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# Marijuana Vaping in Adolescents: Evaluating Provider Knowledge and Practices to Improve Screening and Referral to Treatment

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"Electronic Cigarette Vaping, 1 Vape Cloud" by lindsay.fox is licensed under CC BY 2.0

## Background & Available Knowledge

- Adolescents are utilizing electronic vapor products as a primary method of marijuana use at increasing rates
- Current users 8x more likely to report primary method of marijuana use as vaping 2017 to 2019<sup>1</sup>
- The concentration of tetrahydrocannabinol (THC) has recently increased more than 60%, from approx. 8% in the 1980s to upwards of 70% today<sup>2</sup>
- Perception of risk is declining: decreased perception = increase use of substances<sup>3</sup>
- Emergence of e-cigarette or vaping product associated lung injury (EVALI), intoxication, addiction, overdose<sup>4</sup>
- Primary Care Providers in a unique position to screen
- Screening not consistent, not using validated tools<sup>5</sup>
- Barriers: lack of time, knowledge/training how to manage positive screens<sup>6</sup>
- Less than 10% getting care needed as a result<sup>6</sup>
- AAP recommends PCPs screen all adolescents, tailor guidance to level of substance use, part of routine care<sup>7</sup>

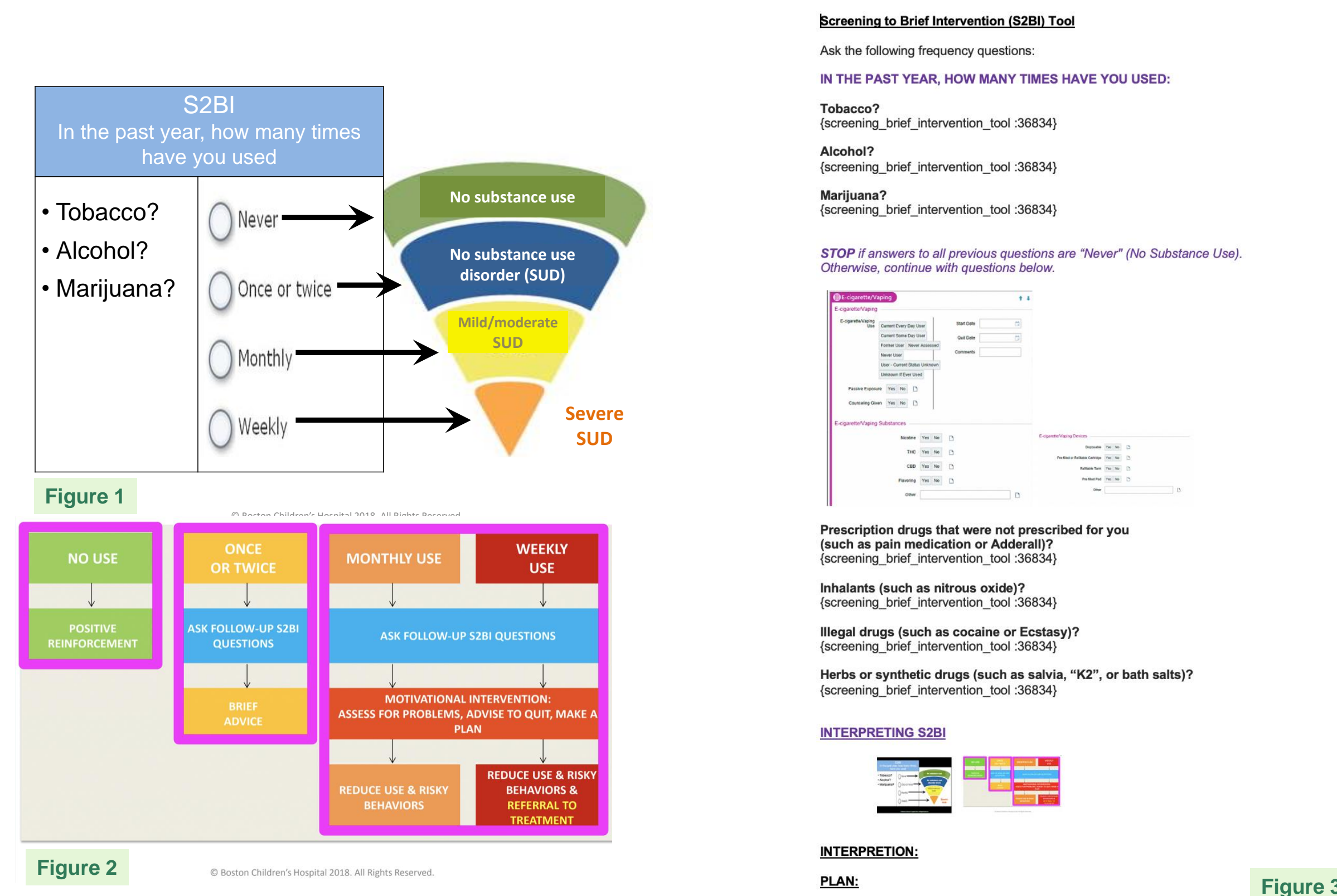
## Objectives

- Determine practices/perceptions of vaping and screening practices
- Provide education about SBIRT/S2BI, vaping
- Create SmartPhrase
- Evaluate impact of education and tool creation with post-intervention survey

