Case Report

Integrative Pediatrics and Child Care

Lessons Learned from Implementing Screening, Brief Intervention, and Referral to Treatment for Youth and Young Adults in Primary Care Settings

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Abstract

Screening, Brief Intervention, and Referral to Treatment (S·BI·RT) in pediatric practices normalizes conversations between youth and healthcare providers about alcohol and other substance use, and supports guidance about healthy behaviors. S·BI·RT also identifies youth ages 12-22 whose current use of addictive substances places them at risk for developing substance use disorders, prompting provider brief intervention and referral for further assessment or treatment before a substance use disorder develops. From May 2014 to June 2017, S·BI·RT was implemented as a standard of care in 23 pediatric practices in three cohorts across 10 organizations in New Hampshire —including academic medical centers and FQHCs—serving over 74,000 youth. This case study focuses on strategies associated with operationalizing S·BI·RT, specifically training and technical assistance related to clinical workflow, for youth and young adults.

Introduction

Addictive disorders are a pediatric disease. Early onset use of alcohol or other drugs is a major predictor of the subsequent development of alcohol or other drug use disorders. Those who use addictive substances before age 15 are nearly seven times more likely to develop addiction as those who delay use until age 21 or older (28.1% vs. 4.3%) [1,2]. Every year that substance use is delayed during the period of adolescent brain development, the risk of addiction and substance abuse decreases [3]. American Academy of Pediatrics recommends universal screening for substance use of youth at each annual physical examination, at a minimum [4,5].

The acronym S·BI·RT – Screening, Brief Intervention and Referral to Treatment – denotes a public health approach to systematic universal screening for problematic alcohol and drug use and the routine steps taken to address the screening results. S·BI·RT represents a set of processes that include discrete components: S (screening), BI (brief intervention), and RT (referral to treatment). Beginning with screening, each component builds on the previous process. The Substance Abuse and Mental Health Services Administration endorses S·BI·RT as an evidence-based approach.

Through S·BI·RT, healthcare providers can identify problematic use, provide early intervention, and coordinate effective care. The significance of S·BI·RT is that it focuses on stopping substance misuse before it starts, and/or catching early use before it escalates.
Case Presentation

From April 2014 to July 2017, the New Hampshire Youth S·BI·RT Initiative (Initiative) implemented S·BI·RT as a standard of care in primary care practices; this case study focuses on strategies associated with operationalizing S·BI·RT, specifically, training and technical assistance (TA) related to clinical workflow, for youth and young adults [6].

Three cohorts of 23 practice sites across 10 organizations serving collectively over 74,000 patients ages 12-22 were funded from May 2014 to June 2017. These sites represented a range of rural and urban service delivery settings, including Federally Qualified Health Centers (FQHCs) and other community health centers (CHCs), a large academic healthcare system, a mid-sized healthcare system, critical access hospitals; and patient-centered medical homes. Funding criteria required sites be 501(c)(3) provider organizations, have an EMR in place, and a relationship with a behavioral health (BH) provider (either integrated, co-located, or in partnership with an external practice). The implementation teams included a medical champion, a BH specialist, an information systems expert, and a member with authority to make decisions, such as a medical director or administrator.

Implementing practices were also required to use a developmentally appropriate, valid and reliable screening tool, which included the CRAFFT [7,8,9] and/or S2BI [10,11]. Screening modalities ranged across sites from high tech (embedded in an EMR as part of a more comprehensive screen) to very fundamental (use of an eraser-board). More than half (54%) screened electronically; 23% used paper. Some practices also used other screening tools, depending upon the patient's age, recognizing that a tool appropriate for a 14 year old may not be the best fit developmentally for someone who is 21. Sites stratified the tool utilized, as well as related clinical decision support based on the patient's age. One practice site reported, “Adolescents perk up when asked these focused questions. Generally speaking, CRAFFT increases engagement and builds trust.”

The BI was considered a brief three to seven minute conversation between provider and patient to understand a patient's level of risk based on screening results, readiness to change, specific life circumstances, and the need for follow-up to actively facilitate positive change [12].

Figure 1 reflects data documented, collected, and reported by practice sites. Documentation of screening, BI, and referrals in the EMR, and subsequent retrieval of that information for reporting posed significant challenges for several practice sites.

![Figure 1: Percent of Youth Not Screened, Screened Not At Risk, and Screened at Risk](image)

In the aggregate, 77% of Youth Visits to a primary care provider (PCP) were screened for risk of alcohol and drug use. Since April of 2015, when the first cohort had had a few months of experience in screening and data collection, the mean percent screened was 74% (range 57% to 90%). As different sites began reporting data at different times throughout the project, aggregate percentages fluctuated, reflecting the lack of experience of each new cohort with the screening process. That is, as more experienced sites began to improve their screening rate, new less-experienced sites began to report data, reducing the overall percent for that quarter.

