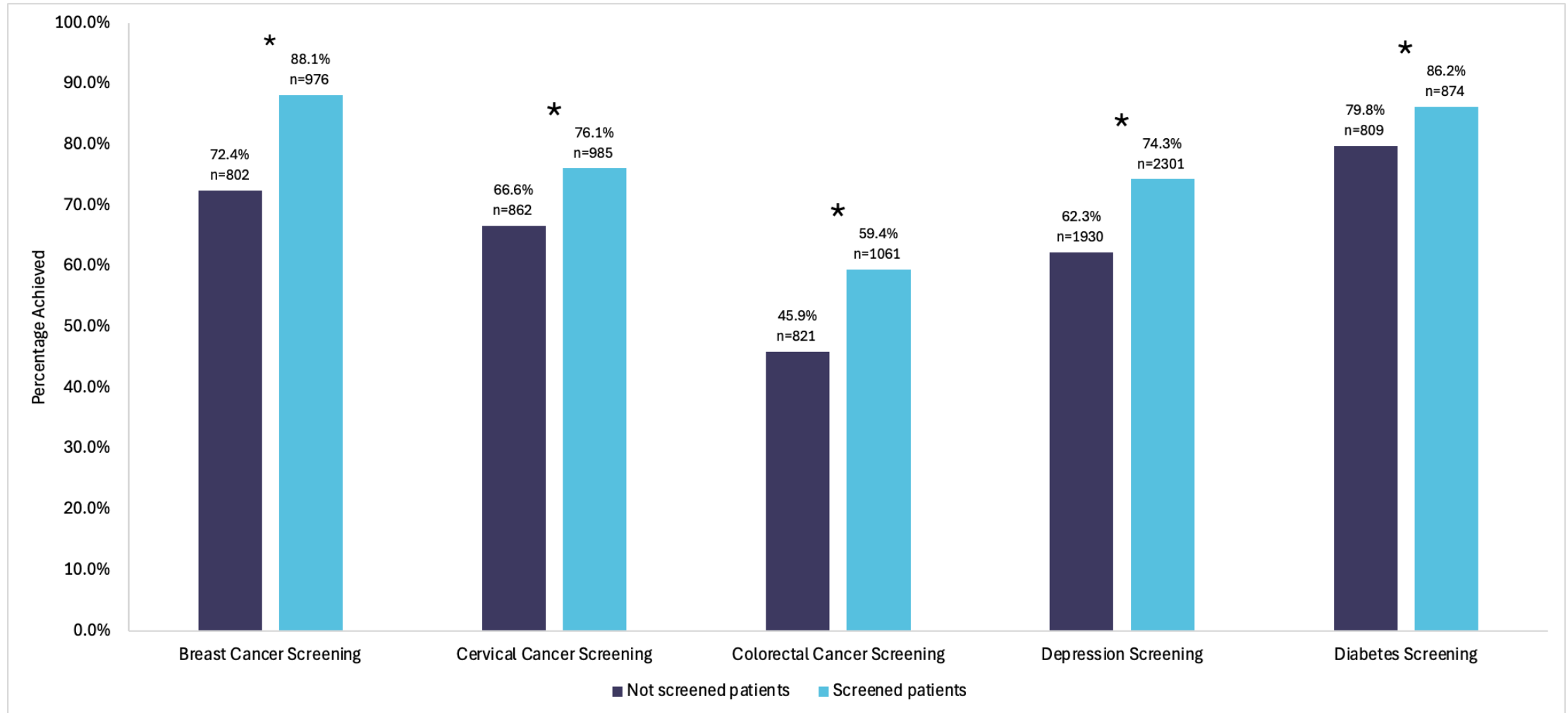
Preventive care metrics – at the PATIENT LEVEL

Primary care patients who were screened for ACEs within screening clinics are more likely to achieve **adult wellness metrics** compared to those not screened

