Background/Significance: Adverse childhood experiences (ACEs) include an array of traumatic events that increase one's risk for chronic conditions, such as diabetes, heart disease, cancer, and stroke, as well as psychological illnesses (Felitti et. al 1998). Over-activation of the hypothalamic-pituitary-adrenal axis is the proposed mechanism of these outcomes. ACE screening is a way to identify individuals who are at higher risk, and efforts have been made to increase provider comfort with screening. However, ACEs are not regularly screened for in pediatric clinics and there is no AAP clinical practice guideline for ACEs screening at this time. The purpose of this project is to investigate Wisconsin provider knowledge and attitudes toward ACEs, and to identify variables that may contribute to, and/or hinder, incorporation of ACEs knowledge into practice.

Specific Aim 1: Investigate correlations between providers' knowledge and/or attitudes surrounding ACEs and providers' experiences, including providers' number of years in practice, patient volume, and provider specialty.

Specific Aim 2: Identify barriers to ACEs screening and ACEs education using interviews (12) with medical students, residents, and providers.

Research design/methods: This mixed method study will consist of two steps: a survey of students, trainees, and practitioners followed by interviews of survey participants. IRB approval has been obtained for step 1 and will be updated pending funding for step 2.

Step 1: Survey

- Procedure: A cross-sectional survey hosted online via Qualtrics will be distributed via listserv to medical students, family medicine and pediatric residents, and family medicine and pediatric practitioners. The projected sample size will be approximately 300 based on listserv estimates, with surveys available over a 6-8 week time period. It is expected that the survey will take 10-15 minutes to complete.
- Measures: The survey consists of 21 questions in a predominantly Likert scale format to evaluate comfort and knowledge of ACEs and screening. The questions have been tested among a sample of survey participants to evaluate clarity prior to use in the study. We also included a free text box at the end of the survey for a description of perceived barriers. Demographics will include year in practice, type of practice (urban, rural, suburban), and subspecialty.
- Recruitment: We will recruit members through the UWSMPH medical school, family medicine, and pediatrics listservs, as well as the Wisconsin AAP listserv.

Step 2: Interviews

- Procedure: Upon completion of the survey, participants will indicate interest in participating in a follow-up interview. A member of the research study staff will conduct qualitative interviews with selected interviewees (n=12) lasting 30-40 minutes.
- Measures: The interview will consist of open-ended questions that expand upon those stated in the online survey to identify areas for further education, perception of barriers to screening, and suggestions for screening implementation in medical settings.
- Recruitment: Of those who express interest, participants will be divided by credentials (student, resident, advanced practitioner, MD/DO) and be randomly selected from within the groups to complete the interview. Three people from each credential subgroup will be selected, or if not evenly distributed, then an appropriate percentage from each subgroup will be used to mirror survey completion breakdown.

Analysis:

- For step 1, we will use descriptive statistics as well as compare year in practice, subspecialty, and clinic location with reported comfort with ACEs and frequency of screening.
- For step 2, we will categorize responses based on credentials and look for common themes relating to educational opportunities and attitudes/barriers toward screening.

Planned deliverables: Abstracts will be submitted for 2021 or 2022 PAS and/or AAP conferences depending on study timeline, with a goal of presentation and ultimately publication. Publication targets will be identified using the Jane Biosemantics tool once results have been synthesized.