## Methods

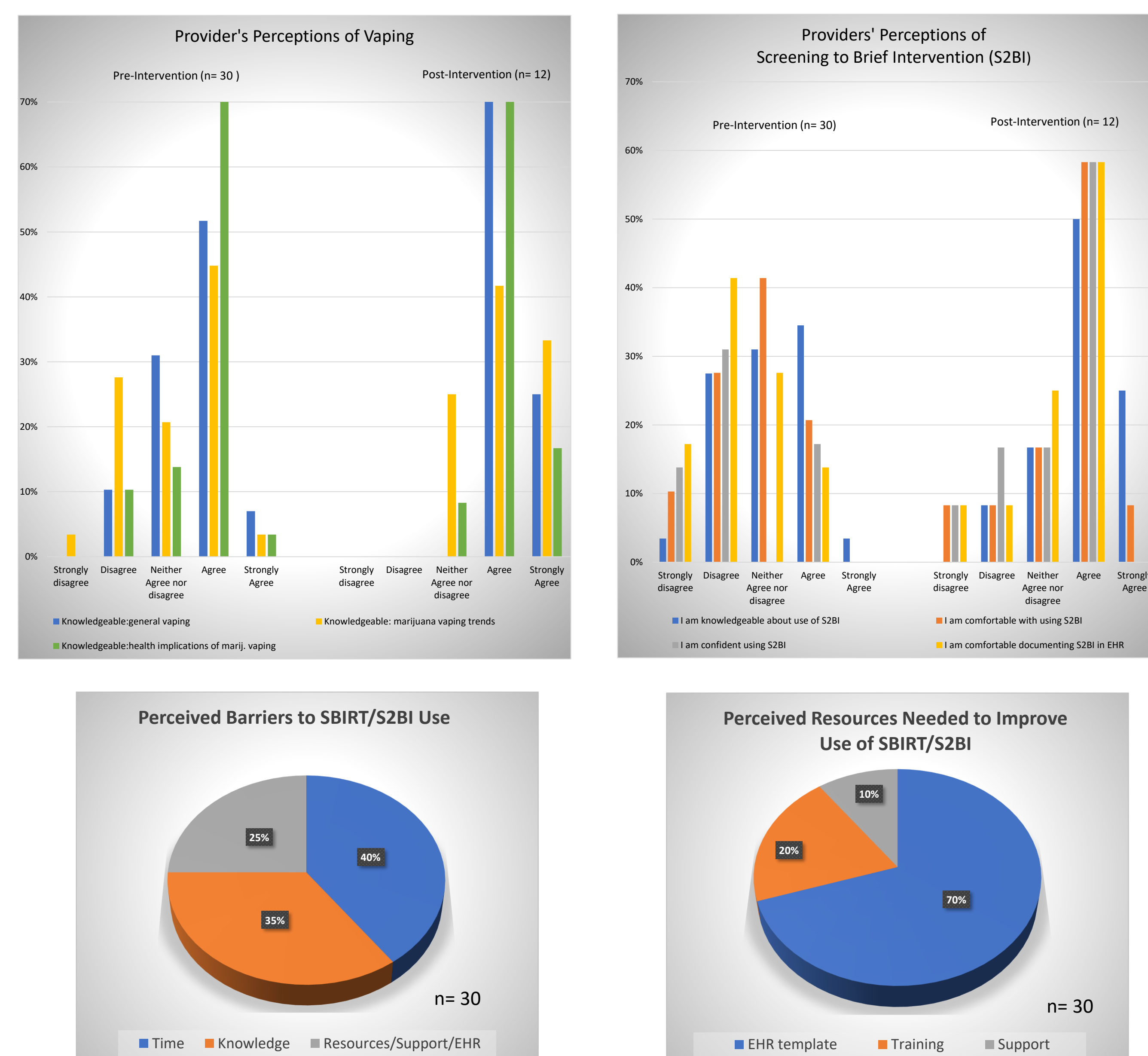
- Pre-intervention Likert Scale survey: baseline perception data
- PowerPoint presentation with survey embedded: Grand Rounds
  - SBIRT/S2BI
  - Vaping
  - SmartPhrase: clinical decision support tool
  - Screencast video
- Post-Intervention survey: 1-2 months after education, Likert Scale Survey and Qualitative Questionnaire

## The Screening and Documentation Tool



- SmartPhrase tool embedded in EHR to improve ease of use, speed, accuracy of screening, documentation of findings (See Figure 3)

## Results



- Education improves providers' perceptions and knowledge
- The intervention highlighted providers' desire for more information, resources and support

## Interpretation

- The educational intervention, screening and documentation tool address a care gap
- Findings addressed the known knowledge gap: time, resources, support needed to address this public health crisis
- The cyber attack and global pandemic were limitation on the scope of this project: use of tool did not increase

## Future Directions

- Increasing screening and referral to treatment positively impacts overall health outcomes and decrease health care costs for adolescents vaping marijuana
- Operationalize the educational intervention and SmartPhrase utilization
- Optimize clinical decision support tool and note template
- Ongoing audit of SmartPhrase
- Ongoing support and feedback solicitation by a change champion

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