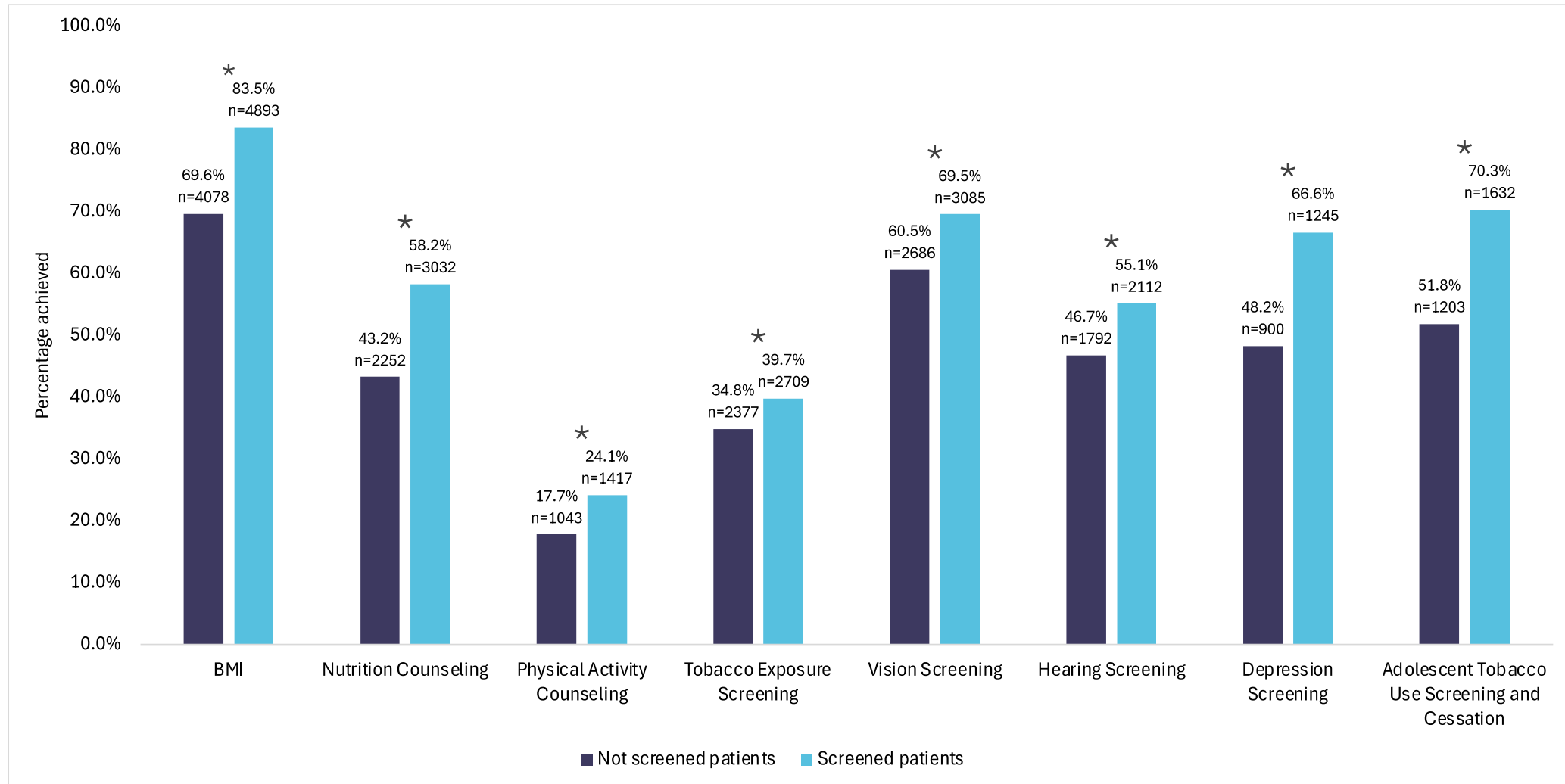


Source: Gill, Ye, Nguyen, Martinez, Hessler, Long, Thakur, Pantell, Thompson, Draycott, Shekarchi (2024). UCAAN iLab Evaluation.

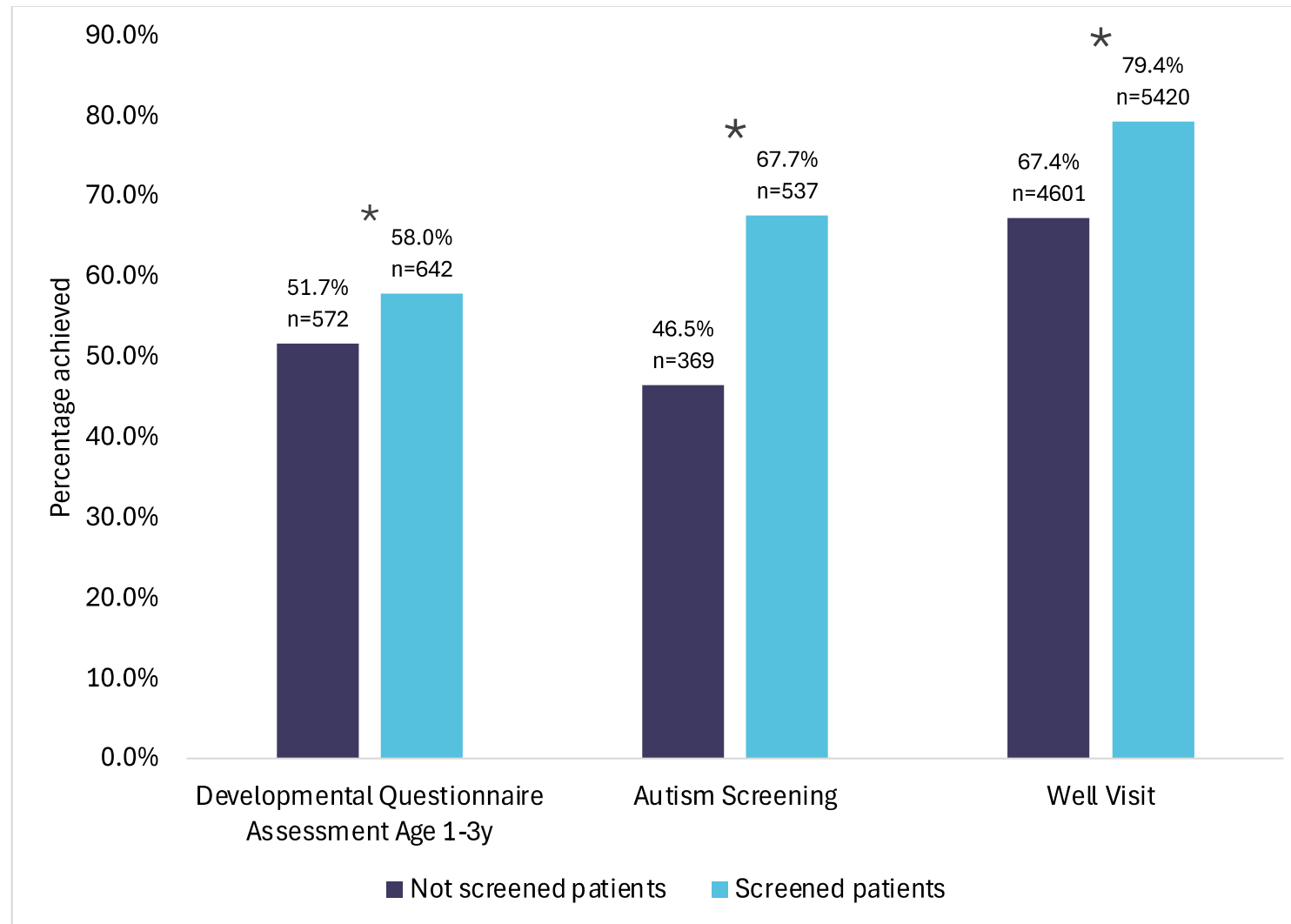
Primary care patients who were screened for ACEs within screening clinics are more likely to achieve **adult disease screening metrics** compared to those not screened



