

## INTRODUCTION

Adverse Childhood Experiences', or 'ACEs', describe stressful or traumatic events that may have a lasting impact on health and well-being. These early experiences, which have various effects on cognitive, social, emotional, and biological functioning, can be put into three categories: abuse, neglect, and household challenges. Since the original publication of the CDC-Kaiser Permanente Study, ACE research has been on the rise.<sup>1</sup> In Kentucky, just under 60% of adults have experienced at least one ACE in their lifetime, and nearly 20% have experienced more than four, placing Kentucky among the highest ranked states for ACE prevalence.<sup>2</sup>

While significant ongoing ACE research is increasing throughout the United States, research specific to Kentucky is lacking. With rates of ACEs being so high in the commonwealth, it is tempting to explore prevention and intervention strategies to implement sooner than later. However, it is first important to be familiar with the current status of awareness around ACEs in primary care providers in Kentucky. Although all providers may have the opportunity to intervene in the care of an individual affected by one or more ACEs, pediatric primary care providers represent the earliest possible point of intervention through screening.

## PURPOSE OF STUDY

This study aims to better understand where Kentucky lies with respect to awareness of ACEs and their associated adverse health outcomes, so that appropriate prevention and intervention strategies may be implemented in the future.

## METHODS

**Population:** 104 pediatric primary care providers within the UK HealthCare system were invited to participate in the study. 23 providers responded; 11 physicians, 10 nurse practitioners and 1 physician assistant.

**Study Design:** This is a quantitative, cross-sectional study. The study was administered using an anonymous, 14-question electronic survey using Qualtrics survey software sent via email using UK's Outlook email directory. Informed consent was disclosed in the cover letter and was obtained by proceeding into the Qualtrics survey. The survey contained questions regarding familiarity with the terminology "Adverse Childhood Experiences," the use of various screening tools for ACEs, and the perceived prevalence of the three most common ACEs seen in practice. The survey also reported pertinent demographic questions.

**Analytics:** Data from the survey was exported from Qualtrics into a Microsoft Excel spreadsheet. All data analyses were conducted using Qualtrics and Microsoft Excel.

