SBIRT: Screening and Brief Intervention and Referral to Treatment in Nebraska

Nikki Roseberry-Keiser
DHHS - Division of Behavioral Health

Chris Wagner
Project Extra Mile
Overview

- Definitions
- The importance of integration
- The importance of screening
- Why SBIRT is a good choice
- A look at the data
- A look at pilots in Nebraska
- Where to get training/more information
- Resources
- Works cited
Definitions
What is excessive consumption?

- **Binge drinking**
  - 5 or more drinks in a sitting for males
  - 4 or more drinks in a sitting for females

- **Heavy drinking**
  - More than 2 drinks per day (on average) or 14 drinks in a week for males
  - More than 1 drink per day (on average) or 7 drinks in a week for females

- **Underage drinking**
  - Consuming alcohol under the legal drinking age of 21

- **Drinking by pregnant women**
  - Consuming alcohol at any time during a pregnancy (CDC)
What is SBIRT?

**Screening, Brief Intervention, and Referral to Treatment:** An evidence-based practice used to identify, reduce, and prevent problematic use, abuse, and dependence on alcohol and illicit drugs. 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, and other community settings provide opportunities for early intervention with at-risk substance users before more severe consequences occur.

Source: SAMHSA
What are the pieces of SBIRT?

- **Screening** – a screener quickly assesses the severity of substance use and identifies the appropriate level of treatment.

- **Brief Intervention** – a healthcare professional engages a patient showing risky substance use behaviors in a short conversation, providing feedback and advice, focusing on increasing insight and awareness regarding substance use and motivation toward behavioral change.

- **Referral to Treatment** – a healthcare professional provides a referral to brief therapy or additional treatment to patients who screen in need of additional services

- **Source:** SAMHSA
Screening

- Listing of evidence-based screening tools
Brief Intervention

- Typically motivational interviewing (MI) is used
  - MI is used to help people move through the stages of change
    - Stages of change are the stairs
    - The actions along the arrow are what the provider can do to help

*Photo Source: http://addictionblog.org/treatment/how-neurolinguistic-programming-nlp-can-change-addictive-behavior/*
OARS

Open-ended Questions

Affirmations

Reflections

Summarizing

Table 3. OARS: The basic skills of motivational interviewing

<table>
<thead>
<tr>
<th>Skill</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask Open-ended questions*</td>
<td>I understand you have some concerns about your drinking. Can you tell me about them?</td>
</tr>
<tr>
<td>Make Affirmations</td>
<td>I appreciate that it took a lot of courage for you to discuss your drinking with me today. You appear to have a lot of resourcefulness to have coped with these difficulties for the past few years. Thank you for hanging in there with me. I appreciate this is not easy for you to hear.</td>
</tr>
<tr>
<td>Use Reflections*</td>
<td>You enjoy the effects of alcohol in terms of how it helps you unwind after a stressful day at work and helps you interact with friends without being too self-conscious. But you are beginning to worry about the impact drinking is having on your health. In fact, until recently you weren’t too worried about how much you drank because you thought you had it under control. Then you found out your health has been affected and your partner said a few things that have made you doubt that alcohol is helping you at all.</td>
</tr>
<tr>
<td>Use Summarising</td>
<td>If it is okay with you, just let me check that I understand everything that we’ve been discussing so far. You have been worrying about how much you’ve been drinking in recent months because you recognize that you have experienced some health issues associated with your alcohol intake, and you’ve had some feedback from your partner that she isn’t happy with how much you’re drinking. But the few times you’ve tried to stop drinking have not been easy, and you are worried that you can’t stop. How am I doing?</td>
</tr>
</tbody>
</table>

* A general rule-of-thumb in MI practice is to ask an open-ended question, followed by 2–3 reflections.

Hall, Gibbie, Lubman (2012)
Importance of integration of primary and behavioral health
Why integration?

• Health care is the one place everyone will go throughout life.

• Prevalence of co-occurring health and mental health problems is high—even in those whose problems are not severe.

• Substance use disorders should be treated as other chronic conditions are in health care.
Why should health care systems screen for substance use?

- People with substance use disorders often access the health care system for reasons other than their substance use disorder.

- Problems aren’t usually obvious and people do not always self-disclose.

- Opportunity to catch problems when they are not severe

- Opportunity to address them and refer to specialty treatment when needed and monitor after specialty treatment
Why screen for alcohol use specifically?

- Excessive drinking is the third leading preventable cause of death in the U.S. (Mokdad et al., 2004)

- Caused 88,000 deaths and 2.5 million years of potential life lost each year from 2006-2010 (CDC, 2013)
  - 436 annual alcohol-attributable deaths in Nebraska and 12,049 years of potential life lost (Gonzalez et al., 2014)

- 9 out of 10 excessive drinkers are not dependent on alcohol (Esser et al., 2014)

- Cost the U.S. $249 billion in 2010, $100 billion of which was borne by government
  - $1.16 billion in costs in Nebraska, $491 million of which was borne by government (Sacks et al., 2015)
Excessive Consumption in Nebraska: The Costs

- Excessive drinking cost the NE $1.16 billion in 2010...
- $491 million of which was borne by government (Sacks et al., 2015)

Cost of Excessive Drinking to Nebraska in 2010 (millions of dollars)

- $880 M
- $180 M
- $58 M

Binge drinking
Underage drinking
While pregnant
Binge Drinking in Nebraska

- 14% of high school students reported binge drinking during the past 30 days (2014/2015 Nebraska Youth Risk Behavioral Survey)
- 19.5% of adults (18+) reported binge drinking during the past 30 days (BRFSS, 2015)
- Nebraska is the 8th worst state in terms of its binge drinking rates among the 50 states and D.C. in 2014 (America’s Health Rankings, 2016)
- Four of Nebraska’s communities (Omaha, Lincoln, Grand Island, and Norfolk) ranked in the top 15 of nearly 200 cities indexed for binge drinking rates across the country (CDC, 2012)
# Updated Priorities Among Effective Clinical Preventive Services

## Table 2. Priorities for Improving Utilization of Clinical Preventive Services

<table>
<thead>
<tr>
<th>Services (Short Name)</th>
<th>Description</th>
<th>CPB</th>
<th>CE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childhood immunization series</td>
<td>ACIP childhood immunization series</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Tobacco use, brief prevention counseling, youth</td>
<td>Provide interventions to prevent initiation, including education or brief counseling</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Tobacco use screening and brief counseling, adults</td>
<td>Screen adults for tobacco use and provide brief cessation counseling and pharmacotherapy</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Alcohol misuse screening and brief intervention</td>
<td>Screen adults’ misuse and provide brief counseling to reduce alcohol use</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Aspirin chemoprevention for those at higher risk of CVD</td>
<td>Low-dose aspirin use for primary prevention of CVD in adults ages 50-59 y with ≤10%, 10-y CVD risk and other factors</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Cervical cancer screening</td>
<td>Screen for cervical cancer in women aged 21 to 65 y with cytology (Papanicolaou smear) every 3 y</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Colorectal cancer screening</td>
<td>Screen adults aged 50-75 y routinely</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Chlamydia and gonorrhea screening</td>
<td>Screen for chlamydia and gonorrhea in sexually active women aged ≤24 y, and in older women at increased risk for infection</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Cholesterol screening</td>
<td>Screen routinely for lipid disorders men aged &gt;35 y, and screen younger men and women of all ages who are at increased risk of CHD. Treat with lipid-lowering medications</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Hypertension screening</td>
<td>Measure blood pressure routinely in all adults and treat with antihypertensive medication to prevent the incidence of CVD</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

Adult addiction medicine patients have more medical and mental health conditions than matched controls.

Conditional Logistic Regression Results: p<0.01 for all conditions shown

Adolescent addiction treatment patients have more medical conditions than matched controls

Higher prevalence (p<.01) of the 20 highest cost and prevalent medical conditions, including:

- Asthma
- Injury
- Sleep Disorders
- Pain conditions (abdominal pain, muscle pain, and headaches)
- STDs
- Benign conditions of the uterus
- Dermatology conditions
- Gastroenteritis

Why SBIRT?

• It is a well-known, well-established model

• The model can be used for a number of issues, alcohol, drugs, domestic violence, mental health, etc

• It is evidence-based

• It works!
Reductions in Substance Use From Baseline to 6 Month Follow-up

Pregnancy Risk Assessment Monitoring System (PRAMS)
PRAMS

- Pregnancy Risk Assessment Monitoring System (PRAMS)
  - Conducted annually through funding from the CDC by DHHS Division of Public Health

- “Percent of women” refers to PRAMS estimates of prevalence among all mothers of live births to Nebraska residents in the calendar years 2012 and 2013.

- Any drinking by women who are pregnant is defined as excessive alcohol consumption
Discussion between expectant mother and a doctor, nurse, or other health care worker about alcohol and illicit drug use during any prenatal care visit, by race.
Discussion between expectant mother and a doctor, nurse, or other health care worker about depression, and physical abuse during any prenatal care visit, by race.
Discussion between expectant mother and a doctor, nurse, or other health care worker about alcohol, illicit drug use, and physical abuse during any prenatal care visit, by age.
Behavioral Risk Factor Surveillance System – ASI Module
Alcohol Screening and Brief Intervention (ASBI) Module on BRFSS

- Asked in Nebraska in 2014, slated again for 2017
- Included five questions, asked to respondents who had a general health checkup in past two years
  - Asked (at last checkup) if they drink; how much they drink; if they binge drink; if they were offered advice on risks of drinking; and if they were advised to drink less
- 8,500 valid cases for the ASBI module in 2014
Who had a routine checkup in past two years?

- 78.9% of Nebraska adults had a routine checkup in past two years (2014, questionnaire path B)
  - Women more likely than men (84% vs. 74%)
  - Increased with age from 25-34 (65%) to 65+ (92%)
  - Residents in urban areas and those with higher incomes more likely
  - Binge drinkers less likely (71% vs. 81%)
  - Heavy drinkers less likely (69% vs. 80%)

- Those who get checkups have different demographics than binge and heavy drinkers, where men and younger adults are more likely to engage in high risk drinking
Asked about Alcohol Use at Last Routine Checkup among Nebraska Adults who had a Routine Checkup in the Past Two Years, 2014

- 75.2% asked if they drink alcohol
- 63.9% asked how much alcohol they drink
- 30.1% asked if they binge drink*

*Specifically asked if they drink (5 or more for men/4 or more for women) alcoholic drinks on an occasion

Preliminary data
Source: Behavioral Risk Factor Surveillance System (BRFSS)
Asked about Alcohol Use at Last Routine Checkup among Nebraska Adults who had a Routine Checkup in the Past Two Years, 2014

- 75.2% asked if they drink alcohol
- 85.0% asked how much alcohol they drink
- 41.4% asked if they binge drink*

*Specifically asked if they drink (5 or more for men/4 or more for women) alcoholic drinks on an occasion

Preliminary data
Source: Behavioral Risk Factor Surveillance System (BRFSS)
Advised to Reduce or Quit Drinking at Last Routine Checkup among Nebraska Adults who had a Routine Checkup in the Past Two Years and were Asked about their Alcohol Use at Last Checkup, by Level of Alcohol Use, 2014

*Reflects the past month alcohol use, categories are not mutually exclusive
Preliminary data
Source: Behavioral Risk Factor Surveillance System (BRFSS)
Demographic Differences for those being Advised to Reduce or Quit Drinking at Last Routine Checkup among Nebraska Adults who had a Routine Checkup in the Past Two Years and were Asked about their Alcohol Use at Last Checkup

- Men who binge drank and were heavy drinkers were far more likely than their female counterparts to be advised to reduce or quit their alcohol use
  - 19.6% vs. 4.1% for binge drinkers; 31.1% vs. 5.3% for heavy drinkers
- Binge and heavy drinkers between 35 and 55 were slightly more likely than younger and older adults to be advised to reduce or quit use
- Binge and heavy drinkers in larger urban areas were slightly more likely to be advised to reduce or quit use
- As income increased the percentage being advised to reduce or quit use decreased slightly for binge and heavy drinkers
What’s happening in Nebraska
PEM community organizing around SBIRT

2011 – CHI emergency room data/observation indicates high level of binge drinking
   – Project Extra Mile shares and encourages use of evidence-based SBIRT with CHI Population Health Coordinator