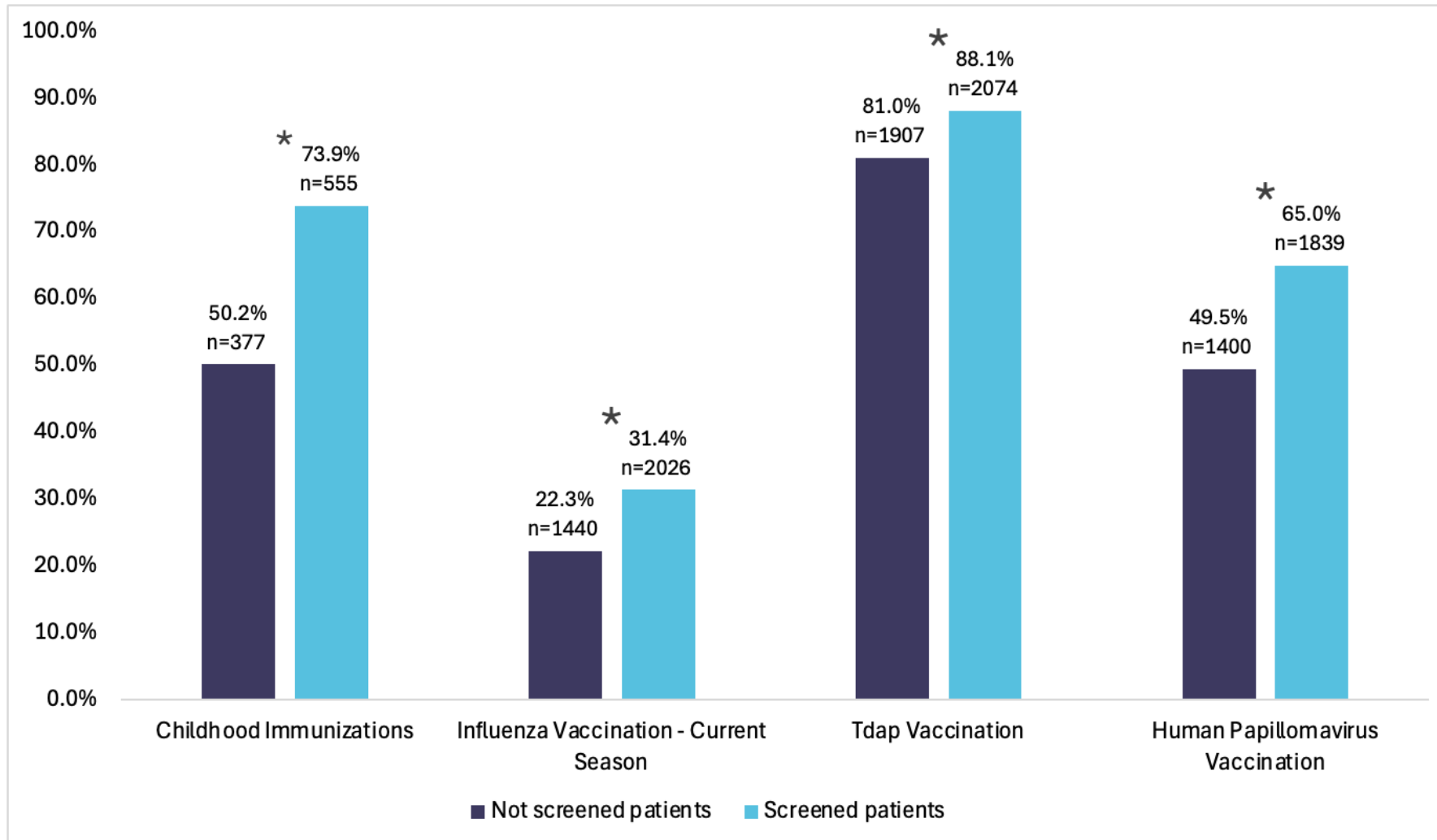
Primary care patients who were screened for ACEs within screening clinics are more likely to achieve **pediatric wellness metrics** compared to those not screened



Primary care patients who were screened for ACEs within screening clinics are more likely to achieve **pediatric developmental screening metrics** compared to those not screened



Primary care patients who were screened for ACEs within screening clinics are more likely to achieve **pediatric vaccination metrics** compared to those not screened

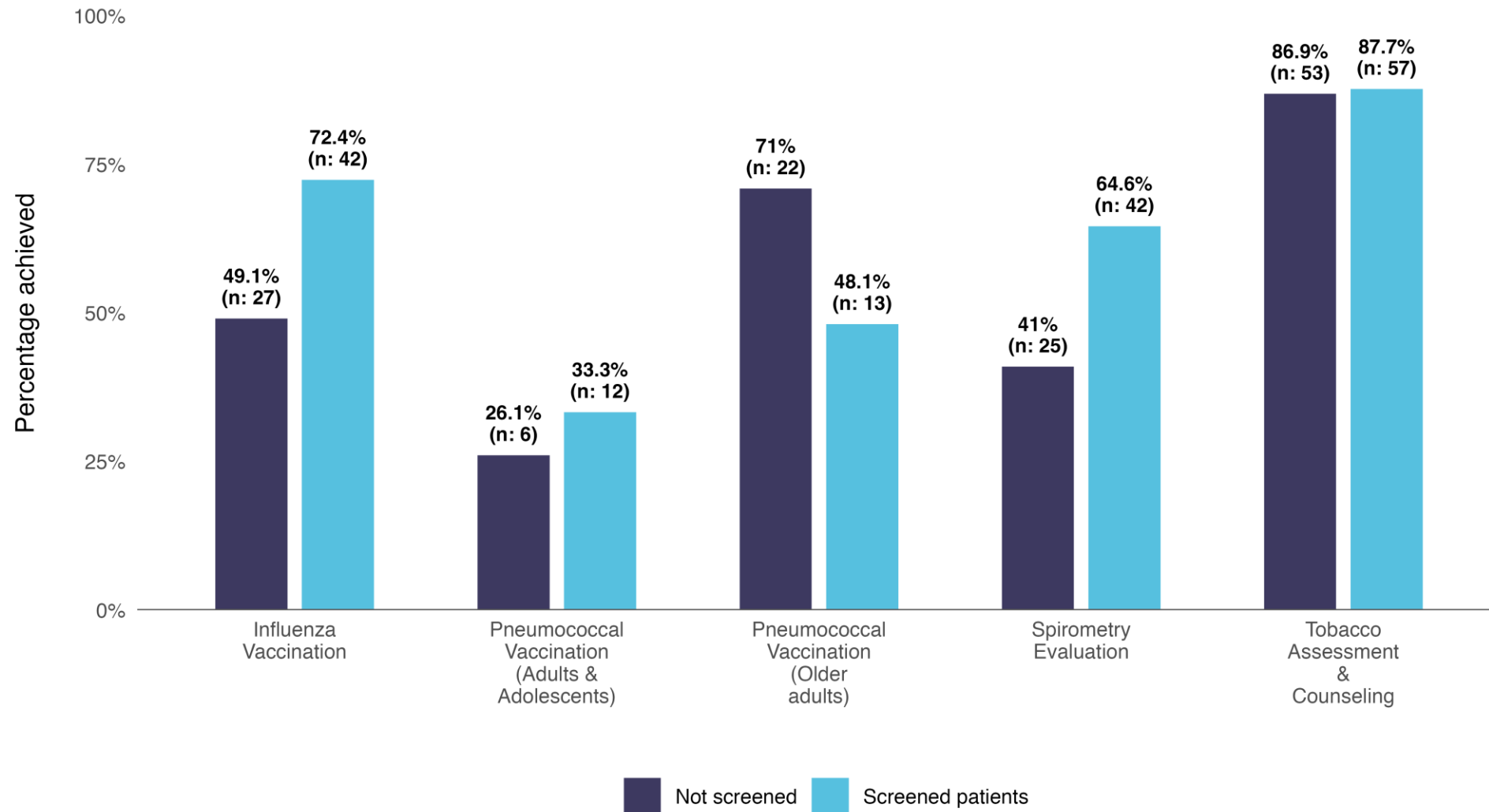


Summary

Evaluation question: What is the association between ACE screening and preventative care metrics/registries among primary care patients?