## RESULTS

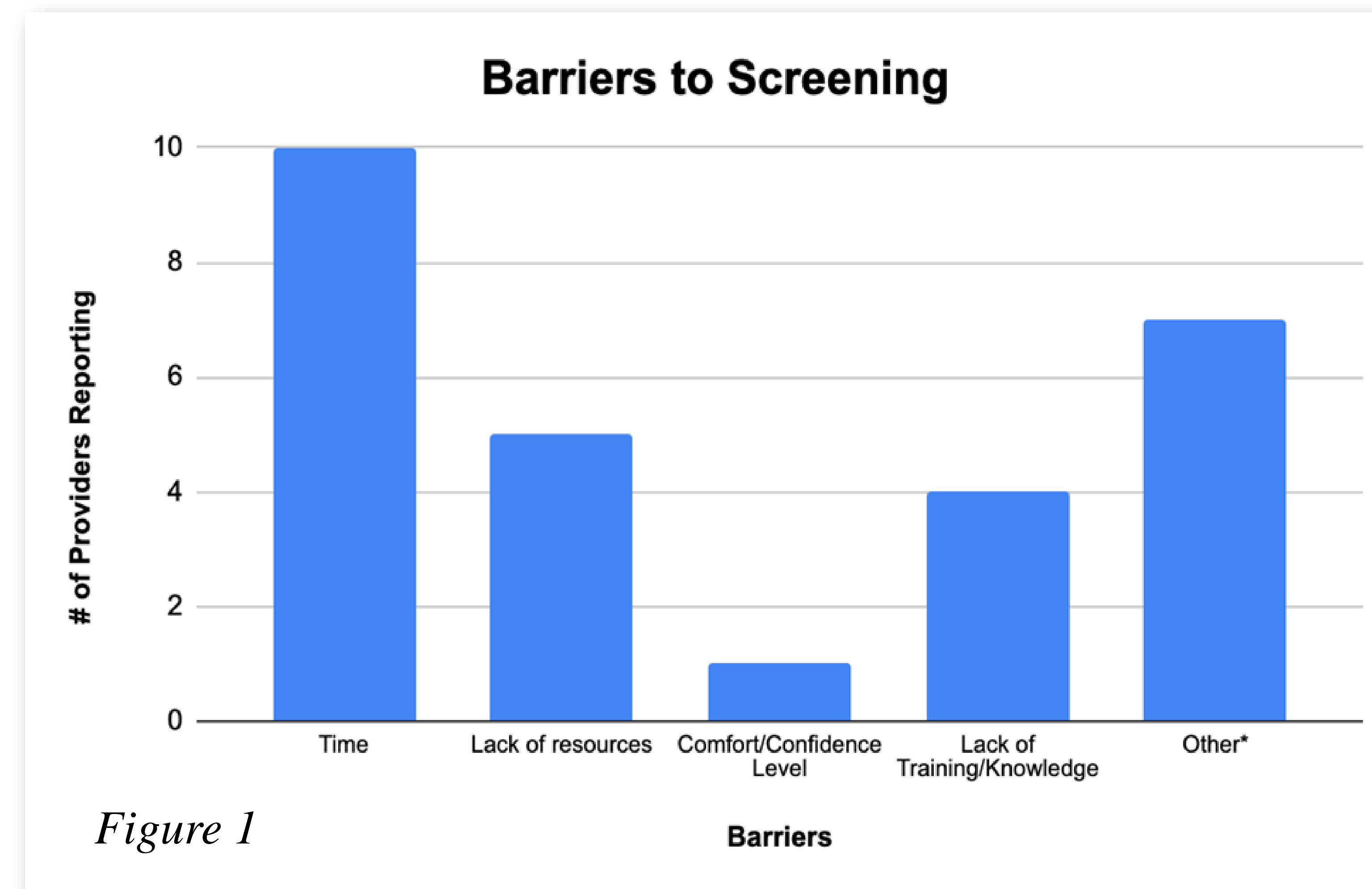


Figure 1

Abuse	Household Challenges	Neglect
<ul style="list-style-type: none"> <li>Physical</li> <li>Sexual</li> <li>Emotional</li> </ul>	<ul style="list-style-type: none"> <li>Mother Treated Violently</li> <li>Substance Abuse in Household</li> <li>Mental Illness in Household</li> <li>Parental Separation &amp; Divorce</li> <li>Incarcerated Household Member</li> </ul>	<ul style="list-style-type: none"> <li>Physical</li> <li>Emotional</li> </ul>

