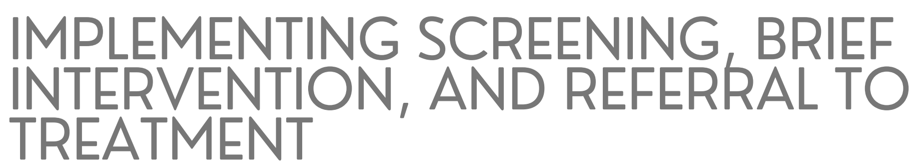
For Alcohol and Drugs with Adolescents at Pediatric Trauma Centers



IMPLEMENTING SCREENING, BRIEF INTERVENTION, AND REFERRAL TO TREATMENT

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Background

Alcohol use increases throughout adolescence with greater usage rates and escalation occurring in older adolescents. According to the CDC (CDC, 2021):

- 23% of high school students consumed alcohol in the past 30 days
- 16% of high school students used marijuana in the past 30 days
- 13% of high school students have used illicit drugs, which include inhalants, cocaine, heroin, methamphetamines, ecstasy, and hallucinogens
- 12% of high school students have taken prescription pain medication without a doctor's prescription or in a manner different than the doctor's prescription
- 5% of high school students drove after drinking alcohol one or more times in the past 30 days
- 14% of high school students rode with a driver who had been drinking alcohol.

Research has shown that injuries, emergency department visits, school failure, violence, arrests, sexual assaults, and unprotected intercourse are associated with substance use during adolescence. Compared to their same aged peers, youth who report initiating drinking before the legal age are significantly more likely to be injured while drinking and/or to have unintentionally injured themselves or others (Hingson, Heeren, Jamanka, & Howland, 2000; Hingson & Zha, 2009). Many of these risks and consequences involve some contact with a medical provider, illustrating the opportunity that providers have for intervening with substance using adolescents.

Since 2006, the American College of Surgeons (ACS) Committee on Trauma has required that all trauma centers (both adult and pediatric) have the capacity to identify patients who are problem drinkers and has mandated that level 1 trauma centers have a mechanism to provide these patients with a brief intervention (BI) (American College of Surgeons Committee on Trauma, 2006). The following points have been made by the ACS and researchers to support this policy a) nearly half of all injuries are alcohol related; b) trauma patients who are problem drinkers are at high risk for recurrent injury if their drinking remains untreated; c) most patients admitted to trauma centers have risky but non-dependent drinking (the level of severity for which brief interventions (BI)s are most effective); d) trauma patients are willing to be screened and talk about their alcohol use; e) trauma surgeons generally support the idea of universal screening and BI; f) most trauma patients are not screened for alcohol use; and g) a visit to a trauma center represents a "teachable moment" when patients may be especially receptive to screening and early intervention (ACS Committee on Trauma, 2006; Miller et al., 2006).

