

Pediatric Clinicians' Responses to a Computer-Facilitated Substance Use Screening and Brief Advice System for Primary Care



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Background

- The American Academy of Pediatrics (AAP) recommends substance use screening for all adolescent patients during routine well-checkups, but adherence to this practice tends to be low.¹
- Frequently cited barriers include lack of time during visits and uncertainty about how to address substance use with patients.
- A computer-facilitated screening and brief advice (cSBA) system can raise screening rates and improve efficiency and effectiveness of clinical care.
- Clinician feedback is critical for determining feasibility and likelihood of adoption of a cSBA system in busy pediatric practices.

Objective

 To assess pediatric primary care clinicians' (PCC) experiences implementing cSBA with their adolescent patients.

Methods

- 27 pediatric physicians and 36 pediatric nurse practitioners (N=54) with an average of 17.0± 9.8 years in practice from 6 practices around Boston, MA, were trained in the cSBA system.
- PCCs implemented the cSBA system during well-visits with adolescent patients age 12-20 years over 18 months from 2015 to 2016.
- At the close of participant recruitment, PCCs completed an 18-item questionnaire with openended and closed-ended questions about their experience with the cSBA system.
- PCCs were offered 3 AMA PRA Category 1[™]
 continuing medical education (CME) credits
 and a \$10 Starbucks gift card upon completion.

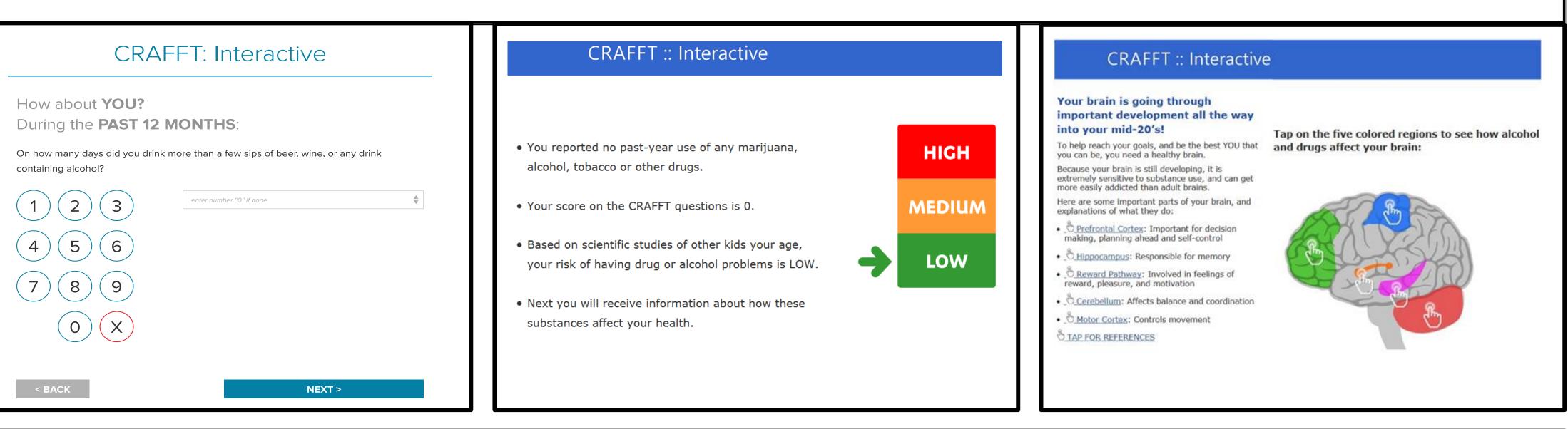
Data Analysis

- Two investigators independently coded the open-ended questions for major themes and came to consensus on coding measures.
- Coding discrepancies were resolved by a third investigator.
- Closed-ended item frequencies were calculated using SPSS.

