Bertha K. Madras, PhD
Deputy Director, Demand Reduction
Office of National Drug Control Policy, USA
Filling a Major Gap in the Spectrum of Substance Use

Screening and Brief Intervention

Bertha K. Madras, PhD
Deputy Director, Demand Reduction
Introduction

- Public Health Challenges
- Effective Prevention
- Effective Intervention
- Effective Treatment
The Spectrum of Use

- Risky use
- Problem use
- Abuse
- Dependence

Drugs

Alcohol
Public Health Challenge:
The vast majority of people with a diagnosable illicit drug or alcohol disorder are unaware of the problem or do not seek help.

Source: SAMHSA, 2006 National Survey on Drug Use and Health (September 2007)

95.5% Did not feel they needed treatment

3.0% felt they needed treatment and did not make an effort

1.5% felt they needed treatment and did make an effort

21 Million People Need, But Do Not Receive Treatment for Illicit Drug or Alcohol Use
Can Healthcare Professionals Address these Public Health Challenges? Reduce the Public Health Burden?

The case for new strategies that can have a positive impact
A Public Health Solution: Screening, Brief Intervention (SBI)

1. Substance abuse leads to significant **medical**, social, legal, financial consequences.

2. Excessive drinking, illicit drug use, and prescription drug misuse are often undiagnosed by medical professionals.

3. The brief intervention itself is inherently valuable, and positive screens may not require referral to specialty treatment.

4. Early, brief interventions are clinically effective and cost-efficient.
Practice Strategy

**Screening:**

Brief Intervention (BI):

Brief Treatment (BT):

Referral (RT):

Source: SAMHSA. A Guide to Substance Abuse Services for Primary Care Clinicians TIP Series No. 24 (1997)
Federal Promotion of Screening, Brief Intervention
17 States with Established SBI Programs and University Grantee
US SBIRT Study

Goals

1. Is screening for any illicit drug use feasible in the context of simultaneous screening for heavy alcohol use?

2. What are drug use outcomes for persons identified through screening as using an illicit drug and thereby needing an intervention?

3. Are there significant variations in outcomes by age, gender, and race/ethnicity?

4. What are the health and social outcomes among those assigned to brief treatment or referred to specialty care?
US SBIRT Identifies Population at Risk

Follow-up Action Depends on Score

Screening Score

459,599 screened

Negative Screen  77.3 %

Positive Reinforcement

Positive Screen  22.7 %

22.7 % = 100%

Moderate Use

Brief Intervention  70 %

Moderate/High Use

Brief Treatment  14 %

Abuse/Dependence

Referral to Treatment  16 %
CONCLUSIONS

Is screening for illicit drug use is feasible in the context of simultaneous screening for risky alcohol use, in a range of healthcare settings?

• The prevalence of illicit drug abuse was clinically significant among the full population screened.

• Screening for a wide range of illicit drugs, in addition to alcohol, is feasible and clinically appropriate in diverse healthcare settings and for various populations.
CONCLUSIONS

Drug use outcomes for persons identified through screening and needing an intervention?

- Of the sample abusing illicit drugs at baseline and followed up at six months:
  - Drug use dropped by 64.7% (p < .001)
  - Heavy alcohol use dropped by 49.0% (from 54.5% to 27.8%, p < .001).
CONCLUSIONS

Significant variations in outcomes by age, gender, and race/ethnicity?

• Positive findings were similar across sites and among different gender, race/ethnic and age subgroups.

• For alcohol use, various ages responded differently to brief interventions.

• Social outcomes were not encouraging for Sites 5, 6
### Other Literature

**Screening, Brief Interventions for Alcohol Have Major Impact on Morbidity and Mortality**

<table>
<thead>
<tr>
<th>Study</th>
<th>Results - conclusions</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma patients</td>
<td>48% fewer re-injury (18 months) 50% less likely to re-hospitalize</td>
<td>Gentilello et al, 1999</td>
</tr>
<tr>
<td>Hospital ER screening</td>
<td>Reduced DUI arrests 1 DUI arrest prevented for 9 screens</td>
<td>Schermer et al, 2006</td>
</tr>
<tr>
<td>Physician offices</td>
<td>20% fewer motor vehicle crashes over 48 month follow-up</td>
<td>Fleming et al, 2002</td>
</tr>
<tr>
<td>Meta-analysis</td>
<td>Interventions reduced mortality</td>
<td>Cuijpers et al, 2004</td>
</tr>
<tr>
<td>Meta-analysis</td>
<td>Treatment reduced alcohol, drug use Positive social outcomes: substance-related work or academic impairment, physical symptoms (e.g., memory loss, injuries) or legal problems (e.g., driving under the influence)</td>
<td>Burke et al, 2003</td>
</tr>
<tr>
<td>Meta-analysis</td>
<td>Interventions can provide effective public health approach to reducing risky use.</td>
<td>Whitlock et al, 2004</td>
</tr>
</tbody>
</table>
WHO Study: The Effectiveness of a Brief Intervention for Illicit Drugs linked to the ASSIST Screening test in Primary Health Care:

- **Phase 1**: Reliability Test-retest of ASSIST - 9 countries
- **Phase II**: Validity study (n=1047); comparison of ASSIST, others - 7 countries
- **Phase III**: Australia, Brazil, India, United States, randomized control multinational trial.
  - n: 731 participants
  - Drug use, n: Cannabis: 395; Cocaine, amph: 247; Opioids: 89
  - Age: 16 - 62 years
  - Follow-up: 86% follow-up at 3 months

http://www.who.int/substance_abuse/activities/assist_technicalreport_phase3_final.pdf
WHO Study:
Drug use and proportions

ASSIST score average: 11.25
% with positive score
- alcohol: 87%
- Tobacco: 75%
- Cannabis: 38%
- Amphetamines: 25%
- Opioids: 22%
- Sedatives: 18%
- Hallucinogens: 8%
- Inhalants: 5%

http://www.who.int/substance_abuse/activities/assist_technicalreport_phase3_final.pdf
WHO Study
Outcome Measures

- Tried to cut down: > 82.8% as a result of feedback, information
- Reduced substance use: 60.2%
- Duration of study/effect: ~11.2 weeks
- Why some responded, others did not:
  - Responders: Cut down, stop use, think about it, feel better
  - Responders: Obligations and responsibilities; identifying and defining the problem (score, interview, hearing myself speak)
  - Non-responders: “heard it all before”, “choice”, “not an issue”, “can’t give it up”

http://www.who.int/substance_abuse/activities/assist_technicalreport_phase3_final.pdf
WHO Study
Outcomes from Pooled data (n = 628)

Marijuana

Opioids

All Drug classes

http://www.who.int/substance_abuse/activities/assist_technicalreport_phase3_final.pdf
US SBIRT Program
Saves Health care costs: WA

- **Population:** aged, blind, disabled
- **Savings:** $157 – $202 / member / month
- **Reductions:** due to decline in inpatient hospital costs: $115-$178 /member / month
- **Increases:** Outpatient ED costs increased by $35-$36
- **Overall reductions:** WASBIRT estimates overall reductions in Medicaid could be $1.9 - $2.4 million/year
- **N:** 1,000 screened in 9 hospitals

## Screening, Brief Interventions for Alcohol Saves Healthcare Costs

<table>
<thead>
<tr>
<th>Study</th>
<th>Cost Savings</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randomized trial of brief treatment in the UK</td>
<td>Reductions in one-year healthcare costs $2.30 cost savings for each $1.00 spent in intervention</td>
<td>(UKATT, 2005)</td>
</tr>
<tr>
<td>Project TREAT (Trial for Early Alcohol Treatment) randomized clinical trial: Screening, brief counseling in 64 primary care clinics of nondependent alcohol misuse</td>
<td>Reductions in future healthcare costs $4.30 cost savings for each $1.00 spent in intervention (48-month follow-up)</td>
<td>(Fleming et al, 2003)</td>
</tr>
<tr>
<td>Randomized control trial of SBI in a Level I trauma center Alcohol screening and counseling for trauma patients (&gt;700 patients)</td>
<td>Reductions in medical costs $3.81 cost savings for each $1.00 spent in intervention.</td>
<td>Gentilello et al, 2005)</td>
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</tbody>
</table>
US Preventive Task Force issued evidence-based guidelines for > 90 preventive procedures:

National Commission on Preventive Priorities (CDC and AHRQ funded) ranked by 2 factors