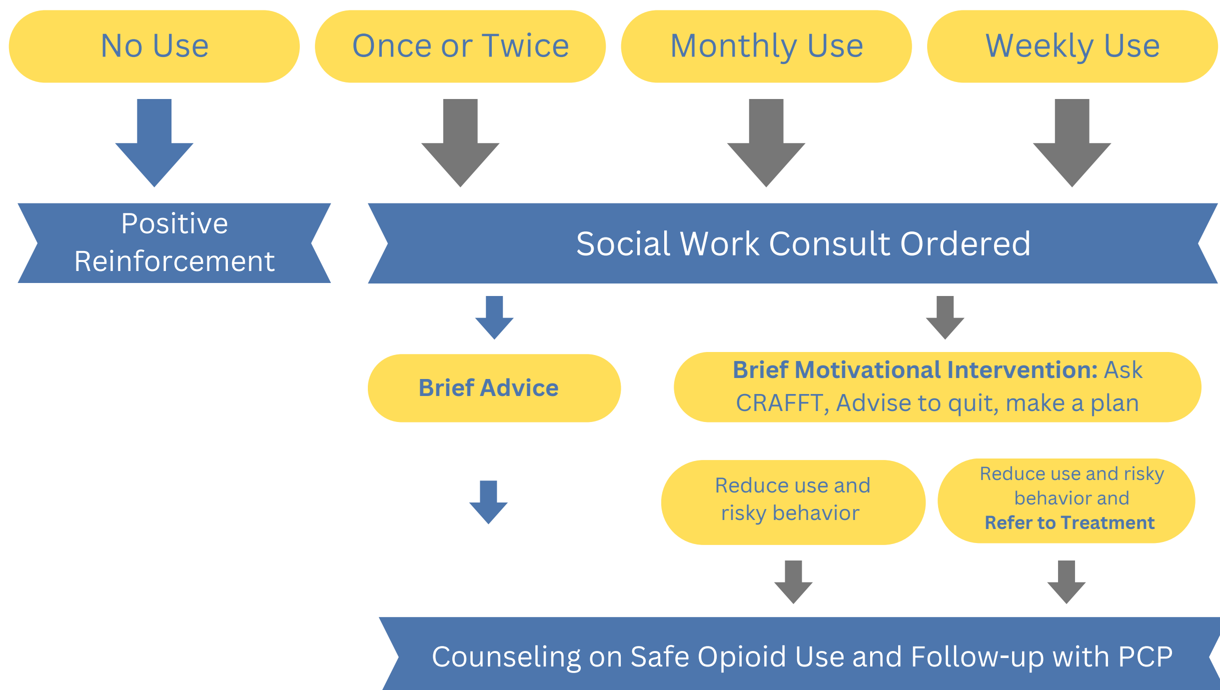
In agreement with these ACS guidelines, we conducted a study funded by the National Institute on Alcohol Abuse and Alcoholism, Implementing Alcohol Misuse Screening Brief Intervention and Referral to Treatment (IAMSBIRT), to implement screening, brief intervention, and referral for treatment (SBIRT) for alcohol and other drug use (AOD) in ten pediatric trauma centers (1R01AA025914). Our implementation strategy was based on the Science to Service Laboratory (SSL), an approach developed by the SAMHSA-funded Addiction Technology Transfer Center (ATTC) Network that consists of three core elements (i.e., didactic training, performance feedback, and leadership coaching). We utilized Screening to Brief Intervention (S2BI) for three reasons: 1) it is highly sensitive and specific in discriminating among clinically-relevant use-risk categories that align with DSM-5 diagnostic criteria (S. Levy et al., 2014) 2) it is the measure that the American Academy of Pediatrics (AAP) uses in its illustrative examples when discussing how to conduct risk triaging (Committee On Substance & Prevention, 2016; S. J. Levy, Williams, Committee On Substance, & Prevention, 2016) 3) it is also the measure for which the New England-ATTC most often receives training requests due to its wide use in that region. Based on APP recommendation, for the referral to treatment component of the model: 1) all adolescents with a history of past year substance use should be referred back to their medical home (i.e., primary care provider) for a follow-up discussion about AOD use; and 2) those adolescents with use suggestive of a more severe substance use disorder ,(defined as weekly use or more) should be linked back to their medical home and receive a formal referral to AOD treatment (S. J. Levy et al., 2016). We included all nursing and social work providers within the pediatric trauma service in order to have SBIRT be integrated into routine clinical care.

The SBIRT model is the most widely endorsed public health approach to improve the detection of and intervention for alcohol misuse in acute care settings. It is a comprehensive, integrated public health approach to the delivery of early intervention and treatment services for persons with or at risk of substance use disorders. The SBIRT model uses universal screening (S) to identify those individuals at risk of alcohol and other drug (AOD) disorders and administer appropriate brief intervention (BI) and/or referral to treatment (RT).

Suggested Model: **Screening**, Brief Intervention, Referral to Treatment (SBIRT) /Connecting with PCP

Screening: is the first step of the SBIRT process and determines the severity and risk level of the adolescent's substance use. In this suggested model for trauma patients, the nursing team completes universal screening using a screening tool that is integrated into the institutions' electronic health record (EHR). The result of a screen allows the nurse to determine if a brief intervention or referral to treatment by a social worker is a necessary next step for the patient.

S2BI Algorithm for Alcohol or Drug Use:



Adapted From Mass Dept of Health SBIRT Toolkit For Providers

The nurse administers the Screening to Brief Intervention (S2BI). S2BI (https://www.samhsa.gov/resource/ebp/screening-brief-intervention-s2bi) is a 3-question validated screening tool for youth aged 12-17 years that was developed at Boston Children's Hospital with National Institute of Drug Abuse funding regarding past year use of alcohol, tobacco, prescription drugs, and marijuana (S. Levy et al., 2016). A nurse provides positive reinforcement to adolescents who report no use of substances, and no social work consult is needed. If an adolescent reports past year use on at least one of the questions, he/she will be asked 4 additional questions about other drugs and a social work consult will be ordered.