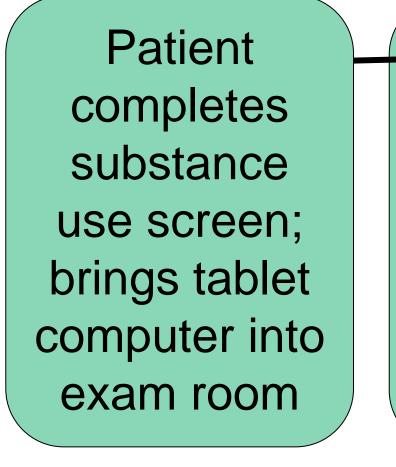
Computer-facilitated Screening and Brief Advice (cSBA) System

cSBA was administered on a tablet computer and consisted of the following components (with screenshots shown below):

- 1. Pre-visit adolescent substance use screening using the CRAFFT 2.0
- 2. Immediate personalized feedback including risk level for a substance use-related problem
- 3. 10 educational pages with scientific information and true-life stories about health risks associated with substance use
- 4. Clinician Report Form with screening results and suggested brief advice tailored by patient's risk level
- 5. Contract for Life (to prevent substance use-related driving/riding) and Teen-Safe.org card (resource for parents)



Well-visit Clinic Flow – cSBA Protocol



PCC discusses confidential-ity with patient

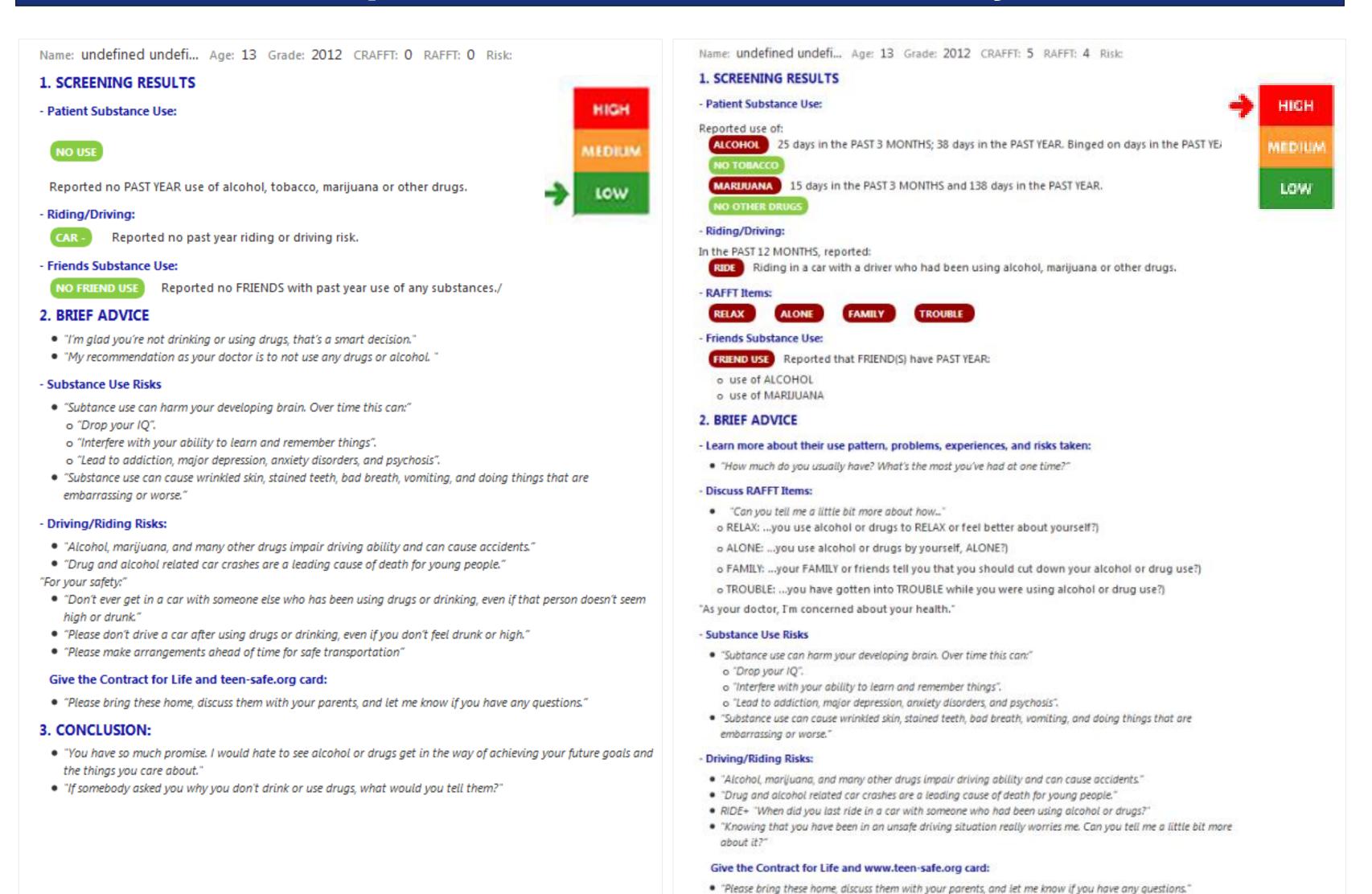
PCC logs
into tablet
computer;
views
Clinician
Report Form

