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 open-ended 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)

Clinician Feedback

• 93% (50/54) completed the questionnaire.

• 88% (44/50) rated cSBA very/moderately useful for their practice.

• 80% (40/50) 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


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