<table>
<thead>
<tr>
<th>Clinical Preventive Services</th>
<th>CPB</th>
<th>CE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss daily aspirin use—men 40+, women 50+</td>
<td>5</td>
<td>5</td>
<td>10</td>
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<tr>
<td>Childhood immunizations</td>
<td>5</td>
<td>5</td>
<td>10</td>
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<tr>
<td>Smoking cessation advice and help to quit—adults</td>
<td>5</td>
<td>5</td>
<td>10</td>
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<tr>
<td>Alcohol screening and brief counseling—adults</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Colorectal cancer screening—adults 50+</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Hypertension screening and treatment—adults 18+</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Influenza immunization—adults 60+</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Vision screening—adults 65+</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Cervical cancer screening—women</td>
<td>4</td>
<td>3</td>
<td>7</td>
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<tr>
<td>Cholesterol screening and treatment—men 35+, women 45+</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Pneumococcal immunizations—adults 65+</td>
<td>3</td>
<td>4</td>
<td>7</td>
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<tr>
<td>Breast cancer screening—women 40+</td>
<td>4</td>
<td>2</td>
<td>6</td>
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<tr>
<td>Chlamydia screening—sexually active women under 25</td>
<td>2</td>
<td>4</td>
<td>6</td>
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<tr>
<td>Osteoporosis screening—preschool children</td>
<td>2</td>
<td>3</td>
<td>5</td>
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<tr>
<td>Discuss folic acid use—women of childbearing age</td>
<td>2</td>
<td>3</td>
<td>5</td>
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<tr>
<td>Obesity screening—adults</td>
<td>3</td>
<td>2</td>
<td>5</td>
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<tr>
<td>Depression screening—adults</td>
<td>3</td>
<td>1</td>
<td>4</td>
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<tr>
<td>Hearing screening—adults 85+</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>Injury prevention counseling—parents of children ages 0-4</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Osteoporosis screening—women 65+</td>
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<tr>
<td>Cholesterol screening—men &lt; 35, women &lt; 45 at high risk</td>
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<tr>
<td>Diabetes screening—adults at risk</td>
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<tr>
<td>Counseling—adults at risk</td>
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<tr>
<td>Tdap—adults</td>
<td>1</td>
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<td>2</td>
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Ron M. Davis MD AMEDNEWS October 22/29 2007 p. 25
Interrupting Progression to Dependence can Reduce Need for Treatment

Use ↓ Abuse → Dependence

Treatment Services:
- Family Services
- Child Care Services
- Vocational Services
- Mental Health Services
- Educational Services
- Medical Services
- AIDS/HIV Services
- Legal Services
- Financial Services
- Housing/Transport Services
- Behavioral Therapy and Counseling
- Intake Processing Assessment
- Continuing Care
- Substance Use Monitoring
- Self-Help/Peer Support Groups
- Clinical and Case Management
- Pharmaceutical Therapy
- Treatment Plan

Source: NIDA
US Innovative treatment Program
Access to Recovery

• Access to Recovery is an innovative treatment and recovery strategy.

• It views the person in need of treatment and services suitable for their needs.

• It views the person as an individual who can contribute to devising a recovery program that resonates with their persona.
Access to Recovery

Objectives


2. Permit choice in seeking recovery.

3. Expand number and range of providers, faith-based providers.
4. Empower treatment-seekers by providing them with vouchers to choose services.

5. Combine clinical treatment with recovery support services.

Access to Recovery
Encourages Flexibility

• Texas: ATR funds target the State’s criminal justice population.
• Tennessee: ATR funds target people with a primary meth addiction.
• Washington: ATR funds target low-income individuals involved with child protective services, shelters, supported housing.
• Wisconsin: emphasizes families with children, pregnant women, parolees and probationers who will return to upon release from prison.
• Individuals are permitted to use vouchers to choose among eligible clinical treatment and recovery support providers.
Access to Recovery has Accomplished Goals

1. Expand treatment capacity
   > than 190,000 received substance abuse treatment and/or recovery support services

2. Permit choice in seeking recovery
   > 37% of clients received clinical treatment; 65% received recovery support services

3. Increase number and range of providers, including faith-based providers
   ATR has attracted a new cohort of treatment and recovery support services providers
Access to Recovery has Accomplished Goals

4. Empower treatment-seekers to engage in their own recovery with the use of vouchers to obtain services

ATR vouchers allow for independent choice for treatment seekers
ATR treatment providers and recovery support services need to fulfill eligibility criteria.
Empowering patients may contribute to better retention and completion rates.

5. Combine clinical treatment with recovery support services effectively.

Seamless combination has been effective.

6. Document outcomes to determine success

Abstinence rate at discharge: 71.4%. (n= 48,000 clients with formal discharge)
Access to Recovery
From Intake to Discharge

- 74.3% were abstinent
- 24.1% were housed
- 32.0% were employed
- 60.6% were socially connected
- 87.8% were not involved with the criminal justice system

Source: SAIS, SAMHSA, Dec. 31, 2007
Thank you….

With gratitude to Federal partners (SAMHSA, NIDA, NIAAA, CMS), ACCME, AMA and medical professionals who have advanced these concepts.