Background

Screening to Brief Intervention (S2BI) Tool

The following questions will ask about your use, if any, of alcohol, tobacco, and other drugs. Please answer every question by checking the box next to your choice.

IN THE PAST YEAR, HOW MANY TIMES HAVE YOU USED:

Tobacco?

- Never
- Once or twice
- Monthly
- Weekly or more

S2BI Tool developed at Boston Children's Hospital with support from the National Institute on Drug Abuse.

It is best used in conjunction with "The Adolescent SBIRT Toolkit for Providers" www.mass.gov/maclearinghouse (no charge).

Alcohol?

- Never
- Once or twice
- Monthly
- Weekly or more

Marijuana?

- Never
- Once or twice
- Monthly
- Weekly or more

STOP if answers to all previous questions are "never." Otherwise, continue with questions on the back.

OVER

Prescription drugs that were not prescribed for you (such as pain medication or Adderall)?

- Never
- Once or twice
- Monthly
- Weekly or more

Illegal drugs (such as cocaine or Ecstasy)?

- Never
- Once or twice
- Monthly
- Weekly or more

Inhalants (such as nitrous oxide)?

- Never
- Once or twice
- Monthly
- Weekly or more

Herbs or synthetic drugs (such as salvia, "K2", or bath salts)?

- Never
- Once or twice
- Monthly
- Weekly or more

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MARCH 2016

Suggested Model: Screening, **Brief Intervention,** Referral to Treatment (SBIRT) /Connecting with PCP

Brief Intervention: The social worker reviews S2BI results to determine whether the adolescent needs: brief advice (once or twice), brief intervention (monthly use), or brief intervention + referral to specialty treatment (weekly use). When giving brief advice, the social worker should explain the negative health impacts of substance use and give clear advice to quit. A brief motivational intervention is recommended for adolescents' reporting use monthly or more. In the IAMSBIRT training initiative, brief interventions include asking CRAFFT questions, advising to quit, discussing possible changes and making a plan to quit.

A brief motivational interview BMI is a brief, structured conversation that relies on patients' own motivations, values and goals to facilitate healthy change. In a BMI, the role of the social worker is to explore problems, recognize the adolescent's ambivalence, and listen for any indication that the adolescent is acknowledging negative consequences of substance use or expressing a willingness to quit or cut down. BMIs in the IAMSBIRT training initiative involve using motivational interviewing principles and methods to explore the adolescent's ambivalence to change, asking questions using the CRAFFT, and using the patients' responses as a pivot point in the conversation, discussing possible changes with the patient and targeting highest risk behaviors, asking permission to include parents in discussion, and finally, providing counseling on opioid safety, and recommending follow-up with primary care provider.

The CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble) questionnaire can be useful to the social worker in beginning of the brief intervention to obtain more information on use and problems to initiate the discussion. CRAFFT is a validated screening tool utilized that asked adolescents if they used alcohol, marijuana or other drugs in the past year (Levy et al., 2016; The Center for Adolescent Behavioral Health Research, 2021). If the adolescent reports no use in the past 12 months and "no" to the CAR question, the CRAFFT scores 0. Adolescents were asked the 6 CRAFFT questions only if they admitted past year AOD use. Each "yes" response scores 1 point. CRAFFT scores of 2 or more are associated with substance use disorder diagnoses and may signal the need for a referral to specialty substance use treatment.

Suggested Model: Screening, **Brief Intervention**, Referral to Treatment (SBIRT) /Connecting with PCP

The CRAFFT Questionnaire (version 2.0)

To be completed by patient

Please answer all questions **honestly**; your answers will be kept **confidential**.

During the PAST 12 MONTHS, on how many days did you:

1.	Drink more than a few sips of beer, wine, or any drink containing **alcohol**? Put "0" if none.	☐ # of days
2.	Use any **marijuana** (pot, weed, hash, or in foods) or "**synthetic marijuana**" (like "K2," "Spice") or "vaping" **THC oil**? Put "0" if none.	☐ # of days
3.	Use **anything else to get high** (like other illegal drugs, prescription or over-the-counter medications, and things that you sniff or "huff")? Put "0" if none.	☐ # of days

READ THESE INSTRUCTIONS BEFORE CONTINUING:

- **If you put "0" in ALL of the boxes above, ANSWER QUESTION 4, THEN STOP.**
- **If you put "1" or higher in ANY of the boxes above, ANSWER QUESTIONS 4-9.**

		No	Yes
4.	Have you ever ridden in a **CAR** driven by someone (including yourself) who was "high" or had been using alcohol or drugs?	☐	☐
5.	Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?	☐	☐
6.	Do you ever use alcohol or drugs while you are by yourself, or **ALONE**?	☐	☐
7.	Do you ever **FORGET** things you did while using alcohol or drugs?	☐	☐
8.	Do your **FAMILY** or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?	☐	☐
9.	Have you ever gotten into **TROUBLE** while you were using alcohol or drugs?	☐	☐

NOTICE TO CLINIC STAFF AND MEDICAL RECORDS:

The information on this page is protected by special federal confidentiality rules (42 CFR Part 2), which prohibit disclosure of this information unless authorized by specific written consent. A general authorization for release of medical information is NOT sufficient.

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Suggested Model: Screening, Brief Intervention, Referral to Treatment (SBIRT) /Connecting with PCP

Referral to Treatment

Referral to treatment does not necessarily mean referral to specialty care for addiction treatment. in some cases it will, but for many adolescents with low to moderate risk it will mean continuing the AOD discussions that started during hospital admission with their medical home provider (pediatrician or primary care provider). For this workflow, referral to treatment is considered as linkage to follow-up discussions about AOD with a health care provider. Patients reporting weekly use on the S2BI could potentially meet criteria for a severe substance use disorder and need specialty care. A score of 2 or more on the CRAFFT is an additional risk factor. In these cases, after the nurse orders a social work consult, the social worker is advised to conduct the BI, and in addition, evaluate whether the patient will benefit from specialty substance use treatment.

Opioid Counseling

Some pediatric trauma center patients may be discharged on prescription pain relievers. Any history of substance use raises the teen’s risk of addiction to pain relievers. For these reasons, all teens and families meeting with social workers should receive information about safe opioid administration and disposal. These instructions should also be incorporated into the EHR discharge instructions.

Implementation Team

In order to effectively put SBIRT into practice within the pediatric trauma center, the recommended implementation strategy is organized into 3 phases: preparation/pre-implementation, implementation, and sustainment.

The first step is to develop a team consisting of three institutional leaders: general oversight (Trauma leadership), nursing (Nursing leadership) and Social Work (Social Work leadership).

Implementation Team

01

Preparation Phase

During this phase, institutions should work with the institution's Information Services or Electronic Health Records administrative team to integrate SBIRT into the EHR, develop QI procedures, promote SBIRT activities within the trauma center and provide online training for all staff involved.

02

Implementation Phase

After preparation activities, trained staff throughout each pediatric trauma center should begin SBIRT implementation with adolescent patients. QI procedures should also go into effect during this time.

03

Sustainment Phase

After the implementation phase, the pediatric trauma center will enter the sustainability phase to monitor continue adherence to policy and procedures for SBIRT being accomplished at the pediatric tram center. All SBIRT activities and related QI activities should continue regularly. There should also be a policy in place to incorporate SBIRT training in orientation for new staff.

Staff Training

All trauma center clinical leadership, nurses and social workers caring for patients admitted to the pediatric trauma service at each center can receive web-based SBIRT training. During the preparation phase, content of the online workshops covers: rationale for implementing SBIRT with adolescents(all); rationale for universal screening and age-appropriate validated tools (nurses, leaders); rationale for brief intervention and age-appropriate intervention elements (social worker, leaders); rationale for providing education on prescription pain reliever misuse (social workers, leaders); and rationale for post-discharge referrals and coordination with the primary care doctor (social workers, leaders). There are educational resources available on the IAMSBIRT website: https://www.lifespan.org/centers-services/injury-prevention-center/research-projects/emergency-medicine-sbirt-website

EHR Integration

Each component of SBIRT should be integrated into the EHR to facilitate universal implementation, documentation of S2BI, CRAFFT, BI, and RT and allow for continuous QI to be easily accomplished.

This requires early planning and connection with your institution's electronic health record team months in advance. Before meeting with your institution's electronic health record team, it is important have an outline and agreement among key stakeholders on how this should look and operate within the electronic health record.
There are a few key points to consider in your planning process and have consensus among your implementation team. Consider which providers will need to see questions and responses in their electronic medical health record templates. Providers frequently have different templates when working within the electronic health record with some seeing questions and responses and some only seeing the patient responses that other member of the team have entered.