Table 1

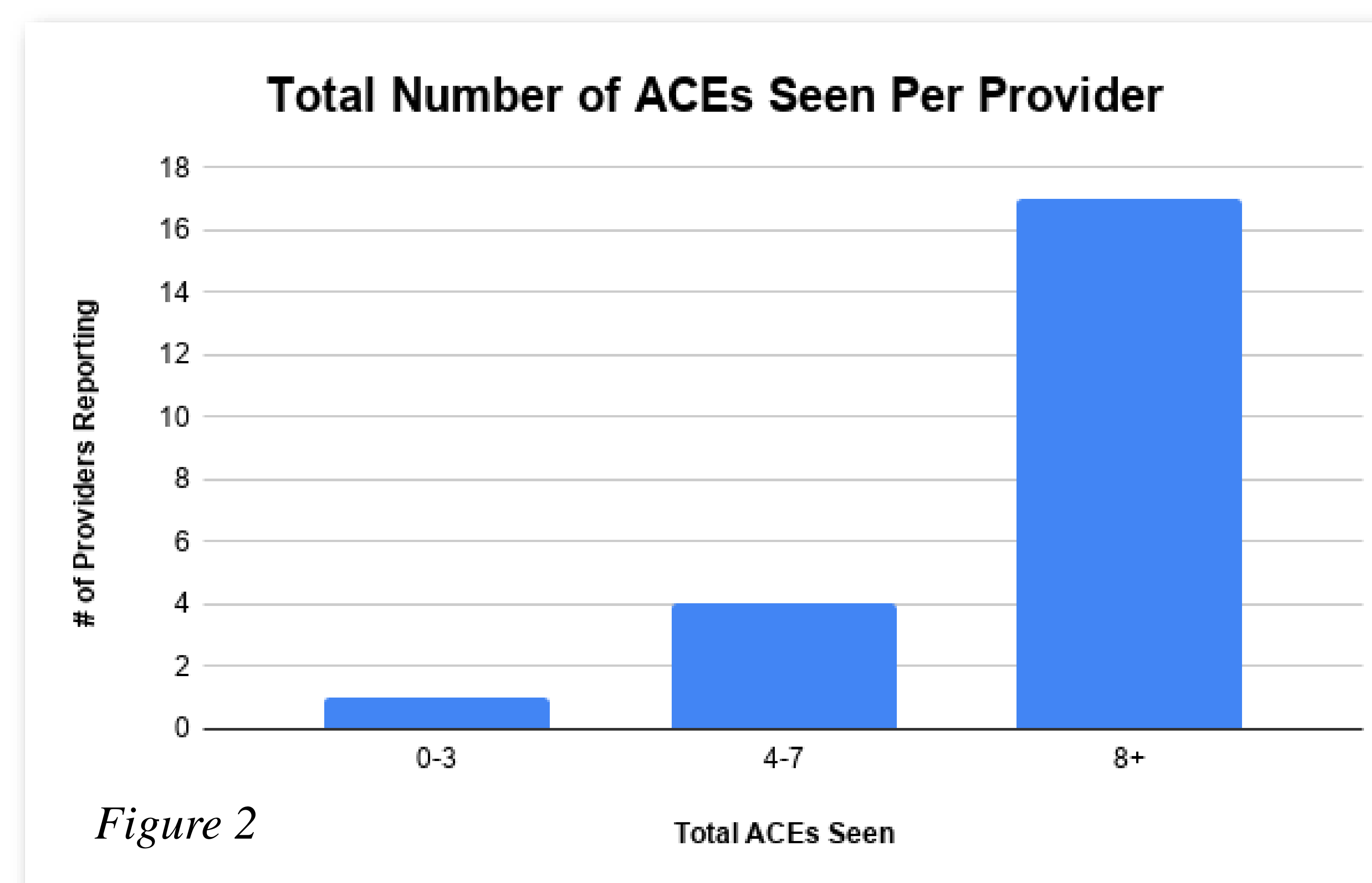


Figure 2

## SUMMARY OF RESULTS

22 providers were included. The 17 providers who reported that they do not currently use any screening tool for ACEs were asked to select from a list all barriers that prevent them from screening (Figure 1). Time was the most frequently reported barrier to screening, indicated by the reporting of 10 providers.

Providers in this study were asked to select all ACEs they had encountered in their practice, irrespective of their screening practices (Figure 2). Table 1 lists the ACEs providers could choose from, which include the same ten ACEs reflected in the original CDC-Keiser Permanente study.<sup>1</sup> It was found that 17 providers (77%) reported seeing at least eight of the ten ACEs listed in Table 1 throughout the duration of their practice.

## DISCUSSION

Every provider in this study reported being at least somewhat familiar with ACEs. However, the prevalence of screening for ACEs within this population is sparse, with only 23% working in a practice that utilized some form of screening tool. The scarcity of screening can be attributed to a combination of perceived and systemic barriers. (Figure 1)

While screening for ACEs does not occur in all pediatric primary care practices within UK Healthcare, it is almost certain their patients have them. Unsurprisingly, 17 providers (77%) reported seeing at least eight of the ten ACEs from Table 1 in their practice (Figure 2). This data is consistent with ongoing ACE research that reports the high prevalence of ACEs across various communities, further implicating the invaluable role primary care providers play in screening.

## CONCLUSION

This study calls to action pediatric primary care providers in Kentucky, to embrace the challenge of integrating a familiar, evidence-based secondary prevention strategy into their practice. Pediatricians represent one of the earliest points of contact for children unknowingly undergoing traumatic experiences within their own home, making them the ideal professionals to administer this screening. This study hopes to empower pediatric providers and inspire future research to promote standardized ACE screening across the commonwealth of Kentucky.

## REFERENCES

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- Merrick MT, Ford DC, Ports KA, Guinn AS. Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States. *JAMA Pediatr*. 2018;172(11):1038-1044. doi:10.1001/jamapediatrics.2018.2537