2012 – Media spotlight on Nebraska’s binge drinking problem: 4 cities in Top 15

2013 – Inclusion of a behavioral health screening and referral tool in 2013-2016 Douglas County Health Improvement Plan
   – PEM brought policy and data knowledge to push for institutional support
PEM community organizing around SBIRT

2014 – Project Extra Mile awarded 5-year Partnerships for Success federal grant; Project Extra Mile works toward SBIRT adoption by all health systems in Douglas County

2015 – CHI and Project Extra mile funds National Opinion Research Center (NORC) presentation to health systems within the Omaha Metro at Project Extra Mile coalition meeting
– NORC presentation to CHI Health Clinic providers, population health coaches, RN’s MA’s and Social Work
– UNMC created Binge Drinking Collaborative Impact Work Group
– Community Benefit dollars: CHI Health Lakeside and Midlands Hospitals contribute $30,000 toward community benefit

2016 – CHI rolls out SBIRT pilot projects at two clinics with plans for more
– CHI’s SBIRT pilot data will be analyzed and combined with a literature review of SBIRT projects across the country in order to precipitate an expansion of SBIRT county- and statewide
Challenges of Implementing

• Making A Business Case

• Making the Clinical Case

• Getting Leadership On Board

• Data Data Data

• Electronic Medical Record (EMR)
Making a Business Case and Clinical Case for SBIRT

Negative Health Outcomes of High-Risk Drinking

- Increased risk of cancer of throat, mouth, breast
- Memory Loss
- Reduced resistance to infection, increased risk of pneumonia
- Liver and Pancreas damage, vitamin deficiency, bleeding and inflammation of the stomach and pancreas
- Trembling hands, tingling fingers, numbness, increased risk to fall,
- Weakness of heart muscle, heart failure, anemia, impaired blood clotting,
- Increased risk to contract a sexually transmitted infection, increased risk of low birth weight babies, and babies being more with fetal alcohol syndrome or other disorders.
Process

- Patients 19 and older presents for Wellness Exam/Physical
- Patient is provided *Health Lifestyle Screener* at check in
- Patient completes screener while waiting
  - AUDIT-C, DAST, Fall Risk (65 and older), Safety Question, PHQ-2
- Patient gives Healthy Lifestyle Screener to Medical Assistant
- Information is entered into EMR
- If pre-screen is positive then full screen is given/asked utilizing full DAST, full AUDIT and PHQ-9
- Provider provides brief intervention and referral based on results
### AUDIT-C in Electronic Medical Record

**Time taken:** 1560 0:30/0:30

**Values By:** Create [Note]

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUDIT-C</strong> questions were NOT answered indicate why</td>
<td></td>
</tr>
<tr>
<td>How often do you have a drink containing alcohol?</td>
<td>Never, 1+Monthly or less, 2-2.4 times a month, 3-2.3 times a week, 4+ or more times...</td>
</tr>
<tr>
<td>How many drinks containing alcohol do you have on a typical day of drinking?</td>
<td>0+1 or 2, 1+3 or 4, 3+5 or 6, 3+7 to 9, 4+10 or...</td>
</tr>
<tr>
<td>How often do you have five or more drinks on one occasion?</td>
<td>0+Never, 1+Less than Monthly, 2+Monthly, 3+Weekly, 4+Daily or Almost D...</td>
</tr>
<tr>
<td>How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?</td>
<td></td>
</tr>
</tbody>
</table>

**AUDIT-C Total Score - Male**

**AUDIT-C Total Score - Female**

**AUDIT-C Total Score - 65+**

*Helping People Live Better Lives.*
AUDIT-C AND AUDIT Results in EMR

Patient Instructions

- We will contact you via MyChart in the next 2 business days with results of today’s blood tests.
- You should receive a call in the next 3-5 business days to schedule your screening colonoscopy.
- Continue current medicines/doses.
- Try to gradually resume regimen of regular exercise.
- Try to cut back so that you are drinking no more than 2 beers on most days/week.
- Follow up annually, sooner as needed.