EHR Integration

Questions can be structured in several ways including questions that are optional for the provider to ask, questions that require the provider enter an answer before proceeding and thus are a hard stop, questions that don't have a hard stop but have built in logic to have pop up reminders if they're not completed by providers. Consider who would get those reminders and how often. You will want to have more than only positive and negative screening responses, so consider including an unable to screen response. It's also good to provide reasons why they were unable to screen, and a pull-down menu can contain some potential responses; some examples are that the patient was critically ill or patient declined to answer. Responses can be typed into a free text box, but it is often easier for providers if the responses are fixed with boxes or buttons to check and this can also ease the ability to do QI. Also discuss with your implementation team if specific responses will trigger an action logic. It could be built into the electronic medical record for automatic referrals to be initiated within the record or reminders for educational materials to be provided at discharge with discharge paperwork or if your system allows it, direct placement in the patient's electronic health portal.

EHR Integration Examples

RN Navigators

Admission | Transfer | Discharge | Pre-op | Sepsis | Blood | Restraints | Video Visit | Disaster Admit | Disaster Shift | Disaster Transfer and Discharge | Burn Admission

OVERVIEW AND HISTORY: Patient Profile, Travel/Exposure, Allergies, Home Meds, Password, History

ASSESSMENTS AND SCREENINGS: LDAs, Nutrition, Skin Risk, Assess for Press..., Autism Spectrum..., Abuse/Neglect, CRAFFT Screeni..., SBRIT-Substanc..., Behavior/Suicide, Fall Risk, VTE Risk Screen..., Functional Screen, Discharge Planning

HOME AND SCHOOL LIFE: Safety/Coping, Education/Daycare, Disability Status

INTERVENTIONS: Bedside Tablets, BestPractice, Med Rec Status

SBRIT-Substance Misuse Screening

Time taken: 3/25/2021 0650 | Responsible | Create Note | Show Last Filed Value | Show Details | Show All Choices

Primary Screening: In the past year, how many times have you used

Nicotine — Once or Twice taken yesterday — Never | Once or Twice | Monthly | Weekly or more

Alcohol — Never taken yesterday — Never | Once or Twice | Monthly | Weekly or more

Marijuana — Never taken yesterday — Never | Once or Twice | Monthly | Weekly or more

Secondary Screening: In the past year, how many times have you used

Prescription drugs that were not prescribed for you (such as pain medication or Adderall) — Never taken yesterday — Never | Once or Twice | Monthly | Weekly or more

Inhalants (such as nitrous oxide) — Never taken yesterday — Never | Once or Twice | Monthly | Weekly or more

Herbs or synthetic drugs (such as salvia, "K2", or bath salts) — Never taken yesterday — Never | Once or Twice | Monthly | Weekly or more

Illegal drugs (such as cocaine or Ecstasy) — Never taken yesterday — Never | Once or Twice | Monthly | Weekly or more

Create Note

Restore | Close | Cancel | Previous | Next

Figure 1. A Screenshot of SBIRT screening integrated into EHR.

CRAFFT Screening Tool

Time taken: 3/19/2021 1013 | Responsible | Create Note | Show Last Filed Value | Show Details | Show All Choices

CRAFFT Deferment (USE ONLY IF YOU ARE DEFERRING THE CRAFFT TO A LATER TIME DURING ADMISSION)

Temporary Deferment ICU Admission: Defer screening until transfering patient to floor setting — Yes

Temporary Deferment Floor Admission: Defer until GCS is >/= 14 — Yes

Will need to complete CRAFFT Screen when patient's cognition improves

Permanent Deferment Patient's BASELINE GCS is less than 14 (Only Required if you are permanently deferring screening) — Yes

****REQUIRED FOR PERMANENT DEFERMENT ONLY****

This row is only required IF patient has a BASELINE GCS of < 14

CRAFFT 2.1 Part A: During the PAST 12 MONTHS, on how many days did you:

Drink more than a few sips of beer, wine, or any drink containing alcohol? Say "0" if none.

Use any marijuana (weed, oil, or hash by smoking, vaping, or in food) or "synthetic marijuana" (like "K2," "Spice") or "vaping" THC oil? Say "0" if none.

Use anything else to get high (like other illegal drugs, prescription or over-the-counter medications, and things that you sniff, huff, or vape)? Say "0" if none.

