The Road to a Healthier Lifestyle: A Missouri Initiative

Presentation Agenda

1. SBIRT is based on a public health model
2. How the model works in Missouri
3. Missouri SBIRT Accomplishments and Outcomes


What is SBIRT?

- Screening, Brief Intervention, Referral and to Treatment
- SBIRT is based on a public health model
- Emphasis on prevention, early detection and early intervention
- Brief interventions use Motivational Interviewing principles and techniques
What It Isn't? Treatment as Usual

SBIRT Model Ingredients:

- Screening is universal
- It is brief (typically 5-10 minutes)
- One or more specific behaviors are targeted
- Services take place in public health setting
- It is comprehensive
- Strong research supports the model’s effectiveness

Why is SBIRT Important?

- Substance misuse is common, deadly, and treatable.
- The attention we give to substance misuse is not equal to its prevalence, despite its’ impact on general health and our ability to intervene effectively.
Leading Causes of Preventable Death in the United States in 1990 & 2000

Table 2. Actual Causes of Death in the United States in 1990 and 2000

<table>
<thead>
<tr>
<th>Actual Cause</th>
<th>No. (%) in 1990</th>
<th>No. (%) in 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>436,000 (1.7)</td>
<td>436,000 (1.3)</td>
</tr>
<tr>
<td>Poor diet and physical inactivity</td>
<td>300,000 (1.2)</td>
<td>400,000 (1.4)</td>
</tr>
<tr>
<td>Alcohol consumption</td>
<td>100,000 (0.5)</td>
<td>66,000 (0.5)</td>
</tr>
<tr>
<td>Microbial agents</td>
<td>90,000 (0.4)</td>
<td>75,000 (0.3)</td>
</tr>
<tr>
<td>Toxic agents</td>
<td>60,000 (0.3)</td>
<td>55,000 (0.2)</td>
</tr>
<tr>
<td>Motor vehicle accidents</td>
<td>25,000 (0.1)</td>
<td>45,000 (0.2)</td>
</tr>
<tr>
<td>Firearms</td>
<td>55,000 (0.2)</td>
<td>20,000 (0.1)</td>
</tr>
<tr>
<td>Fecal incontinence</td>
<td>30,000 (0.1)</td>
<td>30,000 (0.1)</td>
</tr>
<tr>
<td>Self-pharmacotherapy</td>
<td>20,000 (0.1)</td>
<td>17,000 (0.1)</td>
</tr>
<tr>
<td>Total</td>
<td>1,000,000 (5)</td>
<td>1,150,000 (4.2)</td>
</tr>
</tbody>
</table>

*Data are from McGinnis and Foege.* The percentages are for all causes.

Ten Most Effective Prevention Services

1. Discuss daily aspirin use
2. Childhood immunizations
3. Smoking cessation advice and help to quit
4. Alcohol screening and brief counseling
5. Colorectal screening
6. Hypertension screening and treatment
7. Influenza immunization
8. Vision screening
9. Cervical cancer screening
10. Pneumococcal immunizations

The Drinkers’ Pyramid

- Abstainers
- Low Risk Use
- Brief intervention
- At-Risk Drinkers - MOSBIRT Target
- High-Risk Drinkers
- Referral
What is Risky Substance Use?

- Alcohol
  - For men up to age 65:
    - More than 4 drinks in one day and/or
    - more than 14 drinks/week.
  - For women, and for men over 65:
    - More than 3 drinks in one day and/or
    - more than 7 drinks/week.
- Prescription misuse and illicit drugs
  - Any Rx misuse or illicit drug
- Any IV drug use

Size of Standard Drink

Why SBIRT in Medical Settings?

- Many health problems have a significant behavioral health component (smoking, substance use, weight control, exercise, ...).
- Brief interventions are effective with a wide variety of behavioral health problems.
- Medical setting offers a “teachable moment.”
How do we continue to integrate SBI principles in healthcare settings in Missouri?
ACA and SBI within FQHC’s

ACA and SBI within Primary Care Health Homes

- ACA created option for state to create health homes for those with multiple chronic conditions, including MH and SUD.
- 90% federal re-imbursement for services rendered to these recipients
- Pays for services that have not traditionally been reimbursable (care coordination, referrals)
- Screening and Brief Treatment is a specific requirement for the Missouri Primary Care Health Homes

Sustaining SBIRT in MO

- Goal to continue SBI after grant funding ends
- A 2008 DMH report estimated societal costs for substance abuse to be $7 billion annually
- It makes sense to address risky use before it progresses to abuse
Sustaining SBIRT in MO

- Goal to continue SBI after grant funding ends
- Numerous studies indicate cost savings of $3.81 to $5.60 for each dollar invested in screening for risky use
- The most promising approach to sustaining SBI services is for MO HealthNet to fund the State Medicaid codes already on the state’s fee schedule

