# Trauma Center Alcohol Screening and Intervention

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#### Disclosures

□ I have no affiliations, sponsorship, financial funding or holdings that might be perceived as affecting the objectivity of my presentation.







## Objectives

- Discuss alcohol and injury; SBIRT model
- Describe nuisances of SBIRT implementation
- Describe translation research with SBIRT





#### Alcohol Use

## How many American adults (ages 18 and over) drank in the past year and how much did they drink?

Percentage having at least one drink: females 59.6% males 71.8%

#### How many drinks did drinkers usually consume on a drinking day?

1 drink
1 drink

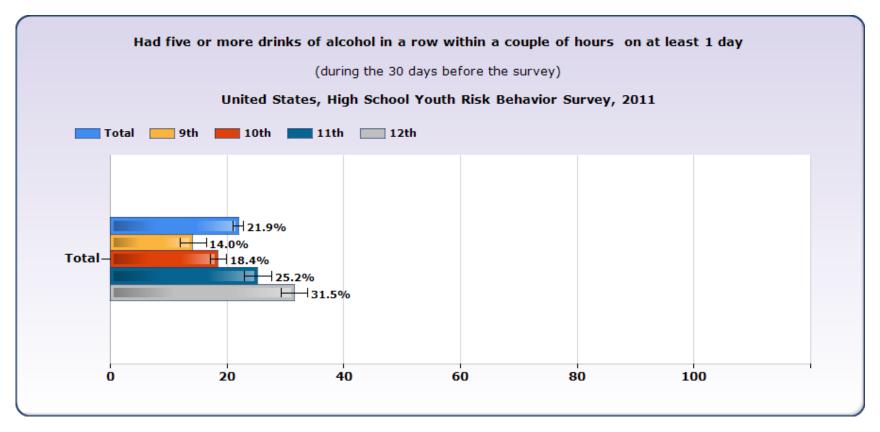
♦ 2 drinks females 29.9% males 29.0%

♦ 3 or more drinks females 21.9% males 42.3%





#### **Binge Drinking Among US High School Students**



**Rhode Island Hospital** 

Centers for Disease Control and Prevention (CDC). 1991-2011 High School Youth Risk Behavior Survey Data. Available at <a href="http://apps.nccd.cdc.gov/youthonline">http://apps.nccd.cdc.gov/youthonline</a>. Accessed on June 20, 2012.



#### Alcohol and Injury

## Contributing factor to the leading causes of fatal injuries:

Motor Vehicle Crashes

Suicide

Homicide

Drowning

Falls

High rates of alcohol misuse among adolescent trauma inpatients (30%) and adult trauma patients (45%)





#### Alcohol and Injury

If receive no other intervention Injury alone does not change drinking habits of injured patients long-term





#### **SBIRT**

- Screening, Brief Intervention and Referral to Treatment
- Randomized Clinical Trials have yielded some promising results
  - □ Adult studies in ED, Trauma Services, Primary Care
  - Pediatric Emergency Department studies
- Recommended by several national organizations





#### Policy

"Alcohol is such a significant associated factor and contributor to injury that it is vital that trauma centers have a mechanism to identify patients who are problem drinkers. Such a mechanism is essential in Level I and II trauma centers. In addition Level I centers must have the capability to provide an intervention for patients identified as problem drinkers."

American College of Surgeons - Committee on Trauma. Resources for Optimal Care of the Injured Patient: 2006





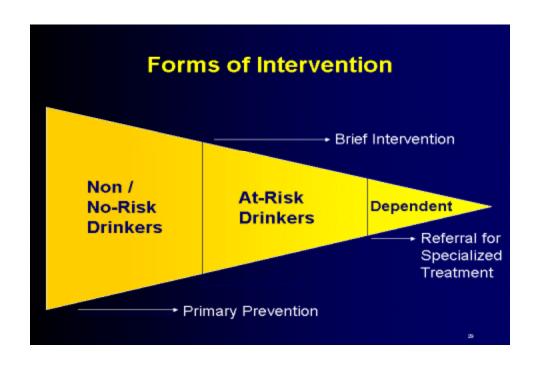
### Screening

- "Screening a healthcare professional assesses a patient for risky substance use behaviors using standardized screening tools. Screening can occur in any healthcare setting"
  - Laboratory testing
  - □ Informal screening questions
  - Standardized screening questions
     AUDIT, MAST, CAGE, ASSIST, CRAFFT





#### **Alcohol Interventions**







#### **Brief Intervention**

- "Brief Intervention a healthcare professional engages a patient showing risky substance use behaviors in a short conversation, providing feedback and advice"
  - □ Varying sessions (1-5 sessions)
  - Delivered by various professionals
  - Research Staff; Physicians; RN; Social workers;
     Psychologists; Health Advocates
  - Many utilize motivational interviewing techniques





#### Referral to Treatment

- "Referral to Treatment a healthcare professional provides a referral to brief therapy or additional treatment to patients who screen in need of additional services"
  - □ 4-5% of adult patients who misuse alcohol require more intensive treatment
  - □ Part of the SBIRT model is to connect those who need additional treatment with community resources





#### **SBIRT**

- □ Few utilize formal screening tools
  - □ 25-39% within US trauma centers
- □ Even less have formal SBIRT policies in place
  - □ 15% of US Emergency Department





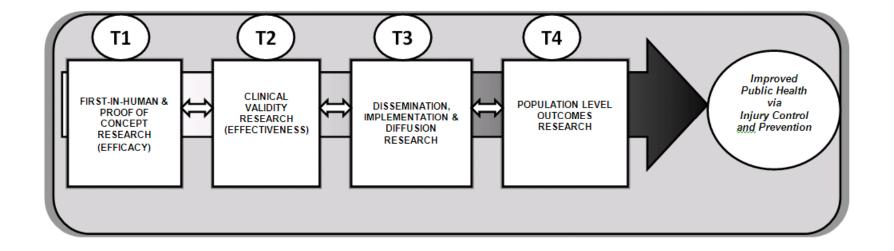
### Barriers to SBIRT Adoption

- □ Lack of time
- □ Lack of training/confidence
- Concerns about patient acceptability
- Reimbursement barriers





#### Translation Research

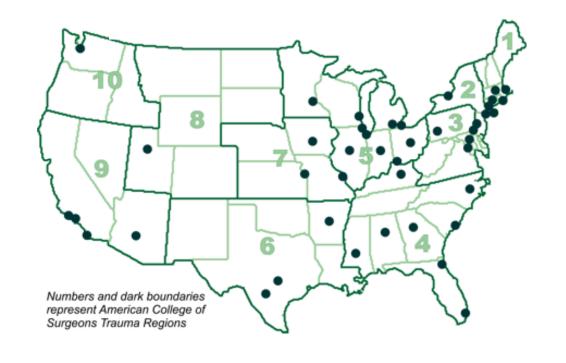






#### Multi Site Translational Research Study

#### **Participating IFCK Sites**



Cincinnati

**Detroit** 

Hartford

**Indianapolis** 

Milwaukee

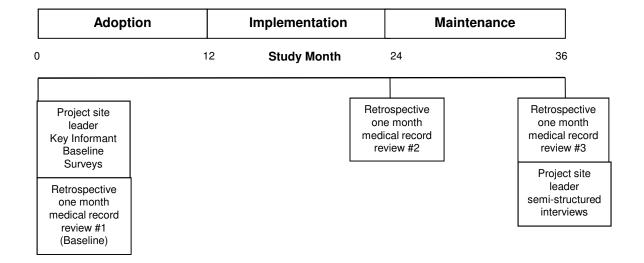
**Pittsburgh** 

San Diego





## Study Timeline







#### **Evaluation Components**

- □ Blinded Medical Record Review
  - Review of injured adolescent patients during 1 month periods to assess compliance with SBIRT
    - ✓ Baseline (September 2009)
    - ✓ Post Implementation Phase (September 2011)
    - ✓ Post Maintenance Phase (September 2012)





#### **Evaluation Components**

- Computerized self report surveys
  - Project site leaders
  - Key informants at each study site

(chosen from list of trauma center components designated by American College of Surgeons)

- Semi-structured interviews with site leaders
  - Access barriers and opportunities to implementation





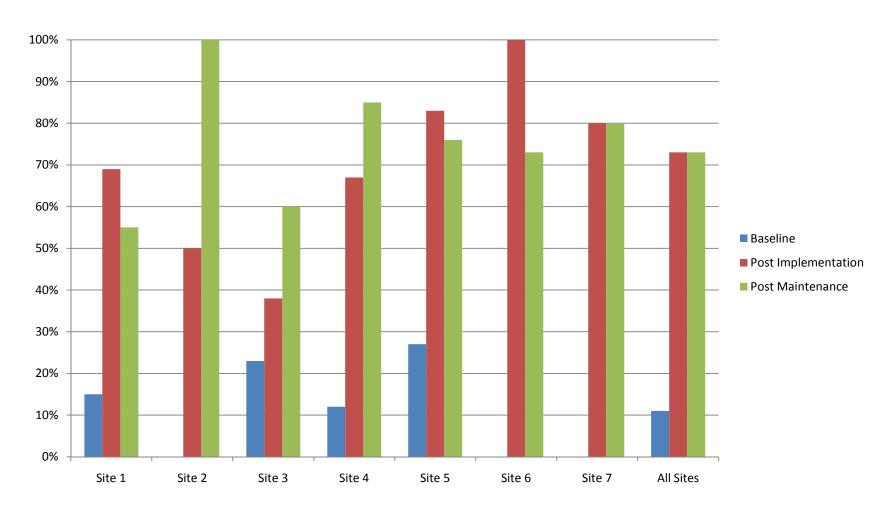
#### **Comparison of Baseline Alcohol Screening Activities**

	Project Site Leader report on Baseline SBIRT Activities	Site Key Informant report Baseline SBIRT Activities	Medical Record Review Baseline SBIRT Activities (% received CRAFFT)
Site A	Yes	<b>Yes=1</b> No=5	15%
Site B	No	NA	0%
Site C	No	<b>Yes=2</b> No=2	23%
Site D	Yes	<b>Yes=7</b> No=0	12%
Site E	Yes	<b>Yes=3</b> No=2	27%
Site F	No	<b>Yes=2</b> No=2	0%
Site G	No	<b>Yes=2</b> No=1	0%

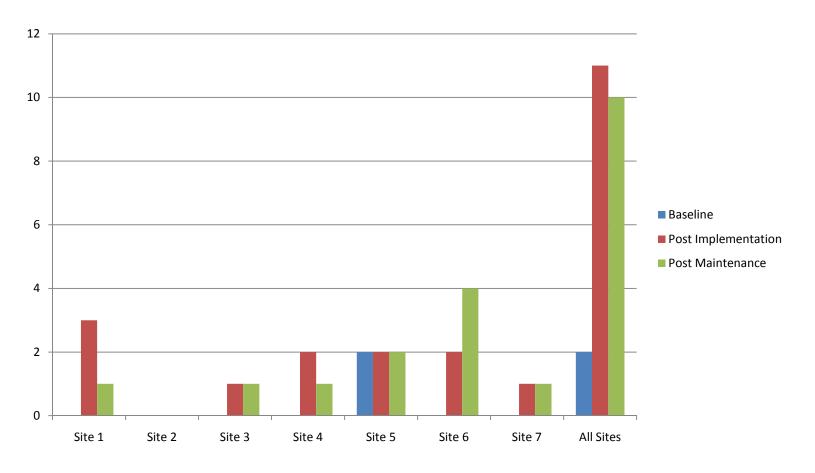




# Percentage of Admitted Adolescent Trauma Patients Receiving a Standardized Alcohol Screening Tool (CRAFFT), by Study Phase



# **Admitted Adolescent Trauma Patients Requiring Brief Intervention Across Sites by Study Phase**



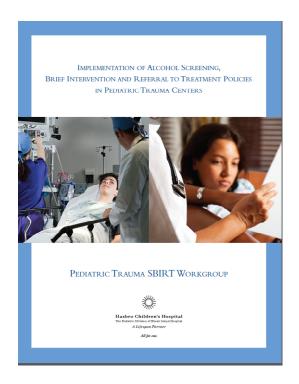
#### Summary

- □ Baseline screening rates (11%) lower than self reported rates of site leaders and key informants
- Adopting/implementing a SBIRT policy for trauma patients can improve and maintain services
- Moderators for successful SBIRT implementation:
  - □ efforts led by trauma coordinator/director
  - □ electronic medical record utilization
  - connection to recertification
  - □ strong partnership with social work
  - □ real time monitoring





### Pediatric Trauma SBIRT Workgroup: Lessons Learned







#### Adult Trauma Centers

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Disseminating Organizational Screening and Brief Intervention Services (DO-SBIS) for alcohol at trauma centers study design

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#### ABSTRACT

Objective in 2005, the American College of Surgeon passed a mandate requiring that Level I trauma centers have a mechanism to identify patients who are problem drinkers and have the capacity to provide an intervention for patients who access positive. The aim of the Bioseminating Organizational Screening and Bird Intervention (Sill patients who access patients are manifered intervention for province (DO 5805) duster randomized total is to test a multilevel intervention trageting the implementation of high-quality also his centening and brief intervention (Sill positives at trauma centers. Method: Veersty sites selected from all United States I ceel I trauma centers were randomized top articipate the trial. Intervention site providers receive a combination of workshop training in orienter-based motivational interviewing (MI) interventions and organizational development activides prior to conducting arrana-center-based alknobs Sill with Milosal-alknobs glowther in juried gathers. Control sites implement care as usual. Providers MI skills, patient adobted computation, and capanizational acceptance of Sill Results: The investigation has success diply-causeled provider, patient and brauma center staff samples into the study, and outcomes are being followed longitualisally.

Conclusion: When completed, the Do. Sills trial will inform faiture American College of Surgeons policy targeting the sustained integration of high-quality alsohol Sill at trauma centers nationwide.

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Physical injury with and without traumatic brain injury constitutes a major public health problem for both civilian and veteran traumaexposed patient populations [1-3]. Each year in the United States exposed patient, populations [1–3]. Each year in the United States (US), a pproximately 1.5–2.5 million Americans are so severely injured that they require inpatient surgical hospitalization [2–4].

Epide miological investigations have documented that alcohol use

problems are endemic among US trauma center inpatients [5-7]. A body of evidence derived from efficacy and effectiveness spectrum randomized dinical trials now suggests that alcohol screening and brief intervention (SBI) programs derived from motivational interviewing (MI) principles may reduce alcohol consumption among patients presenting to acute care medical, trauma center settings

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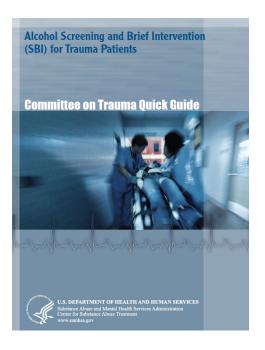
[8-13]. Thus, the widespread integration of high-quality alcohol SBI into acute injury care has the potential to markedly increase the population impact of injury prevention efforts and has been a long-standing public health objective [14–16].

In 2005, the American College of Surgeons, the primary agency responsible for developing trauma center regulatory requirements in the US, passed a resolution mandating that Level I trauma centers must have a mechanism to identify patients who are problem drinkers and have the capacity to provide an intervention for patients who screen positive [17]. Trauma centers that are found not to be performing alcohol SBI during American College of Surgeons' verification site visits risk losing College accreditation and associated federal funding [17,18]. This represents the first ever nationwide US policy mandate for the integrated treatment of alcohol use problems in a general medical setting (i.e., hospital inpatient, emergency department or primary care outpatient setting). Although an enormous first step, specific alcohol SBI methodology is being left to





#### Other Resources







#### **Trauma Center Alcohol Screening and Intervention**