PCC reviews
patient's
responses;
follows
talking points
for tailored
brief advice

PCC hands
patient
Contract for
Life and
TeenSafe.org card

PCC and patient discuss goals/make follow-up plan

Patient Packet



If adolescent reveals that driver is a parent, sibling or other close relative:

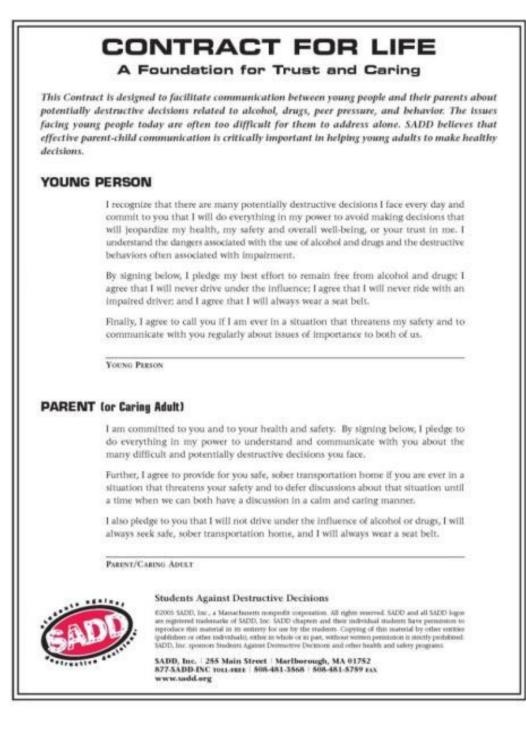
"Please let me know if this ever happens again."

CRAFFT score is greater than 2. Consider referral to treatment

3. CONCLUSION:

Discuss a safety plan, consider a follow-up visit if there is not enough time for discussion
 "I will speak with your parents about the Contract for Life. I do this with parents of all my patients.

Clinician Report Form & Brief Advice by Risk Level





Clinician Feedback

- 93% (50/54) completed the questionnaire.
- 88% (44/50) rated cSBA very/moderately useful for their practice.
- 80% (40/54) reported increased confidence discussing substance use with adolescents.
- 62% (31/50) would recommend cSBA to other practices; 32% (16/50) were undecided.
- Most useful aspects of cSBA:
 - 1. The pre-visit computerized screening
 - 2. Screening results and risk level
 - 3. Suggested risk level-specific talking points

"The most useful aspects of the cSBA system were having the risk assessment ready for me with any 'at risk' findings highlighted."

"A valuable talking point was to remind patients that their brains are still developing into their mid-20s, and substance use can permanently affect neurological development."

- Challenges of cSBA:
 - 1. Increased visit time for some patients
 - 2. Difficulty navigating the system without regular use
 - 3. Lack of integration in the EMR system

"It would be helpful if we could integrate into EPIC or the EMR in general!"

Conclusion

- PCCs found cSBA feasible and acceptable for substance use screening and brief advice during annual adolescent well-care visits.
- Integration of cSBA into EMR systems would improve practice flow and system utility.

References

. Hingson Ralph, Zha Wenxing, Iannotti Ronald, Simons-Morton Bruce. Physician Advice to Adolescents About Drinking and Other Health Behaviors. Pediatrics. Jan 2013; 131; 249-257.

Acknowledgements

This study was supported by grants R01AA021904 and 1R34AA023026 from the National Institute on Alcohol Abuse and Alcoholism (NIAAA). We thank our study Steering Committee members: Drs. Ronald Samuels, Traci Brooks, Laura Grubb, Tom Silva, Louis Vernacchio, and Wendy Wornham. We thank our research study staff: Jesse Boggis, Paula Carroll, Sarah Copelas, Jill Finlayson, Kateryna Kuzubova, Jordan Levinson, Victoria Rines, and Jessica Tauber.

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