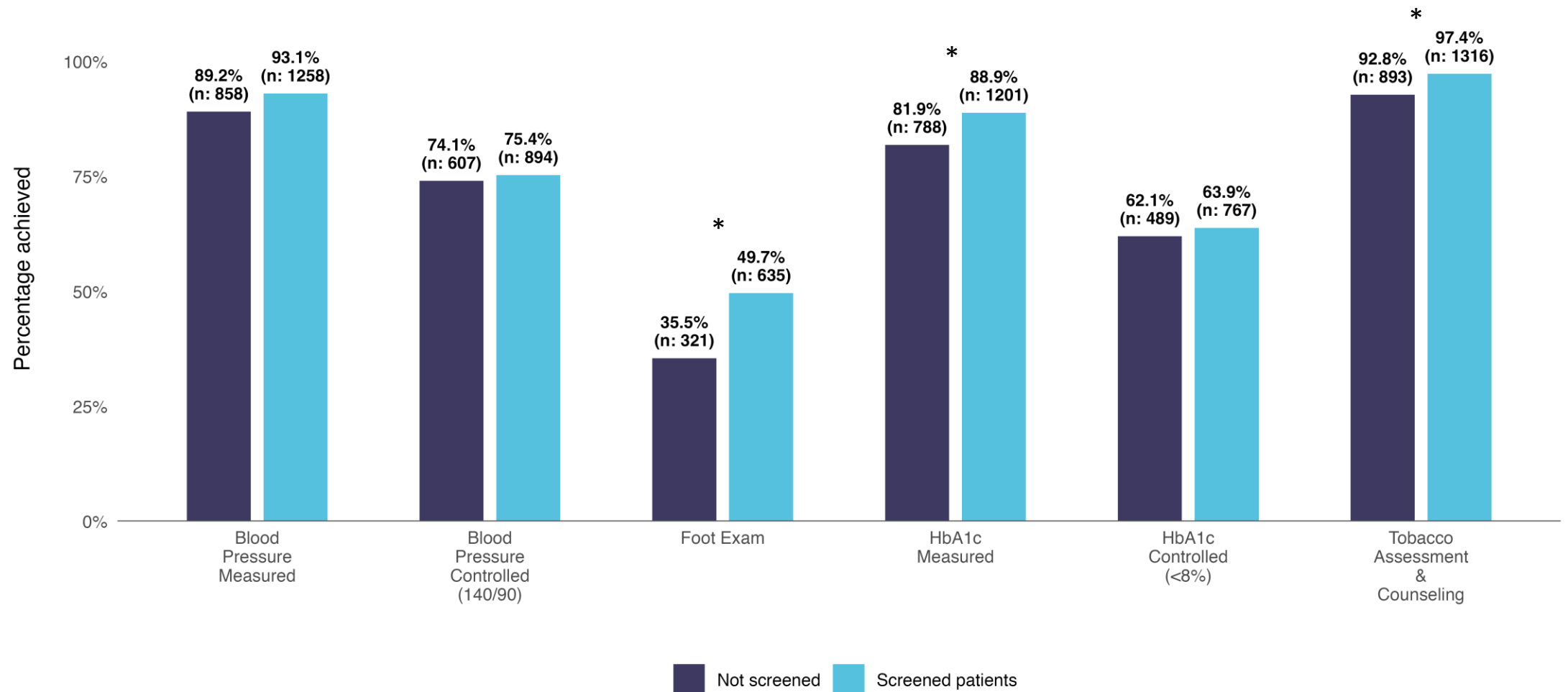
- Primary care patients who were screened for ACEs within screening clinics are more likely to achieve **adult and pediatric wellness, adult disease screening, pediatric developmental, and pediatric vaccination metrics** compared to those not screened for ACEs

ACE screening was not strongly associated with COPD disease management



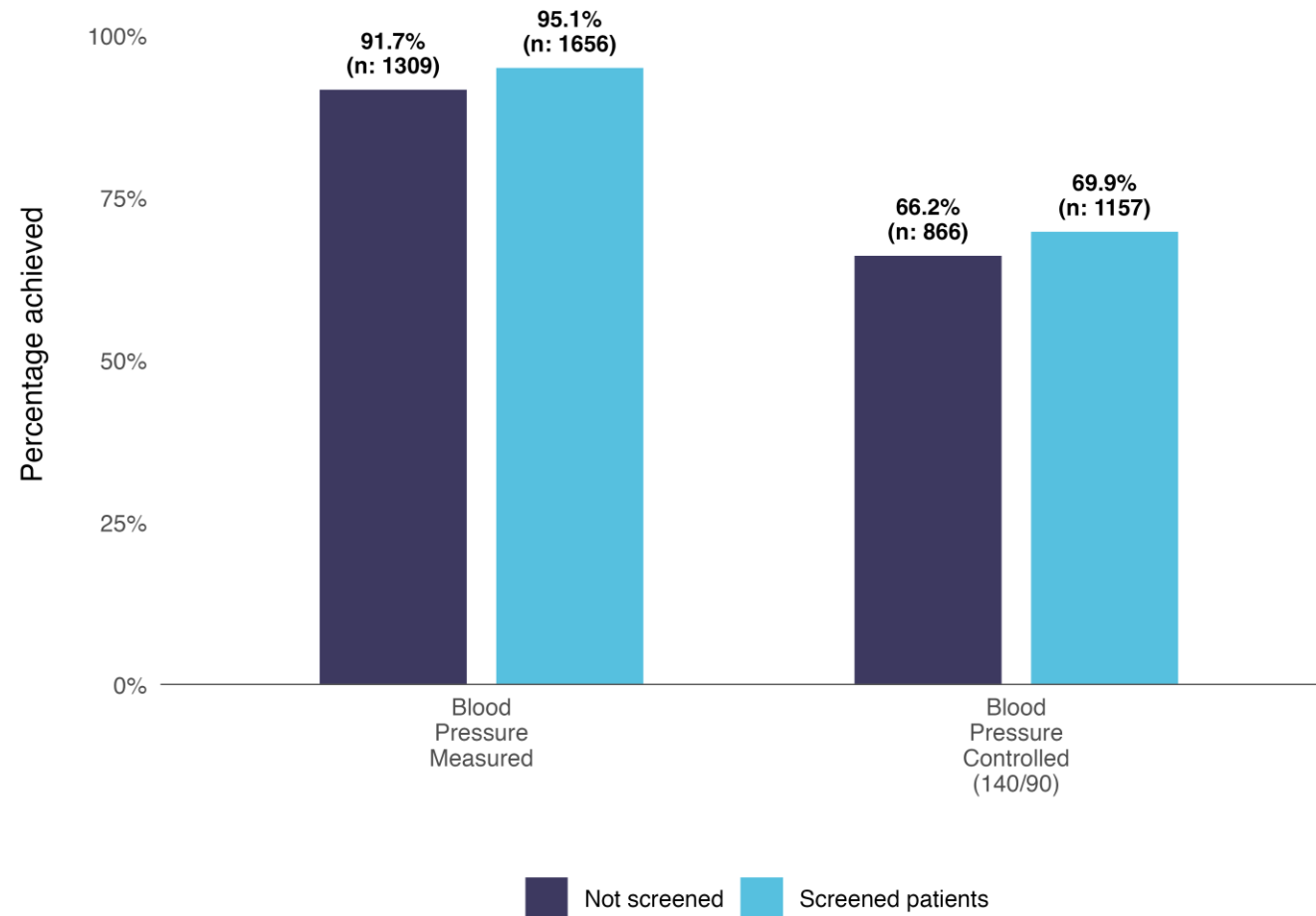
*Results were statistically significant at $P < 0.05$. Reference group is not screened. Models were propensity score matched on age, gender, line of business, clinic, appointment type, number of PC visits, and PC visit date quartile. Outcome models further adjusted on appointment type, number of PC visits, clinic, and date quartile to balance covariate SMDs (> 0.2). The Ns for each outcome model ranged from 58 to 126.