CRAFFT 2.1 Part B: If the patient answer "0" for ALL the questions in Part A, ask the CAR question, then STOP. If the patient answered "1" or higher in ANY of the questions above, ask all following CRAFFT questions below.

C: Have you ever ridden in a CAR driven by someone (including yourself) who was "high" or had been using alcohol or drugs? — 0=No | 1=Yes

CRAFFT Total

CRAFFT Total Score (Auto Calculated)

CRAFFT Risk Level Information

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Figure 2. A Screenshot of CRAAFT integrated into EHR.

EHR Integration Examples

S2BI (12-17 years)

Are you able to screen the patient?

- ○ Yes
- ○ No

Reason unable to screen:

- ○ Patient is NOT developmentally able to answer questions about substance use.
- ○ Patient is unable to answer questions due to his/her medical condition.
- ○ Patient/parent refuses.

In the last year, how many times have you used:

Tobacco?

- ○ Never
- ○ Once or twice
- ○ Monthly
- ○ Weekly

Tobacco Type	Tobacco Amount	Tobacco Last Use	Tobacco Use Comment
<MultiAlpha>			
<MultiAlpha>			

Alcohol?

- ○ Never
- ○ Once or twice
- ○ Monthly
- ○ Weekly or more

Alcohol Type	Alcohol Amount	Alcohol Last Use	Alcohol Use Comment
<MultiAlpha>			
<MultiAlpha>			

Marijuana?

- ○ Never
- ○ Once or twice
- ○ Monthly
- ○ Weekly or more

Marijuana Type	Marijuana Amount	Marijuana Last Use	Marijuana Use Comment
<MultiAlpha>			
<MultiAlpha>			

Figure 3. A Screenshot of S2BI integrated into EHR.

EHR Integration Examples

If any of these responses are "once or twice" or more frequently, then ask these follow up questions:

In the last year, how many times have you used:

Prescription drugs not prescribed to you?

- Never
- Once or twice
- Monthly
- Weekly or more

Prescription Drug Type	Prescription Drug Amount	Prescription Drug Last Use	Prescription Drug Use Comment

Illegal drugs such as cocaine or ecstacy?

- Never
- Once or twice
- Monthly
- Weekly or more

Illegal Drug Type	Illegal Drug Amount	Illegal Drug Last Use	Illegal Drug Use Comment

Inhalants such as nitrous oxide?

Right click in box for reference text.

- Never
- Once or twice
- Monthly
- Weekly or more

Inhalants Type	Inhalants Amount	Inhalants Last Use	Inhalants Use Comment

Herbs or synthetic drugs such as salvia, K2 or bath salts?

- Never
- Once or twice
- Monthly
- Weekly or more

Synthetic Drug Type	Synthetic Drug Amount	Synthetic Drug Last Use	Synthetic Drug Use Comment

For patients with more than "once or twice" usage:
- If patient does NOT have a psychiatry consult, consult social work to follow up on these results.
- If patient IS followed by psychiatry, consult psychiatry with these results.

CRAFFT Screening Interview - SYSTEMTESTONLY, BEYONCE

*Performed on: 10/23/2019 0928 EDT By: HUNTER RN, KATELYN PLICK

CRAFFT Screenin

The CRAFFT Screening Interview

Begin: "I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."

Question	Answer	Question	Answer
Have you ever ridden in a CAR driven by someone (including yourself) who was "high" or had been using alcohol or drugs?	No / Yes	**Do you ever use alcohol or drugs to RELAX, feel better about yourself, or fit in?**	No / Yes
Do you ever use alcohol or drugs while you are by yourself, or ALONE?	No / Yes	**Do you ever FORGET things you did while using alcohol or drugs?**	No / Yes
Do your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?	No / Yes	**Have you ever gotten into TROUBLE while you were using alcohol or drugs?**	No / Yes

*Two or more YES answers on the CRAFFT suggest a serious problem and need for further assessment.

CRAFFT Score (ref)

In Progress

Figure 4. Screenshot of the CRAFFT integrated into EHR

Quality Improvement

As part of ACS trauma center certification, Level I pediatric trauma centers are required to develop and document continuous quality improvement protocols. Leaders at each site can develop Quality improvement protocols to monitor adherence for each of the three training tracks. Trauma center staff can develop a Quality Improvement protocol for:

1) Screening Adherence
2) Delivery of a Brief Intervention
3) Referral to Treatment Adherence

Trauma service leadership can have a QI policy to ensure this monitoring occurs regularly and has a mechanism for performance feedback to staff exists.