Fifteen percent of Youth Screened were found to be at risk (2,242 of 15,126), ranging from 10%-23% over the course of the reporting period. Although the data do not distinguish between low risk and high risk, the data for Youth at Risk who Need Referral provide insight: 687 (31%) Youth at Risk needed a referral. How these figures compare to national data depends on the survey used, the ages covered by the survey, and the definition of “at risk”. Nearly 70% of participating practice sites established new partnerships for referral with behavioral health providers, schools, recovery supports, and/or other organizations in their communities as a result of this Initiative.

1The mean percent is the mean of all of the percentages in each reporting quarter over time, and so differs slightly from the aggregate percent.
This Initiative demonstrated that the S·BI·RT mnemonic lacks an important component: follow-up. Follow-up includes the proactive steps a practice takes to contact a youth at risk for the purpose of closing the loop on suggested action steps, regardless of whether that patient received a BI or was referred to specialty services/treatment. The nature of follow-up depends upon the patient’s needs, organizational capacity, and the provider’s preferences. More specifically, follow-up includes a broad range of actions on the part of the PCP or other staff (care coordinator, nurse, educator) to check in with a patient who has been identified as Youth at Risk, including a phone call to confirm if the patient made an appointment or communicating with the individual provider or organization to which the patient was referred. Following up on screening results, BI conversations, or referrals for further assessment and treatment is crucial to ongoing, whole health management with each patient, and essential to a meaningful provider-patient relationship. This component of the process presented the greatest challenge to participating practices; follow-up care or contact from their PCP was documented for only 7% of Youth at Risk (n=146).

Technical Assistance and Training

“We initially encountered much resistance internally. We would like to sincerely thank the guidance provided by the staff at JSI through the two-year grant period. Additionally, without the support of the “collaborative”, implementation of SBIRT in our health center would have been challenging.”

-Implementing Site

An initial site-based readiness assessment [13] captured organizational context, including any existing plan for screening implementation, confidentiality protocols, EMR, current QI practices, organizational communication practices, and existing services to accommodate referrals, and informed site-specific implementation plans. Length, scope of content, and timing of on-site trainings were customized through collaborative content development, allowing for adaptation based on each site’s level of expertise and access to other resources. For example, providers at some organizations had already received motivational interviewing (MI) training prior to this Initiative; thus, the focus of training for these grantees was less on developing MI skills, and more tailored to emphasizing developmental issues related to the 12-22 year old population.

The TA and training plan was initially developed as an action learning collaborative [14,15,16] which included monthly cohort calls, individual on-site consultation, phone and email consultation, informational webinars, tailored on-site trainings, as well as in-person meetings. As the Initiative progressed, TA was provided more often through monthly virtual meetings, with fewer in-person meetings.

Initially, we provided S·BI·RT process and BI training prior to implementation, but found that many sites spent a few months establishing their screening protocols and workflows before going live. By that time, any BI training that had been done was stale. In addition, at the outset some providers overestimated their comfort level with BI, and it wasn’t until they were engaging with youth, that they asked for and were truly engaged in training. Based on our experiences, we recommend an initial introductory training focusing on what the S·BI·RT process is, why it is important, and what the implementation process will involve. The initial BI training for providers should be conducted just as the screening goes live, with a booster training for BI and MI two to three months after the initial training.

Throughout training, we provided materials including guidelines to conducting BI conversations and strategies for cutting down on risky use. We also developed: tip cards with readiness to change rulers; educational materials illustrating pictures of standard sized alcoholic drinks that can facilitate conversations with patients; and a Playbook, which serves as a compendium of actions and strategies that support S·BI·RT implementation as a systems level change.

Over the course of this Initiative, 570 staff were trained, including PCPs, nurses, medical assistants and administrative staff. Training evaluations indicated that participants found the trainings were applicable to their work (100%); increased their knowledge and skills (96%); impacted their future job performance (96%); and found the teaching strategies and/or resources effective (98%). Evaluations from annual summits revealed that on average, 91% of participants (n=305) indicated that knowledge gained would influence their practices.