Among adult patients in the diabetes registry, those who were ACE screened were more likely to also complete foot exams, HbA1c measurements, and tobacco assessments



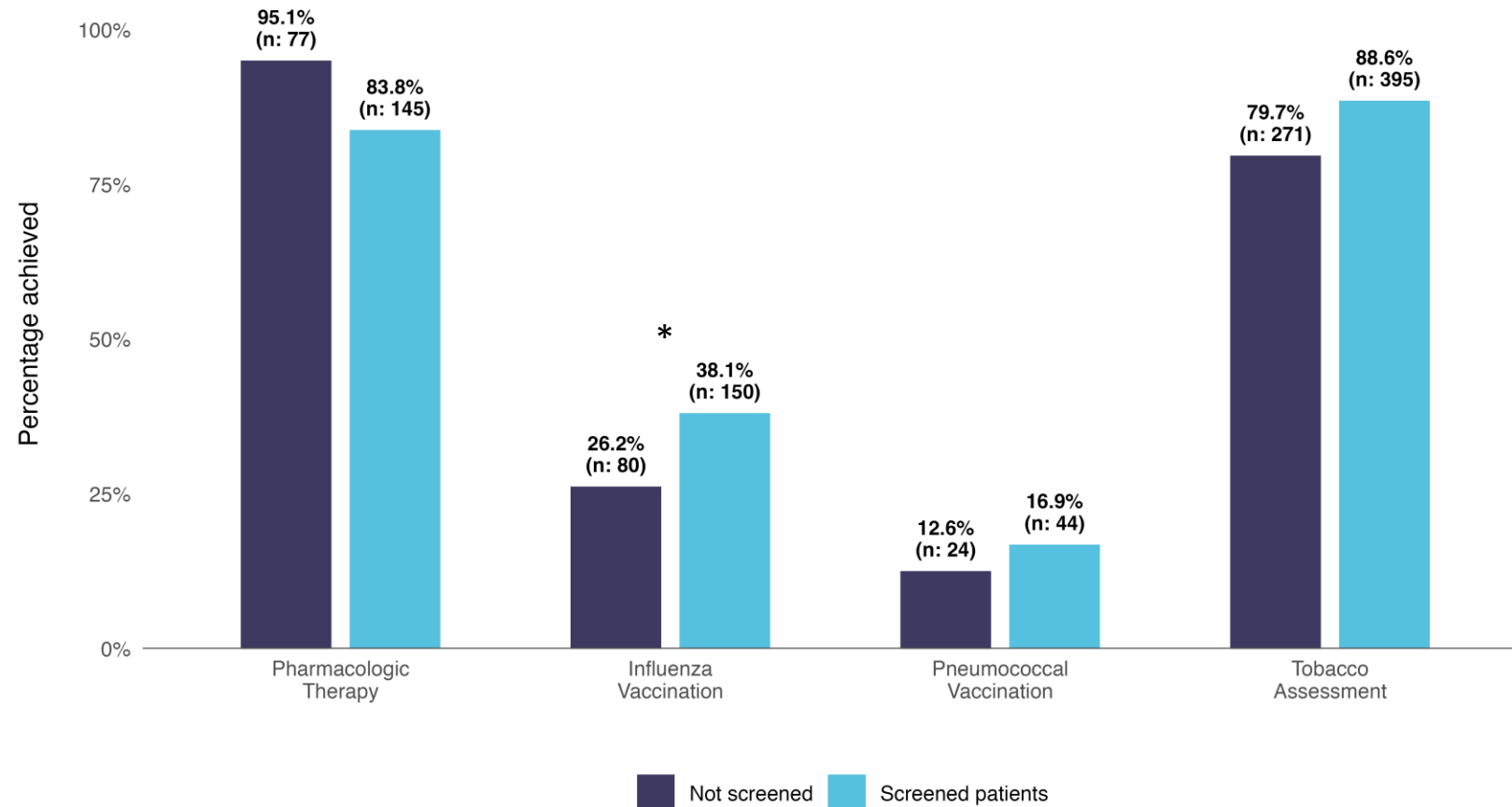
*Results were statistically significant at $P < 0.05$. Reference group is not screened. Models were propensity score matched on age, gender, line of business, clinic, appointment type, number of PC visits, and PC visit date quartile. Outcome models further adjusted on PC visit date quartile to balance covariate SMDs (> 0.2). The Ns for each outcome model ranged from 1989 to 2313. Source: Gill, Ye, Nguyen, Martinez, Hessler, Long, Thakur, Pantell, Thompson, Draycott, Shekarchi (2024). UCAAN iLab Evaluation.

ACE screening was not strongly associated with **hypertension** disease management



