

Norton Children's and the University of Louisville School of Medicine  
Louisville, Kentucky

## BACKGROUND

- Growing evidence supports that adverse childhood experiences (ACEs) and social determinants of health (SDH) are strong predictors of lifelong health. Thus, pediatric primary care clinicians are recommended to screen for ACEs and SDH during health supervision visits.
- Parental experience of childhood trauma has been associated with poor health outcomes in their children, so incorporating parental ACE screening into health supervision visits may provide an opportunity to break the cycle of toxic stress and improve lifelong health.
- Building connections to community partners is a method the primary care team can use to create prevention and intervention resources for families.

## METHODS

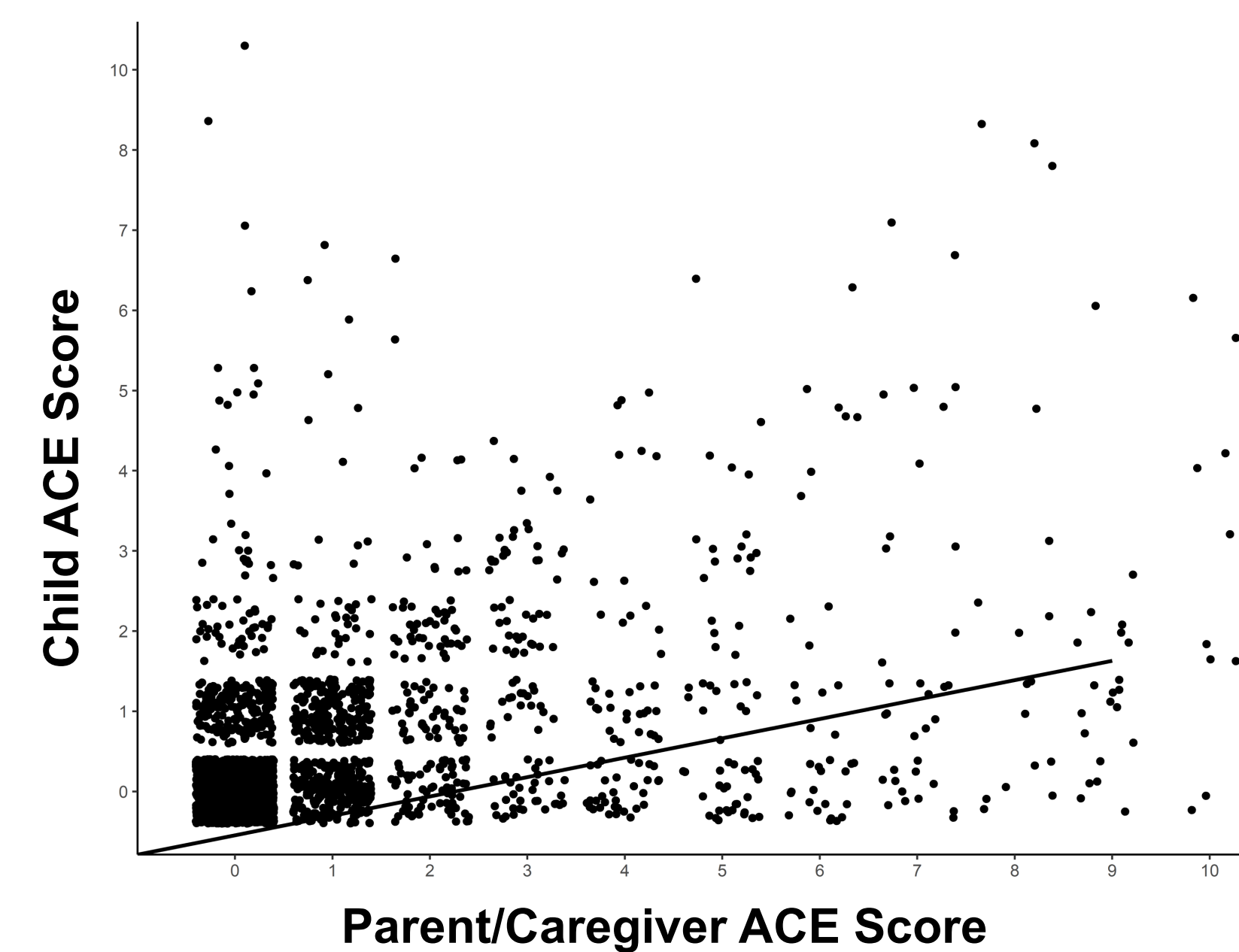
- Developed and implemented social care needs screener (financial, housing, food insecurity, educational, legal, and family stability) and compared the results with ten-question child and parent ACE screeners in an urban academic primary care clinic.
- Provided trauma-informed care education to the entire primary care team.
- Met with over 25 broad-based community partners (in clinic, virtually, or in community) to develop and strengthen relationships.
- Created monthly patient care meetings in which we invite community partners to share resources and discuss how to improve our partnerships.