Example one
Checklist for QI on SBIRT performance

QI Team

- Nursing – perform validated screening
- Trauma Clinician Expanded Role – champion for SBIRT
- Social Work – provides Brief Interventions for positive screening and Referrals to Treatment if needed
- Nurse educator – provides support for nursing staff education
- Trauma Program Manager – provides support for team members as needed

Oversee enactment and sustainability of SBIRT QI

- QI team will work together to maintain SBIRT process with the Trauma acting as lead champion

Accessed components

- Screening – Trauma service will review
- Brief Interventions – Social Work
- Referrals – Social Work
- All – monthly report from IT sent to the Trauma

Data Source to use for each monitored item

- EHR (name) and monthly IT report will be used to check screening compliance

How will your site define success for each item monitored?

- Minimum of 80% of patients who qualify will be screened

Frequency of SBIRT QI

- Monthly

Plan for staff turnover

- New nurses will receive training for CRAFFT/S2BI in their new employee classes
- New NTU social work should be given access to IAMSBIRT online training materials and will be oriented and supported by social work.

Plan for staff retraining if performance does not meet expectations

- Training videos will be reshared via the unit's monthly newsletter as needed with accompanying written specifics that need to be improved
- Social work will review training materials, conduct role plays, and audit assessments done by training social work.

How will findings be reported to staff?

- The Trauma will share findings with staff in the unit's monthly newsletter as needed.
- Individual follow up done via e-mail and then in person if needed.

Example Two

Objective: To assess and improve compliance with administration and implementation of the S2BI for admitted trauma patients 12-17 years old

(Hospital goal: 90% of admitted 12-17 years old with screens completed for ALL units—including non-trauma patients)

Outcome measurements

- S2BI screening: number/% of 12-17 year old admitted trauma patients with S2BI documented in mandatory nursing admission assessment field
  i. Goal: 90% S2BI completion
- Social work brief intervention: number/% of 12-17 year old admitted trauma patients with SW BI documented in patient's electronic health record (EHR) if S2BI documents ANY use (once/twice, monthly/weekly)
  i. Goal: 80% social work BI for
- Social work referral to treatment: number/% of 12-17 year old admitted trauma patients with social work BI documented in patient's electronic health record (EHR) if S2BI documents monthly or weekly use
  i. Goal: 80% social work referral to treatment

QI team

- Site leaders:
  i. MD lead:—will oversee QI for IAMSBIRT
  ii. Social work lead:
  iii. RN lead:
- S2BI implementation team
  i. Nursing – perform screening (CRAFFT and S2BI)
  ii. Social work – provides Brief Interventions for positive screening and Referral to Treatment if needed
  iii. Nurse educator – provides support for staff education
  iv. Trauma Program Manager – provides support for team members as needed
- Data
  i. Trauma registry administrator: name
  ii. QI specialist: name
  iii. Research assistant: name

Data collection plan

- Frequency: monthly data collection and review
- List of trauma patients: name will send a list of patients admitted for trauma (inpatient floor and ICU) from the trauma registry to name at the beginning of every month
  i. Inclusion: 12-17 years old, admitted for a traumatic injury
    1. Name
    2. MRN
    3. Date of visit
    4. Date of birth
    5. If patient can be screened for S2BI (yes/no)—sometimes they can't be screened if they are too critically ill at presentation.

Example Two (Continued)
Objective: To assess and improve compliance with administration and implementation of the S2BI for admitted trauma patients 12-17 years old

If yes: was the S2BI completed

i. If S2BI completed—the responses to the questions:

In the past 12 months have you ever (never/once or twice/weekly or monthly)

1. Smoked or vaped nicotine
2. Drank alcohol
3. Smoked/vaped/eaten marijuana
4. Urine toxicology screen results (if performed)
5. Serum toxicology screen results (if performed)

Social work BI and Referral to Treatment:

i. Name will send list (same as above) to name
ii. Name will review EHR for documentation of these two metrics
iii. Name will send these data to name

Data analysis plan

- Run charts: name will use the data from name and name to create run charts to track the 3 QI metrics
    - i. S2BI screening
    - ii. Social work BI
    - iii. Social work referral to treatment

Remediation plan

- Will work with hospital's current plan to improve S2BI compliance (still being finalized)
- RN: new RN staff are completing NetLearning about S2BI
    - i. For now will plan on reporting data and metrics to group
    - ii. Name or trauma NPs can present to charge nurses
    - iii. Can consider placing data (e.g. run charts) in staff break rooms on inpatient/ICU units
    - iv. Can consider individual follow up via e-mail and then in person if needed.
- Social work: name will train new social work on implementation with BI and RT with S2BI
    - i. For now will plan on reporting data and metrics to group
    - ii. Can consider individual follow up via e-mail and then in person if needed

In Summary...