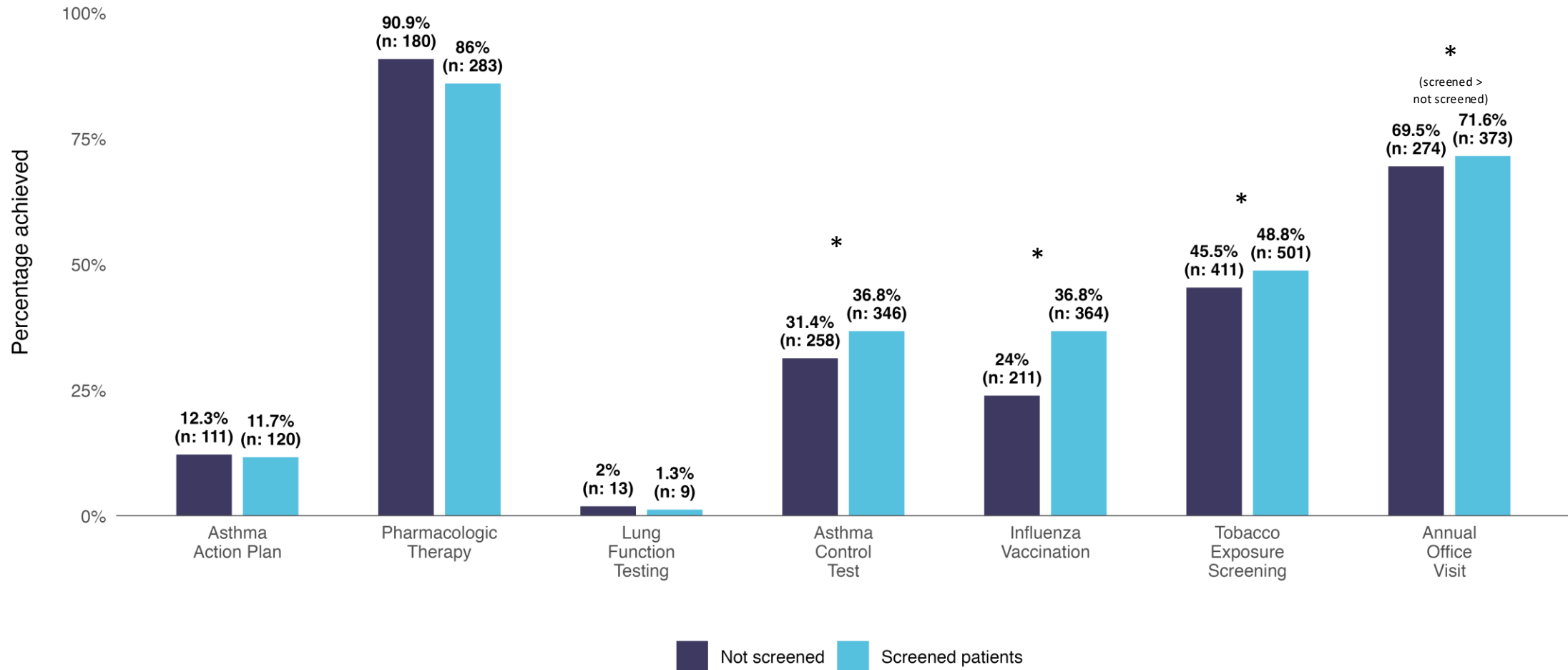
*Results were statistically significant at $P < 0.05$. Reference group is not screened. Models were propensity score matched on age, gender, line of business, clinic, appointment type, number of PC visits, and PC visit date quartile. Outcome models further adjusted on age and PC visit date quartile to balance covariate SMDs (>0.2). The Ns for each outcome model ranged from 2965 to 3168.

Patients in the **adult asthma** registry who were ACE screened were more likely to be vaccinated for influenza



*Results were statistically significant at $P < 0.05$. Reference group is not screened. Models were propensity score matched on age, gender, line of business, clinic, appointment type, number of PC visits, and PC visit date quartile. Outcome models further adjusted on appointment type, clinic, number of PC visits, and PC visit date quartile to balance covariate SMDs (>0.2). The Ns for each outcome model ranged from 254 to 786.

Patients in the **pediatric asthma** registry who were ACE screened were more likely to also have received their Asthma Control Test (ACT), influenza vaccination, tobacco exposure screening, and have completed their annual office visit



*Results were statistically significant at $P < 0.05$. Reference group is not screened. Models were propensity score matched on age, gender, line of business, clinic, appointment type, number of PC visits, and PC visit date quartile. Outcome models further adjusted on age, appointment type, clinic, number of PC visits, and PC visit date quartile to balance covariate SMDs (> 0.2). The Ns for each outcome model ranged from 527 to 1930. Source: Gill, Ye, Nguyen, Martinez, Hessler, Long, Thakur, Pantell, Thompson, Draycott, Shekarchi (2024). UCAAN iLab Evaluation.

Summary

Evaluation question: What is the association between ACE screening and disease management of COPD, diabetes, hypertension, adult asthma, and pediatric asthma?

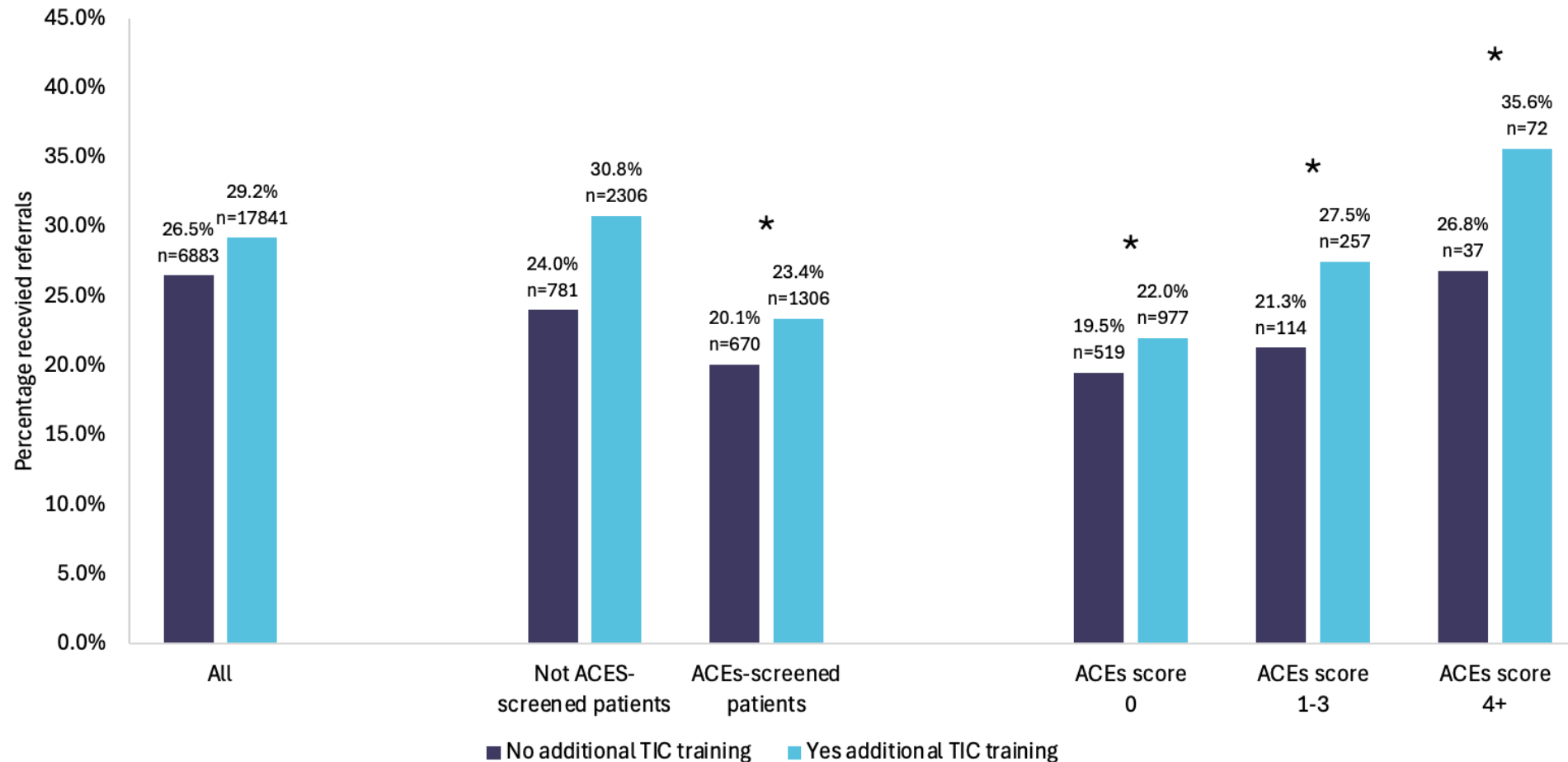
- Primary care patients who were screened for ACEs within screening clinics are more likely to achieve **some disease management metrics such as measurement of HbA1c, vaccination, and tobacco assessments** compared to those not screened for ACEs
- While screening was not associated with significant improvement with all disease management metrics, there **were no decreases in these metrics** either compared to those not screened for ACEs