## ACKNOWLEDGEMENTS

- Grant funded by Passport Improved Health Outcomes Program (IHOP)
- Support from Norton Children's Research Institute
- Authors have no financial relationships to disclose.

## RESULTS

- The parent and child ACE and SDH surveys were completed by 3374 parents/caregivers, who were primarily mothers (78%), insured by Medicaid (89%), and African-American/Black race (76%).

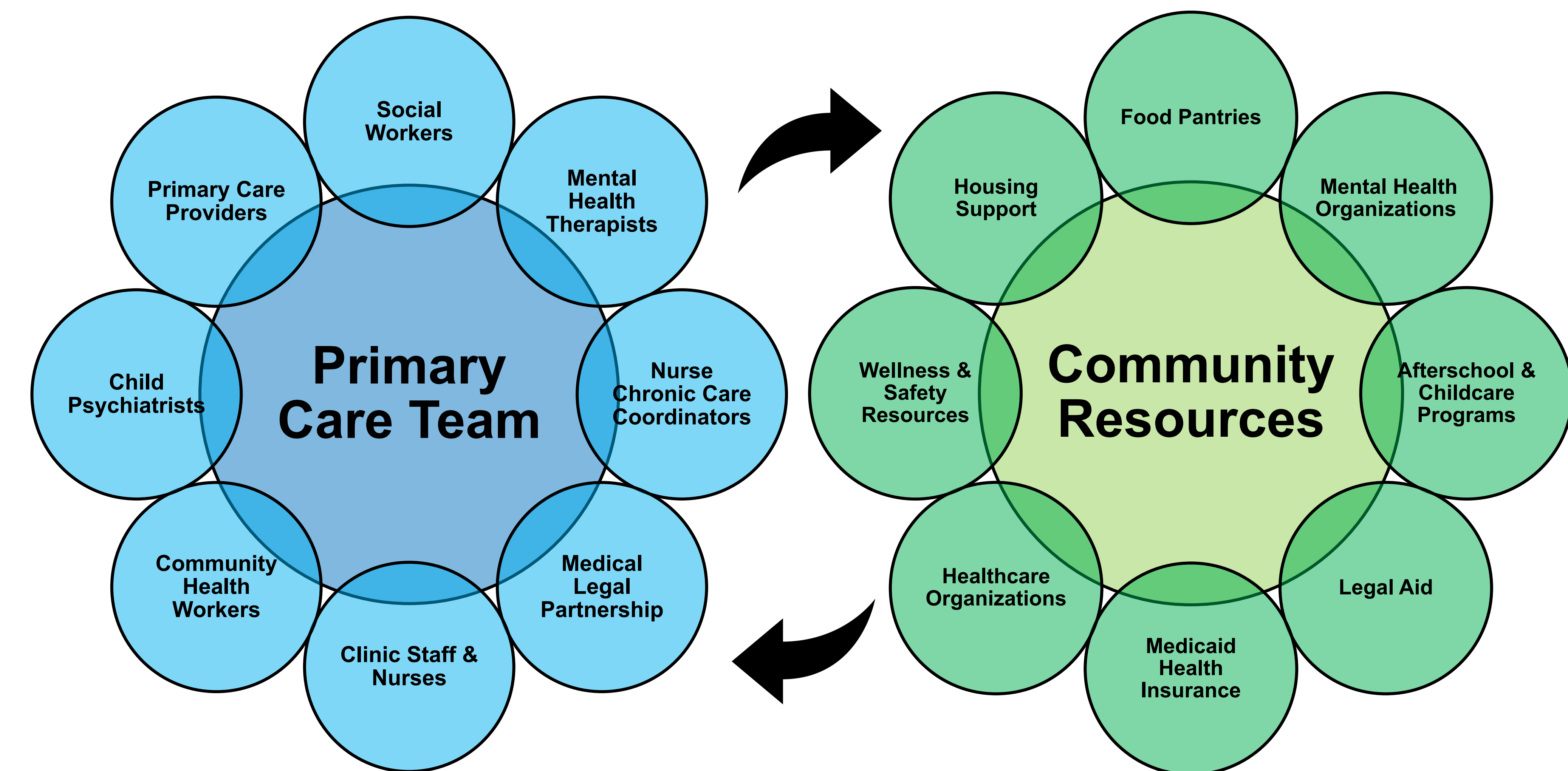


- As parents reported higher ACE scores for themselves, the reported ACE scores for children increased.
- Using multivariable generalized estimating equation, the strongest predictor for a child's reported ACE score of 4 or more when parent reported their own ACE score as of 4 or more (OR=9.07, *p*-value <0.001), followed by foster care, issues with custody, and then housing instability.

Multivariable Generalized Estimating Equation Predicting Child ACE Score of 4 or More

REGRESSION VARIABLES	OR	LowLimit	UpLimit	p-value
Parent ACE score 4+	9.072	4.548	18.097	< 0.001
Financial Instability	2.191	0.995	4.826	0.051
Housing Insecurity	3.449	1.49	7.981	0.004
Food Insecurity	1.308	0.621	2.758	0.48
Struggling in School	1.882	0.898	3.944	0.094
School Not Meeting Educational Needs	1.487	0.53	4.175	0.451
Custody Problems or Change in Custody	4.497	1.687	11.989	0.003
In Foster Care	5.127	1.756	14.965	0.003
Race - Hispanic	1.303	0.244	6.961	0.757
Race - Black	0.504	0.226	1.125	0.094
Race - Other	1.162	0.42	3.217	0.772
Race - Unknown	1.56	0.314	7.749	0.587
Gender - Male	0.913	0.545	1.529	0.73