It is important that we continue working to not only treat injuries in pediatric trauma centers but also to identify risky behaviors that may have resulted in the injury or could result in a future injury. Adolescent alcohol and substance use certainly are behaviors that need attention to reduce injury risk. The trauma center has a unique role in identifying those adolescents at risk and providing a brief intervention that can lead to behavior change. Here we have given guidance on a comprehensive implementation strategy for implementation of a SBIRT program. Important points are to create an implementation team of key stakeholders, incorporate the electronic health record to assist the process, utilize a validated screening measure in addition to biologic screening, provide awareness building within the institution of the program, provide training to those delivering screening and brief intervention and create a mechanism for referral of high risk adolescents to specialty care and for all adolescents to continue the discussion on alcohol with their primary care provider. A plan for continuous monitoring each of the program steps is necessary to maintain program fidelity, provide feedback and document sustainability. A successfully implemented program can improve the health and safety of adolescents in the community.

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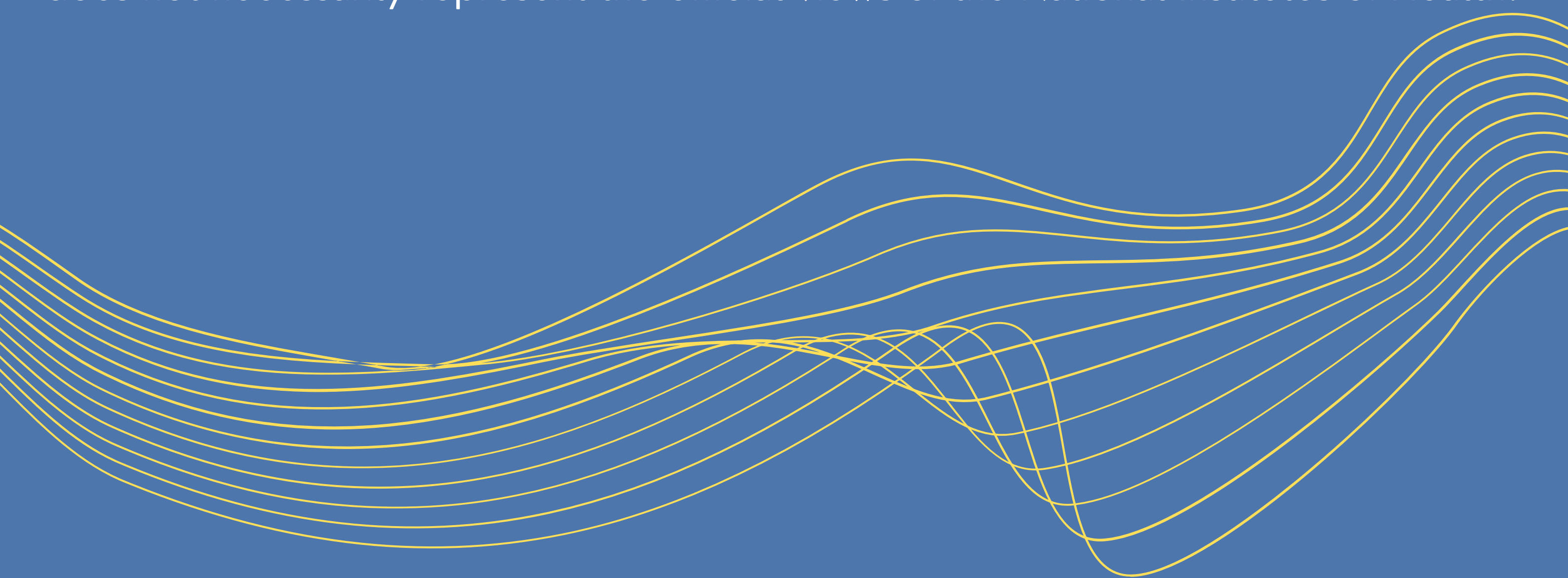

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