Managing Substance Abuse Disorders in Primary Care Settings

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Screening, Brief Intervention, and Referral to Treatment

SBIRT

S-BIRT

- Screening quickly assesses the severity of substance use and identifies the appropriate level of treatment.
- Brief intervention focuses on increasing insight and awareness regarding substance use and motivation toward behavioral change.
- Referral to treatment provides those identified as needing more extensive treatment with access to specialty care

Screening

- Identify patients who need further assessment or treatment for substance use disorders
- Does not establish definitive information about diagnosis and possible treatment needs
- The goal is to make screening for substance abuse a routine part of medical care.

Screening?

Screening for diseases is warranted:

1) if the disease has a significant prevalence and consequences
2) effective and acceptable treatments are available
3) early identification and treatment lead to favorable outcomes
4) effective screening instruments are available and easy to administer.

Screening : Two Components

1. Biomarkers: objective evidence that an individual may abuse drugs, e.g., positive drug screen or physical indications of potential abuse (e.g., liver disease).
2. Patient Reports: based on questionnaires designed to get a "big picture" of the individual's substance use and to identify potential red flags.

Attributes of a Good Screening Instrument

- Brief, easy to use
  - Integrate into regular care duties
- Sound psychometric properties
- Ability to be used by a variety of staff
- High sensitivity (Low false negatives)
- High specificity (Max true negatives)
- Trade off: length/patient-PCP burden vs: accuracy/reliability

Screening Instruments

- All agencies within a particular health care system should use the *same screens, scored the same way, and administered in the same way*.
- A screen should be *simple* enough that it can be administered by a wide range of health professionals.
- It should focus on the *substance use severity* (primarily consumption patterns) and a core *group of associated factors* such as legal problems, mental health status, educational functioning, and living situation.
- The *client's awareness* of the problem, feelings about his or her substance use, and motivation for changing behavior may also be solicited.

Screening Instruments

- Alcohol Use Disorders Identification Test (AUDIT)
- Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)
- Drug Abuse Screening Test (DAST)
- CRAFFT
- Others: CAGE (AID); DUDIT; RAGS, RDPS, SSI-SA

Evidence Table
DoDef/VA

	Recommendations	Sources of Evidence	QE	R
1.	Use of labs	Anton et al., 1995	II-2	A
2.	Screening of asymptomatic patients	U.S. PSTF, 1996	II-2	D
3.	Annual screening of hazardous use	U.S. PSTF, 1996		
		U.S. DHHS, 1995	III	B
4.	Consider volume and use	Hawks, 1994		
		Room et al., 1995		
		Hasin et al., 1996		
		Midanik et al., 1996	II-2	A
5.	Use of AUDIT score	Saunders et al., 1993	II-1	A
6.	Use of CAGE score	Mayfield et al., 1974	II-2	A
7.	Routine screening for other drug abuse/dependence	U.S. PSTF, 1996	III	D
8.	Use of Drug Abuse/Dependence Screener	Schorling, 1997	III	C
9.	Use of TICS score	Brown et al., 1997	II-3	B
10.	Use of DAST score	Skinner, 1982	III	C

QE = Quality of Evidence; R = Recommendation (See Introduction)

Alcohol Use Disorders Identification Test (AUDIT)

Please circle the answer that is correct for you.

1. How often do you have a drink containing alcohol?

Never	Monthly or less	Two to four times a month	Two to three times a week	Four or more times a week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?

1 or 2	3 or 4	5 or 6	7 to 9	10 or more

3. How often do you have six or more drinks on one occasion?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily

4. How often during the last year have you found that you were not able to stop drinking once you had started?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily

5. How often during the last year have you failed to do what was normally expected from you because of drinking?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily

AUDIT

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

Never Less than monthly Monthly Weekly Daily or almost daily

7. How often during the last year have you had a feeling of guilt or remorse after drinking?

Never Less than monthly Monthly Weekly Daily or almost daily

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

Never Less than monthly Monthly Weekly Daily or almost daily

9. Have you or someone else been injured as a result of your drinking?

No Yes, but not in the last year Yes, during the last year

10. Has a relative or friend, or a doctor or other health worker been concerned about your drinking or suggested you cut down?

No Yes, but not in the last year Yes, during the last year

Scoring - Questions 1-8: 0-4 ; Questions: 9-10: 0, 2 or 4

AUDIT Guidelines for Determining Intervention Strategies

Risk Level	Intervention	Audit Score
I	Education	0-7
II	Simple Advice	8-15
III	Simple Advice plus Brief Counseling and Continued Monitoring	16-19
IV	Referral to Specialist for Dx and Treatment	20-40

ASSIST

1. In your life, which of the following substances have you ever used? *(NON-MEDICAL USE ONLY)*

2. In the past three months, how often have you used the substances mentioned?

3. During the past three months, how often have you had a strong desire or urge to use*?*

4. During the past three months, how often has your use of led to health, social, legal or financial problems?

5. During the past three months, how often have you failed to do what was normally expected of you because of your use of?

6. Has a friend or relative or anyone else ever expressed concern about your use of*?*

7. Have you ever tried and failed to control, cut down or stop using?

8. Have you ever used any drug by injection?

DAST

- provides a general measure of lifetime problem severity that can be used to guide further inquiry into drug-related problems and to help determine treatment intensity.

Drug Abuse Screening Test (DAST-20)

1. Have you used drugs other than those required for medical reasons?
2. Have you abused prescription drugs?
3. Do you abuse more than one drug at a time?
4. Can you get through the week without using drugs (other than those required for medical reasons)?
5. Are you always able to stop using drugs when you want to?
6. Have you had "blackouts" or "flashbacks" as a result of drug use?
7. Do you ever feel bad or guilty about your drug use?
8. Does your spouse (or parents) ever complain about your involvement with drugs?
9. Has drug abuse created problems between you and your spouse or your parents?
10. Have you lost friends because of your use of drugs?

Drug Abuse Screening Test (DAST-20)

11. Have you neglected your family because of your use of drugs?
12. Have you been in trouble at work because of drug abuse?
13. Have you lost a job because of drug abuse?
14. Have you gotten into fights when under the influence of drugs?
15. Have you engaged in illegal activities in order to obtain drugs?
16. Have you been arrested for possession of illegal drugs?
17. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?
18. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?
19. Have you gone to anyone for help for a drug problem?
20. Have you been involved in a treatment program specifically related to drug use?

DAST Guidelines for Determining Intervention Strategies

Score	*Degree of Problems*	*Suggested Action*
0	No Problems Reported	None
1-2	Low Level	Monitor, Reassess Later
3-5	Moderate Level	Further Investigation
6-8	Substantial Level	Intensive Assessment

CRAFFT

- **C** -Have you ever ridden in a **Car** driven by someone (including self) high, drunk, use
- **R** - Have you ever used D or A to **Relax**?
- **A** - Do you ever use **Alone**
- **F** - Do you ever **Forget** things that you did while using?
- **F** - Do **Family or Friends** tell you to cut down?
- **T** - Have you ever gotten into **Trouble** when using?

Screening Instruments

- ✓ Conjoint two-item screen
  - "In the past year, have you ever drunk or used drugs more than you meant to?"
  - "Have you felt you wanted or needed to cut down on your drinking or drug use in the past year?"
    - Ages 50-59: Sensitivity 73.9, Specificity 84.8

(Brown et al., 2001)

- ