Screening, Brief Intervention, and Referral for Treatment: Evidence for Use in Clinical Settings

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Goals of this Presentation

Discussion of:
1. SBIRT history
2. Research findings on SBIRT in Medical Settings
3. Integration Strategies
4. Successful Implementation
5. Federal Resources
What is SBIRT?

SBIRT is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders. Primary care centers, hospital emergency rooms, trauma centers, office-based practices and other community settings provide opportunities for early intervention with at-risk substance users before more severe consequences occur.
SBIRT: A Means of Improving Community Health

- Current model of SBIRT based on IOM report recommending development of integrated service systems linking:
  - community-based screening and brief intervention
  - Assessment and referral activities
- SBIRT: fills a gap between primary prevention and more intensive treatment for those with SUDs
- SBIRT goal: to improve community health by reducing prevalence of adverse consequences of substance misuse including SUDs through early intervention and referral when needed
What is SBIRT in Practice?

- **Screening**: quickly assess use and severity of alcohol, illicit drugs, and prescription drug abuse
- **Brief Intervention**: a 3-5 minute motivational interview and awareness-raising intervention given to risky or problematic substance users
- **Referral to Treatment**: referrals to specialty care for pts with substance use disorders
# Why Do We Need SBIRT?

Problem Substance Use is Highly Prevalent in Americans

<table>
<thead>
<tr>
<th>Substance Type</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risky Drinking</td>
<td>23%</td>
</tr>
<tr>
<td>Illicit Drug Use</td>
<td>8%</td>
</tr>
<tr>
<td>Substance Abuse or Dependence</td>
<td>10%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>7%</td>
</tr>
<tr>
<td>Illicit Drugs</td>
<td>3%</td>
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10% with SUDs get treatment, 95% who don’t get treatment don’t know they have a problem.

SAMHSA, National Survey on Drug Use and Health, 2010
SBIRT: History

• 1957: SBIRT concept developed; ED psychiatrist engaging patients in respectful, nonconfrontational conversation regarding need to go to treatment or usual care

• Current SBIRT not feasible until development of reliable screening tools for alcohol and drug abuse in the 1980s
  • MAST, CAGE, DAST

• First SBIRT demonstration: brief physician advice capable of motivating some to stop smoking

• Malmo Study showed screening with brief interventions delivered in primary care settings reached large numbers of at-risk drinkers, many of whom decreased alcohol use

• 1981 WHO initiated a program of research to develop an international screening test and to evaluate brief interventions for at-risk drinkers (AUDIT)
SBIRT History

- WHO expanded its SBIRT program to study implementation methods of screening/BI in primary care and to integrate screening and brief intervention (SBI) into healthcare systems in developing and developed nations
- 1997: SBI for illicit drugs in addition to alcohol and tobacco first developed
- SAMHSA SBIRT program: variety of SBIRT demonstrations in 11 states and program of SBIRT training in medical residency
SBIRT in Medical Settings: Emergency Departments

- ED is the healthcare safety net and by default the point of primary care for millions of Americans
- 40% of ED visits are due to trauma and 50% of these are alcohol-related (Nilsen et al. 2008)
- As of 2006 all Level I trauma centers required to be SBIRT capable and to offer to those with trauma
- Numerous studies show patients accept SBIRT and it has been effective in patients with alcohol problems
- SBIRT associated with reductions in alcohol consumption, repeat-injury hospitalizations, and decreased drinking/driving (Vaca and Wynn, 2007)
SBIRT in the Emergency Department

Implementation Studies

14 institutions: Training of ED staff (n=402) (MD, NP, PA, nursing, SW): 74% reported having had < 10 h of alcohol education during graduate or post-graduate training; 78% < 2 h alcohol education in previous year. Participants given:

- 2 h interactive workshop with case simulations or
- Web-based program

At 3 mos. post-training:

- Significant increase in belief that SBIRT would make a difference to patients
- 72% reported use of SBIRT intervention in their clinical practice
- Predictors of use: more years of practice, no differences by profession

At 12 mos. Post-training:

- Increased confidence in ability to perform SBIRT
- Greater sense of responsibility to screen

Barriers: Lack of belief in effectiveness, lack of role models among faculty, concern for angry response from patient, lack of reimbursement, lack of referral sources

Underscores need for institutional support and continued supervised clinical practice of SBIRT and system change that supports this intervention (The Academic ED SBIRT Research Collaborative, 2007a)
SBIRT in the Emergency Department

- Companion Study of 7751 patients screened; 2051 exceeded NIAAA low risk limits: 1132 consented to study where patients received SBIRT/BI or control (written advice/referral list) from providers.

- At 3 mos: Those receiving brief intervention reported significantly fewer drinks/wk and were more likely than controls to be drinking under the NIAAA low-risk limit.

- Conclusion: ED intervention can directly benefit patients by reductions in alcohol consumption, decreased in alcohol morbidity, mortality and cost. (The Academic ED SBIRT Research Collaborative, 2007b)

- 6 and 12 mo. F/U: effects seen at 3 mo. were no longer evident. (The Academic ED SBIRT Research Collaborative, 2010)
SBIRT in the Emergency Department

Other models shown to be promising:

- Nurse delivered SBI in ED
- Decreased alcohol consumption (quantity and frequency) and decreased ED use in 3 mo. follow-up period (Desy et al., 2010)

To address time constraints and lack of referral experience in ED providers:

- Health promotion advocates with SA experience placed in ED as physician extenders: see all patients to assess general health and safety and substance use; if SA treatment needed, HPA will do the referral (Bernstein et al. 2009)
SBIRT in Medical Settings: Emergency Department

Challenges

– **Time Constraints**
  • 70-75% will not be at risk; significant time spent screening those not in need of intervention
  • Screening plus BI approx 10 min.
  • Computerized intervention < 10 min.

– **Comfort Level of Staff**
  • Training needed before SBIRT becomes routine and staff can administer efficiently
  • Generally skills needed can be easily learned and training available online

Lack of Referral Resources

– **Cost of SBIRT/?Reimbursement**
SBIRT in the Emergency Department

Washington State Medicaid Cost Analysis:
- Working age (18-64 yr), disabled Medicaid patients
- Screened (AUDIT/DAST)
- SBI delivered by SA counselors
- SBIRT associated with significant reduction in Medicaid costs of $366 per month per member (Estee et al. 2010)

Similar results from study by Gentilello et al. 2005:
- SBIRT produced cost savings in reduced health expenditures of $3.81 for every $1.00 spent; possible savings of $1.2 billion annually
SBIRT in Primary Care

• Numerous studies show alcohol screening and brief counseling interventions reduce unhealthy alcohol use in primary care patients (Kaner et al. 2007; Babor et al. 2008, Williams et al. 2011)

• Gryczynski et al.: SBIRT implementation in rural healthcare settings including FQHCs, Public Health Offices, IHS clinics
  – Use of AUDIT (> 8) and single yes/no screener for illicit drugs or illicit use of prescription drugs in last year; positive screen = referral to BHC
  – BI or BT delivered by Behavioral Health Counselors (psychologists, SW, CD counselors) integrated into the medical team
  – 6 Month Follow Up: BI/BT associated with decreased frequency of illicit drug use, alcohol use, alcohol intoxication
Overcoming Barriers in Primary Care

SAMHSA SBIRT in Medical Residency Programs:
Train residents on SBIRT so that they can incorporate it into their practices

• Barriers:
  - Knowledge of substance use problems/disorders
  - Time requirements
  - Reimbursement
  - Lack of faculty mentors
Overcoming Barriers in Primary Care

Obtain buy-in from faculty and clinic leadership

What is the biggest problem in terms of substances in the clinic population?

- Take that problem on and help the staff to more effectively manage
- Underscore SBIRT as a means of identifying and addressing problem substance use
- SBIRT training also provides a platform to teach addiction pharmacotherapy treatment that can be used in primary care
- Have mentors be available to faculty and residents to provide help and encouragement
The following two slides show a screener for alcohol, prescription medications, and illicit drugs that can be completed by the patient and follow-up by the clinician.

This screener is available in English, Spanish, and Chinese on the PCSS-O website.

Credit: The UCSF SBIRT Collaborative Education Program, 2010. Funded by SAMHSA grant 1U79TI020295 Awarded to Dr. Jason Satterfield.
1.) What is your age? _____ years  
2.) Are you (mark one): ○ Male ○ Female ○ Transgender

3.) Do you sometimes drink beer, wine, or other alcoholic beverages? ○ Yes ○ No ○ Decline to answer  
**If yes, please answer questions 3a and 3b and continue**

3a.) On average, how many drinks do you have?  
_____ drinks per day and _____ drinks per week

3b.) In the past year, have you had: 5 or more drinks (men) or 4 or more drinks (women) in one day?  
○ Yes ○ No ○ Decline to answer

4.) In the past year, have you used a prescription drug for non-medical reasons?  
○ Yes ○ No ○ Decline to answer

5.) In the past year have you used an illegal or recreational drug?  
○ Yes ○ No ○ Decline to answer

One standard drink is any of these below:

- 12 fl oz of regular beer
- 8-9 fl oz of malt liquor
- 5 fl oz of table wine
- 1.5 fl oz shot of 80-proof spirits
**ALCOHOL:** Confirm amount of alcohol use with patient.

| Male patient had 5+ drinks/day; female or any patient 65+ had 4+ drinks/day? | O Yes | O No |
| Frequency: | |
| Male patient averages > 14 drinks/week; female or any patient 65+ averages > 7 drinks/week? | O Yes | O No |

**DRUGS:** Follow up on patient “Yes” responses on items 4 and/or 5, above.

1. *“Please tell me the name of the illicit drug(s) and/or prescription medication used for non-medical reasons.”*
2. *“How often do you use it?”*

**CLASSIFY USE:** Does pt meet DSM-IV Substance Abuse/Dependence Criteria? (see criteria on reverse)

| Pt is: | O Not at risk | O At risk | O Substance Abusing | O Substance Dependent |

**ADVISE:** *“You are drinking/using more than is medically safe. I strongly recommend that you cut down (or quit), and I’m willing to help.”* Comments:

**“Are you willing to consider making changes with your substance use?”**

| Maybe | O Yes | O No |
| Conducted Brief Intervention? | O Established Rx contract? | O Completed CURES report? |

Comments:

Pt. meeting DSM-IV criteria for sub. abuse or dependence should be scheduled for follow-up & offered referral to specialty care. Treatment Assistance Program (TAP): 415-503-4730 *“Let’s set up a follow-up appointment so we can check back in about this.”*

Comments:

| O Referred to specialty care/outside prog. | O Arranged f/u care w/ me or other DGIM | O Provided Educational Materials/Self-help info | O Meds Provided |


Access the Screener:

- SBIRT Clinician Follow Up Form
- English
- Spanish
- Chinese
Pediatrics/Adolescents

- Alcohol and drug use a leading cause of injury and death in children/adolescents
- Drinking in 12-17 y.o.: 16% last 30 days (NSDUH, 2007)
- Binge drinking (> 5 drinks on one occasion) common in adolescents: 8% 8th graders; 19% 12th graders (last 30 days) (Surgeon General, 2007)
- 47% of adolescents try an illicit drug by time of high school graduation (Johnston et al. 2009)
- Use of drugs/alcohol prior to age 15 predicts SUDs in adulthood (Grant et al. 1997)
Survey to assess SBIRT in pediatric (12-17 y.o.) population:

- 242 Hospitals responded
- 18% screen all adolescents in ED (Screening Tools: AUDIT, CRAFFT, CAGE)
- 26% screen adolescents admitted to trauma service
- 52% use BAC as indicator for whether to screen; who gets BAC is decision of clinician-i.e.: healthcare professionals decide who is at risk; will exclude many likely to have at risk behaviors (Schweer 2009)
Children’s Hospital of Philadelphia:
- Study of SBIRT implementation for patients 12-18 yrs with trauma (n=209)
- Use of CRAFFT screener by trauma nurses by pencil-paper
- Positive response to any screening question: referral to SW or trauma APN to assess; specialty treatment referral if needed
- Charting in “Specially Protected Information” part of record
- Positive screens in 25%; 81% answered 1-2 questions affirmatively (Robinson RL, 2010)

Adolescent SBIRT in ED:
- Brief Motivational Interview was associated with reduced alcohol consumption in one setting (Monti et al. 2007); and reduced alcohol-related injury, traffic violations, drinking/driving; but not consumption in another (Monti et al. 1999)
Employee Assistance Programs

- Telephonic intervention tested with employees who self-referred or manager-referred

- Offered AUDIT; score feedback; if positive alcohol education/advice; pros/cons of alcohol use; importance of cutting back and referral as appropriate

- Over 5 mos. 295 offered screening; most common reason for call to EAP: stress/anxiety/panic (38%), depression (19%), alcohol (6%), other drug (1%); alcohol or drug use with another problem self-reported (2%)

- 93% consented to AUDIT-C

- 40% of all screens were positive; 52% moderate-high risk

- Pre SBIRT identification of alcohol problems: < 1%; post SBIRT: 23.5% at 3 mos, 18.3% at 5 mos.

- 72% of positive screens contacted EAP clinician for recommended appointment (McPherson et al. 2010)
Resources

• SAMHSA support for training of medical professionals

• Websites with training programs/resources
  – e.g.: Peer educator SBIRT model: http://www.bu.edu/bniart/

• Medicare/Medicaid to pay for SBIRT which will encourage its use:
  – With ACA implementation in 2014 federal government will pay entire cost of SBIRT for Medicare/Medicaid (no state contribution)
Ongoing Questions

- Not all SBIRT research is positive
- Some ED SBIRT studies show little difference in drinking results from controls
- May be because alcohol use/rate of dependence greater in ED admits and those patients may need specialty care rather than a brief intervention (BI)
- Some follow up rates are low which could bias study results e.g.: Gentilello et al, 1999: 1153 patients with high risk alcohol use: 54% follow up; those receiving BI decreased alcohol use by 21.8 + 3.7 drinks/wk at 12 mos. (p=0.03). Reinjury related to alcohol use decreased by 47% (but not statistically significant)
- Unclear if SBI is useful for hospitalized or more seriously ill (substance dependent individuals)
Ongoing Questions

• Little data on effective screening tools and effectiveness of SBIRT interventions in illicit drug users
• Long-term prevention studies have not been completed that would show the value of SBI in community at large
• Primary Care Studies: BI for positive screens;
  - at 12 mo F/U: 57% with at risk drinking
  - 69% with at risk drinking in control groups
  - Absolute risk difference: 12% and a decrease of 2-3 drinks per week.
• Based on this evidence, the USPSTF recommends SBI as a “B” recommendation (fair evidence that the benefits outweigh the harms). (Bernstein et al. 2009)
Summary

• SBIRT is increasingly used in medical settings in the U.S. and internationally

• Madras et al. 2009:
  – SAMHSA data collected from multiple sites having implemented SBIRT in grant-funded programs through August 2007:
  – 459,599 screened; 23% positive
  – 16% BI
  – 3% brief treatment
  – 4% specialty referral

• 6 mo follow up: illicit drug use 68% lower; alcohol 39% lower

• Improvements in general health, mental health, employment, housing and criminal activity
Summary

- SBIRT shows promise in many medical settings
  - Early identification of risky substance users
  - Large numbers screened present greater opportunities to get those in need to treatment
  - Opportunity to teach medical staff about substance use disorders including pharmacotherapies that can be implemented in primary care

- Additional research needed to determine how best to implement, dose needed to maintain in staff and dose needed for patients to maintain gains
SAMHSA Training Initiatives

PCSS-B Training
Physicians’ Clinical Support System - Buprenorphine

PCSS-0 Training
Prescribers’ Clinical Support System for Opioid Therapies

AAAP, APA, AOAAM, AAAP, ADA, AMA, AOAAM, APA, ASPMN, IntNSA

Web-based Training in Safe Opioid Prescribing
- Clinical Online Modules
- Listserv
- Peer Support
- Phone App
- Webinars

AAAP, APA, AOAAM Office-Based Treatment of Opioid Dependence
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Upon completion of the Post Test:

- You will receive an email detailing correct answers, explanations and references for each question.
- You will be directed to a module evaluation, upon completion of which you will be emailed your module Certificate of Completion.

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