Sustaining SBIRT in MO

- Prepared report that examines all 50 states and the status of its Medicaid fee schedule
  - Currently 22 states with Medicaid or CPT codes open for SBI reimbursement
  - There are 29 states that have Health and Behavior Assessment/Intervention codes used for SBI
- MO HealthNet and the Governor’s office have agreed to proceed with funding the HBAI and SBI codes at a minimum for FQHC’s and CMHC’s

ACA and SBI within FQHC’s

- A discussion of how one site integrated SBI in their clinical practice.
Missouri Patients Screened

- As of 3/31/2013:
  - 89,878 Patients have been screened
  - 8-9% qualified for an intervention (7,156)
    - Brief Education = 4,621
    - Brief Coaching = 1,081
    - Referral to Treatment = 1,454
  - Required to Follow 10% of those receiving an intervention
    - 506 Qualified
    - 242 Consented

MOSBIRT Patient Demographics (N=89,878)

- More likely to be female (60%)
- Racial composition
  - White: 73%
  - Black or African American: 19%
- Average age of 36
- Of the 7,156 that qualified for an intervention, Drug of choice is alcohol (72%) followed by marijuana (52%)
MOSBIRT Follow-up Patient Demographics (N=186)
(Based on 6 month follow-up of days used substances in past 30 days)

- More likely to be male (54%)
- Racial composition
  - White: 71%
  - Black or African American: 23%
- Average age of 36
- Drug of choice is alcohol (86%) followed by marijuana (74%)

MOSBIRT Patient Outcomes (N=186)
(Based on 6 month follow-up of days used substances in past 30 days)
National Outcome Measures

Abstinence (Did not use alcohol/drugs past 30 days) increased 53% (n=70)

Employed/In School (Currently working/in school past 30 days) increased 25.8% (n=74)

Experienced no Health/Behavioral Consequences (past 30 days) increased 54.1% (n=185)

Crime & Criminal Justice (Past 30 days arrests) decreased 13.3% (n=70)

Abstinence (Did not use alcohol/drugs past 30 days) increased 530% (n=185)

Experienced no Health/Behavioral Consequences (past 30 days) increased 54.1% (n=73)

Patients say:

"If my doctor asked me how much alcohol I drink," (92% Agree)

"I would be embarrassed if my doctor asked me how much alcohol I drink." (98% Disagree)

"As part of my medical care, my doctor should feel free to ask me how much alcohol I drink." (93% Agree)

"I would be annoyed if my doctor asked me how much alcohol I drink." (86% Disagree)

"If my drinking is affecting my health, my doctor should advise me to cut down on alcohol." (96% Agree)

"If my doctor asked me how much I drink, I would give an honest answer." (92% Agree)
Improving Screening

- What is screening?

<table>
<thead>
<tr>
<th>Predicted Present</th>
<th>Predicted Absent</th>
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</thead>
<tbody>
<tr>
<td>Is Present</td>
<td>True Positive</td>
</tr>
<tr>
<td>Is Absent</td>
<td>False Positive</td>
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</table>

Sensitivity: proportion of correctly identified positives
Specificity: proportion of correctly identified negatives
Original Prescreening

- More than 4/5 drinks in a day (NIAAA)
- Drink more than you intend
- Felt need to cut down drinking (CAGE)
- Smoke pot, use another street drug, or use a prescription painkiller, stimulant, or sedative for a non-medical reason (single item drug screen)

Initial Look

- No “gold” standard
- An alternative standard
- Original screen – alternative standard
  - Sensitivity ≈ 44%
  - Specificity ≈ 12%
- Revised screen – alternative standard
  - Sensitivity ≈ 80%
  - Specificity ≈ 71%

Why Approximately?

- The only people getting the alternative standard assessment were those who prescreened positive.

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<td>True Positive</td>
<td>False Positive</td>
</tr>
<tr>
<td>Is Absent</td>
<td>False Positive</td>
<td>True Negative</td>
</tr>
</tbody>
</table>
Potential Prescreen

- AUDIT-C
  - How often
  - How many when drinking
  - More than 4/5 on one occasion

- Currently determining cut points
  - For SBIRT, all current literature uses the wrong gold standard
  - Need everyone to be assessed with both the screen AND alternative standard

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Brief interventions to reduce health care consumers’ risky substance use behaviors

or How Brief is Brief?

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Amber Reinhart, PhD, Department of Communication, UMSL

Presented to the 2013 Missouri Department of Mental Health Spring Training Institute, Osage Beach, MO.

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SBIRT?

- Screening
- Brief Intervention
- Referral to Treatment
Current Practice

- Universal screening
- Specially trained coaches
- Tablet computer based
  - Assessment
  - Service
  - Follow-up
- 85,000+ screens

Our Question

How Brief is Brief?