- We created and expanded the primary care team to include multi-disciplinary services in order to address parent/child ACEs and social care needs. Team members provided direct services to families for mental, social, and legal needs.
- Through new and stronger community partnerships, we improved resources available in clinic, such as a food bank with fresh produce, car seats, books, pack-n-plays, helmets, and trigger locks.
- Using a team approach, we bolstered the number and quality of referrals to multiple community resources that addressed social care needs as well as mental and physical health care resources for parent/caregivers.
- We prioritized connecting with resources that highlighted the importance of promoting health equity and/or enhancing resilience, such as home visiting programs, afterschool programs, and parenting groups available in the neighborhoods where families live.



## CONCLUSIONS

- Screening for parent/caregiver ACEs may be more predictive of high child ACEs than SDH screening alone.
- Building community connections in primary care offers prevention and treatment strategies to address ACEs and social care needs in children and parents/caregivers.

## REFERENCES

- Dubowitz H, Finkelhor D, Zolotor A, Kleven J, Davis N. Addressing Adverse Childhood Experiences in Primary Care: Challenges and Considerations. *Pediatrics*. 2022 Apr 1;149(4):e2021052641. doi: 10.1542/peds.2021-052641. PMID: 35362065.
- Adrienne W. Henize, Andrew F. Beck, Melissa D. Klein, Monica Adams, Robert S. Kahn; A Road Map to Address the Social Determinants of Health Through Community Collaboration. *Pediatrics* October 2015; 136 (4): e993–e1001. 10.1542/peds.2015-0549.