Key Findings

Clinic Level Trauma-Informed Care Training

Patients in ACE screening clinics that received additional trauma-informed care training had more eConsult referrals, especially as ACE scores increased

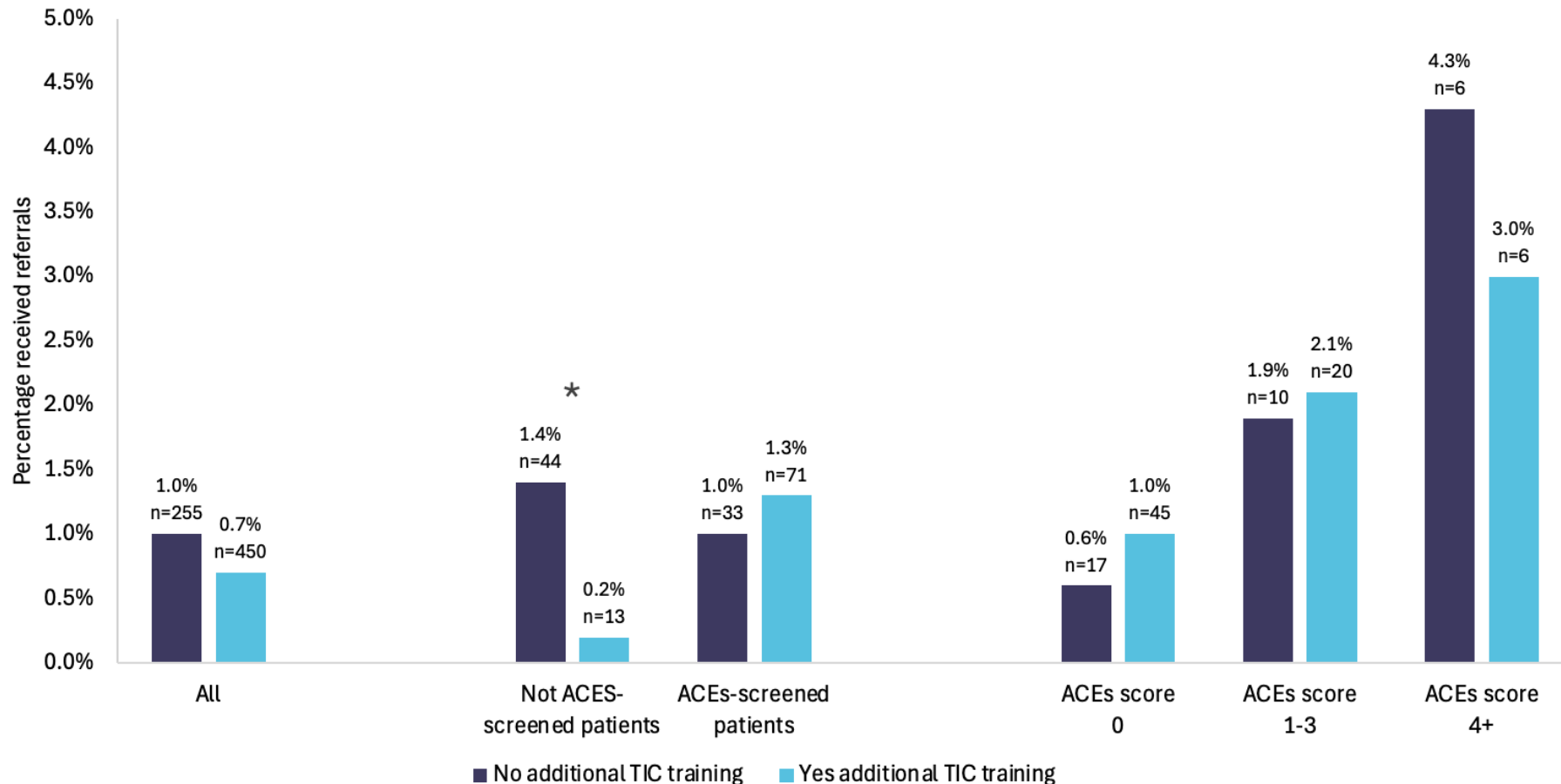
28% of all primary care patients from screening clinics had an eConsult referral (n=24724)



*Results were statistically significant at $P < 0.05$. Reference group is no additional TIC training. Additional TIC training is collected at the clinic level. Models were adjusted for age, gender, and line of business, and clustered sandwich estimator of variance for clinic. Stratified analyses by ACEs screening and scores were additionally adjusted for appointment type. P-interaction were not significant for ACEs screening status and ACEs score.

For patients with 4+ ACEs who were seen at clinics that received additional trauma-informed care training, fewer **One Degree referrals** were made

0.8% of all primary care patients from screening clinics had a One Degree referral (n=705)



*Results were statistically significant at $P < 0.05$. Reference group is no additional TIC training. Additional TIC training is collected at the clinic level. Models were adjusted for age, gender, and line of business, and included clustered sandwich estimator of variance for clinic. Stratified analyses by ACEs screening and scores were additionally adjusted for appointment type. P-interaction was significant for ACEs screening status and was not significant for ACEs score.

Summary of Findings

Summary of Key Findings

- ACE screening is associated with score-related social work, medical specialty care, and social service referrals
- Clinics that are ACE screening may be more likely to achieve some goal metrics for preventive care and/or disease screening. But, the greatest impact for these is seen at the patient level
- Adult and pediatric patients who are ACE-screened are more likely to achieve goal metrics for wellness, vaccinations, disease screening, developmental/behavioral screening, and certain disease management than patients who are not ACE-screened
- Clinics that receive Trauma-Informed Care training in addition to Becoming ACEs Aware in California have different referral patterns through eConsult and One Degree

Supporting Effective Screening and Intervention



Continued Screening

- Identify emerging needs and provide timely interventions through continuous screening.
- Check in with your site leadership and the ACEs-LA team to confirm your site's practices and procedures around ACE screening and response.