Personal Health Risk Assessment

About This Report

Matthew, like most men you have a lot of responsibilities and decisions every day. There is no exact definition of what is healthy, but here are some basic ideas.

While there are many ways to be healthy, this report focuses on helping you learn about the relationship between your current substance use and risks to your health. Based on what you told us, this report will answer the questions:

- What health risks do you face (in particular for alcohol)?
- How do you compare to others?
- What can you do to reduce your risk and improve your health?

If you decide to make some changes to reduce your risks, you will be taking better care of yourself and your future. Change requires you to make different choices and no single choice is right for everyone. This tool gives you a variety of suggestions. The choice is up to you.
Alcohol

The following is based on what you have told us. Your alcohol use has created a moderate number of problems. Your problems with alcohol use are as follows: You have social, legal, or financial problems once or twice a month. You have had problems with your job or work when under the influence of alcohol. You have had problems with your family or with your friends or other people you are close to when under the influence of alcohol. You have had problems with your health when under the influence of alcohol. You are aware of the problems caused by alcohol use.

Jean, the following is based on what you have told us:

- You have about 40 drinks per month. That is more than 70 of 120 mounts.
- You spend between $3,172 and $3,329 on alcohol during the past year.
- Over five years, you have spent between $8,360 and $15,000 on alcohol.
- You added 7,200 calories each month. That is more than 27 pounds per year.
- To burn off these calories each week a 155 lb individual would need to:
  - walk fast 4 miles for 6.4 hours.
  - ride a bicycle between 14-15 mph for 2.6 hours each week.
  - garden for 5.1 hours every week.

Risks From Drinking

Jean, these problems are common if you drink a lot of alcohol:

- You can have hangovers.
- You may become in an aggressive or violent way.
- You may have accidents or become injured.
- You may have medical issues that require treatment.

Compare Your Drinking To Others

The chart compares your drinking with men your age in Missouri and the US. Matthew, each day you drink more than most people who drink in Missouri and more than those who drink in the US. Based on what you have told us, you fall into the Binge (more than 4 drinks a day) group. In the last three months you report binge drinking at least once.

Drinks per day: On days that you drink you have 8 drinks and "your estimate" in the chart above is that others have 10 drinks. Your estimate is high, nationally the average male your age drinks less than 4 drinks in one day that they drink.

Drinking days a week: You said that you drink 4 days a week and you think that others drink 5 days a week. Your estimate is high, nationally the average man between the ages of 25 to 29 drinks about 2 days a week.

So men your age drink fewer days a week and, when they do drink, drink fewer drinks than you think they do.

Your Motivation To Change And What To Do Next

Matthew, you can change your behaviors. When it comes to making a change we all have different motivations. Below are some specific recommendations that you could do about your readiness to change.

In terms of alcohol use, you are in the precontemplation stage of change. You are not thinking about change at this moment. In fact, you may not have realized that your alcohol use is a potential problem.

Steps to start thinking about your alcohol use behaviors:

For alcohol use, the precontemplation stage of change suggests that you probably did not know about the risks from your alcohol use behaviors. Think about your risks and what you want, then answer these questions.

- What might happen if you don’t change?
- What would be the good things about changing your risky alcohol use behaviors?
- Suppose you don’t change, what is the worst that might happen?
- Suppose you don’t change, what is the best that might happen?
Pilot Study Design

- Random Controlled Trial
- Patients at moderate risk levels
  - PFR only
  - PFR + Brief Intervention
- One month follow-up

Results at one month

- 40 participants (19 reached at follow-up)
  - PFR Only group
    - Significant reduction in ASSIST Alcohol risk scores
    - Significant reduction in last 30 day cannabis use
    - Significant increase in change motivation
  - Both groups
    - Significant reduction in drinks in the last 7 days
  - No significant changes in
    - binge drinking days, drinking days, drinks per drinking day, or cannabis risk
    - readiness to change level or self-perceived effectiveness to change

Patients at risk

<table>
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<tr>
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<th>Follow-up</th>
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<td>Alcohol</td>
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<td>2</td>
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<tr>
<td>Cannabis</td>
<td>8</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Admission</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Cannabis</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Due perhaps to the small number of cases, this is not a statistically significant difference.
So what?

- Caveats
  - Small pilot study
  - Short follow-up duration
  - 50% follow-up rate

- Implications
  - PFR only interventions have potential for moderate risk users
  - Reduce time/effort to implement
  - Provide more time for those in need of professional services

This has been an MIMH Production

www.mosbirt.org
For more information on the MOSBIRT program, please call Barbara Keehn, Project Director, at (314) 877-6445

Questions?