AUDIT-C

<table>
<thead>
<tr>
<th>Question</th>
<th>Male</th>
<th>Female</th>
<th>85+</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you have a drink containing alcohol?</td>
<td>Monthly or less</td>
<td>1 or 2</td>
<td>Never</td>
</tr>
<tr>
<td>How many drinks containing alcohol do you have on a typical day of drinking?</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>How often do you have five or more drinks on one occasion?</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AUDIT Total Score: Male 17
AUDIT Total Score Female 17
AUDIT Total Score 85+ 17
Next Steps—Improve Brief Intervention work through integrated care and roll out to 30+ clinics as we implement Patient Centered Medical Home. In addition CRAAFT has been added for adolescents.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of &quot;At Risk&quot; Patients (AUDIT C Score ≥ 4)</td>
<td># of &quot;At Risk&quot; Patients Receiving Full Assessment (Goal = 100%)</td>
</tr>
<tr>
<td>Bellevue (1/20/2016-11/19/2017)</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Bellevue (12/22/2017-12/22/2017)</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>132nd &amp; Center (1/20/2016-11/19/2017)</td>
<td>61</td>
<td>59</td>
</tr>
<tr>
<td>132nd &amp; Center (12/22/2017-12/22/2017)</td>
<td>56</td>
<td>56</td>
</tr>
</tbody>
</table>

% of Missed Opportunities (NOT Offered AUDIT C) (Goal = 10%)

- Bellevue (12/1/2016-1/10/2017): 35%
- Bellevue (1/20/2017-3/21/2017): 32%
- 132nd & Center (11/1/2016-1/19/2017): 30%
- 132nd & Center (1/20/2017-3/21/2017): 19%

% of Patients "At Risk" Based On AUDIT C

- Bellevue: 14%
- 132nd & Center: 33%
Road to Success

- Technical Assistance through NORC
- Community Needs Assessment and Community Health Improvement Plan
- Project Extra Mile Funding
- Statewide Data-College of Public Health Collaborative
- EMR Build
- Community Benefit Funds-ACA
- CHI Mission
SBIRT Pilot- CHI Health Family Practice Pilot

- Between June 6, 2016-August 31, 2016 screened 536 patients 19 and older were eligible to be screened and 369 were screened.

- 86 of the 369 (23%) scored positive on the AUDIT –C for some level of risk (4 or higher on AUDIT C) for their alcohol use.

- Next Steps—Improve Brief Intervention work through integrated care and roll out to 30+ clinics as we implement Patient Centered Medical Home. In addition CRAAFT has been added for adolescents.
Omaha Collegiate Consortium pilot

> Piloting on college campuses

- UNO, Creighton University, Clarkson College, Nebraska Methodist College

- UNO and Creighton have both mental health and physical health staff trained to implement
  - Screen all youth at intake using the AUDIT
  - Provide a brief motivational intervention for anyone who scores an 8 or higher on the tool

- Clarkson has trained its academic advisors and NMC has trained its mental health counselor
  - Provide screening when they have concerns and refer as needed

- Between April 1 and September 30, 2016 approximately 1025 students were screened as a result of this effort.
Where is training available?

- http://ireta.org/improve-practice/addiction-professionals/online-courses/
- https://www.drugabuse.gov/blending-initiative/cme-ce-simulation
- Sign-up in the back of the room
Other Evidence-based Strategies

- Increasing alcohol taxes
- Regulation of alcohol outlet density
- Dram shop liability
- Maintaining limits on days and hours of sale
- Enhanced enforcement of law prohibiting sales to minors
- Electronic screening and brief interventions
- Maintaining government control of retail alcohol sales (Community Preventive Services Task Force, 2013)
Additional Resources

http://www.niaaa.nih.gov/

http://ireta.org/improve-practice/toolkitforsbirt/

Works Cited


Madras, Bertha K. et al. (2008). Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: Comparison at intake and 6 months later. Drug & Alcohol Dependence, Volume 99, Issue 1, 280 - 295

Questions? Comments?
Thank You!

Chris Wagner, MA
Policy and Research Coordinator
Project Extra Mile
Chris@projectextramile.org

Nikki Roseberry-Keiser, MA
Prevention Program Specialist
NE DHHS – DBH
Nikki.Roseberry-Keiser@Nebraska.gov