Leveraging Available Response Supports

- You can support patients in the following ways:
 - Conversation and Education. Offer support and provide education on ACEs and toxic stress.
 - Specialty Referrals to in-house resources
 - **USE ONE DEGREE!!!**
 - Our evaluation results show that it HELPS GET PATIENTS CONNECTED TO SERVICES!



Proper Charting and Documentation

- Accurate records of screens, interventions, and referrals support patient care.
- Be thorough in your documentation practices.
- **DO NOT SCAN IN FORMS**
- Enter ALL information into **BOTH** forms:
 - **ACE/PEARLS Adhoc Form** (where you record patient answers)
 - **Provider Adhoc Form** (where PROVIDERS document clinical assessment & response)



Open Invitation for Support

- Training for new staff, refreshers, and quality improvement reviews available.
- **REAL-TIME SUPPORT** via ACEs-LA's Support Teams Channel.



About 1 in 6 adults have 4 or more ACEs.

Although common, having ACEs can be very bad for your health. According to the CDC, at least 5 of the top 10 causes of death can be associated with ACEs.

Healthy Ways to MANAGE STRESS

aces-la.org

- Supportive Relationships
- Balanced Nutrition
- Physical Activity
- Mindfulness Practices
- Experiencing Nature
- Mental Healthcare

Relaciones de Apoyo
Sueño de Calidad
Nutrición Equilibrada
Actividad Física
Prácticas de Conciencia
Contacto con la Naturaleza
Atención de Salud Mental

Formas Saludables de MANEJAR EL ESTRÉS

1 de cada 6 adultos tiene 4 o más ACEs.

Aunque es común, tener ACEs puede ser muy malo para la salud. Según los CDC, al menos 5 de las 10 principales causas de muerte pueden estar asociadas con ACEs.

What are ACEs?

Adverse Childhood Experiences (ACEs) happen to people before their 18th birthday.

They include exposure to abuse, neglect, and household challenges like mental illness, divorce, or substance abuse.

ACEs cause toxic stress for your body.

aces-la.org

BIPOC Mental Health

El Mes de Salud Mental de BIPOC

AWARENESS MONTH

TAP THE LINK IN OUR BIO TO ACCESS MENTAL HEALTHCARE RESOURCES
TOCA EL ENLACE EN NUESTRO BIO PARA ACCEDER RECURSOS DE SALUD MENTAL

¿Que son las ACEs?

Las experiencias adversas de la infancia (ACE) le suceden a las personas antes de cumplir 18 años.

Incluyen exposición a abuso, negligencia y desafíos domésticos como enfermedades mentales, divorcio o abuso de sustancias.

Los ACE causan estrés tóxico para su cuerpo.

aces-la.org

NETWORK OF CARE RED DE ATENCIÓN

Antelope Valley
San Fernando
San Gabriel
West
East

aces-la.org

screen treat heal

A comprehensive approach to addressing ACEs
Un enfoque integral para abordar las ACEs

Screening: Identifying ACEs through standardized tools to help uncover hidden stressors and inform next steps.
Tratamiento: Identificar un problema de ACE a través de herramientas estandarizadas para ayudar a descubrir factores estresantes ocultos que afectan a personas que no se perciben.

Heal: Personalized treatment plans, including counseling, therapy, and family support, address the root causes of ACEs.
Trabaja: Los planes de tratamiento personalizados, que incluyen asesoramiento, terapia y apoyo familiar, abordan las causas raíz de las ACEs.

Heal: Fostering healing and resilience through compassionate care and continuous support.
Sanar: Fomentar la curación y la resiliencia a través de una atención compasiva y un apoyo continuo.

aces-la.org

NETWORK OF CARE CBOs RED DE ATENCIÓN CBOs

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Who We Are

ACES-LA brings together LA County stakeholders and the state to build community resilience. We are dedicated to helping DHS clinics across LA County implement ACE screening and responses. Through our Network of Care initiative, we aim to support children and families impacted by toxic stress by strengthening connections between DHS clinics and community-based organizations.

Quiénes Somos

ACES-LA reúne a agentes interesados del condado de Los Angeles y el estado para crear resiliencia en la comunidad. Nos dedicamos a ayudar a las clínicas de todo el Departamento de Servicios de Salud del Condado de Los Angeles a la implementación de la detección y respuesta de ACE. A través de nuestra iniciativa Red de Atención, nuestro objetivo es fortalecer las conexiones entre las clínicas del Departamento de Servicios de Salud y las organizaciones comunitarias para satisfacer conjuntamente las necesidades de los niños y las familias afectadas por el estrés tóxico.

aces-la.org

Our Vision

Through screening, treating, and healing, we aim to improve the health and well-being of LA County adults, children, and families, build creative connections, and inspire resilience.

Nuestra Visión

A través de detección, tratamiento y sanar, nuestro objetivo es mejorar la salud y el bienestar de los adultos, niños y familias del condado de Los Angeles, construir conexiones creativas e inspirar resiliencia.

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Our Mission

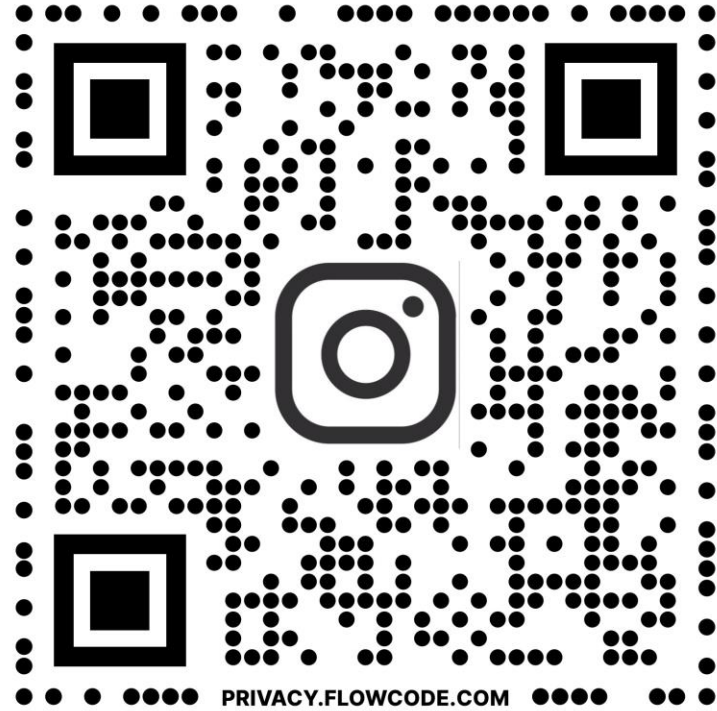
Our intention is to cultivate successful, healing connections that empower people and their communities to achieve health and well-being.

Nuestra Misión

Nuestra intención es cultivar conexiones exitosas y sanadoras que empoderen a las personas y sus comunidades para lograr la salud y el bienestar.

aces-la.org

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Thank you!

Upcoming Lunch and Learn:

See you **Wednesday, February 19th, 2025!**