Considerations on Clinical Work-Flow for Screening, BI and Referral to Treatment

SBIRT implementation in primary care settings represents a systems change that requires numerous workflow adjustments in addition to training on screening and/or BI. Factors contributing to variation in successful
implementation included leadership endorsement, clinician engagement, support for adapting EMRs, staff engagement in developing new workflows, commitment to ongoing training/QI efforts, and partnerships for needed referrals. Some sites institutionalized the process by adding S·BI·RT performance as an organizational metric (e.g., adding S·BI·RT data to performance dashboards, and integrating S·BI·RT Quality Measures into ongoing Professional Practice Evaluations as part of provider contracts). Specific considerations are highlighted below.

Screening

Practices that already screened their adolescent patients on behavioral health concerns such as tobacco, depression, anxiety, and suicidality found it easier to embrace and implement S·BI·RT as they already had workflow processes in place. Some sites identified through S·BI·RT implementation that they were not conducting their other screenings in the most effective way. In general, providers needed encouragement to address substance misuse in the same manner they address depression, anxiety, suicidality, etc. Some were hesitant to document substance use-related issues in the EMR due to misplaced concerns that details of illegal drug use might negatively impact the young person's future opportunities. Although we expected patients to object to the screening, we often found the opposite. One implementing practice reported:

“What was surprising was the brutally honest and candid remarks made by the adolescents. They felt comfortable enough speaking with their Clinician and admitting their use. More importantly, they took the Clinician's advice and guidance towards changing their behavior. Having Behavioral Health Clinicians in-house for warm hand-offs helped ease their trepidations towards a new healthcare provider to speak with.”

Another spoke to the method of screening

“We learned that we got more honest responses to screening questionnaires when youth were able to use a tablet touch-screen for recording self-reported questions responses, rather than by responding to questions asked verbally from a medical assistant.”

Brief Intervention

Practices found it easier to implement routine screening than to incorporate appropriate BI based on results. While many PCPs are accustomed to screening patients for a number of health risks, providing a BI often constituted a behavior change to the manner in which providers engage patients. Influencing providers' response to patients proved more difficult to change than embedding a screening tool in the EMR. Providers' understanding of the distinction between BI and treatment was critical. Some providers were initially hesitant, reporting that they felt as PCPs that they were not qualified to provide BIs. It was necessary to emphasize that the aim of the BI was to engage the patient in a motivating conversation about voluntary steps toward change or reducing harm, not to provide treatment.

Referral to Treatment

Referral to Treatment (the RT in S·BI·RT) may be a misleading descriptor. In primary care settings, “referral” typically means “referral for further assessment” by a specialist, who then conducts an assessment, makes a diagnosis and determines the need for treatment. If the EMR is not structured to capture referrals, this information is often documented in field text or narrative notes, making it difficult to track and provide follow-up care. In some practices, lack of mechanisms to note whether the patient is already in treatment, or whether they declined referral also presents a challenge.

Follow-up

There was variability in how follow-up was provided, and what constituted a follow up, for any patient referred to a specialist. Follow up could be a phone call, which is not reimbursed, or an appointment, in which case the billing code for the appointment might not reflect that it was follow-up care; therefore, it was difficult to report exact numbers for follow-up because there was no easy way to integrate this information into the EMR. The absence of a mechanism or process to note whether the patient is already in treatment or declined referral is a barrier to follow-up. CHCs and FQHCs with BH services integrated into their clinic and practices that had existing relationships with local mental health providers found it easier to provide follow-up care than the larger private organizations. They also assigned staff to follow-up with patients who received referrals.

Conclusion

Primary care practices in general, and those that care for children and youth in particular, are incredibly busy caring for patients with multiple medical and behavioral co-morbidities as well as dealing with socioeconomic challenges. Insurers and state and national authorities
increasingly require additional screening and services for health conditions such as obesity and nutrition, exercise, bullying at school, and learning disorders while demanding rigorous compliance with multiple regulations and expectations. Unfortunately, primary care practices are under-resourced for the work that must be accomplished every day, as most continue to rely on reimbursement for services provided. Taking time for meetings, training programs, and so on during clinical time represents revenue lost. The efforts of the participating clinical sites are impressive and humbling.

“Sometimes adding a new process to your practice can be challenging for both management and staff. We were glad to learn that the screening process didn’t create “more work” in a negative way; it made the work we were already doing more meaningful.”

Primary care plays a key role in preventing and addressing substance use among youth. Through universal screening and follow-up, S·BI·RT enables practitioners to address various levels of alcohol and drug use. S·BI·RT fosters opportunities to develop positive patient-provider relationships through engagement in conversations that can delay or prevent onset of substance use. Connecting primary care practices with community services and resources is critical to collectively meet the needs of substance-involved youth.

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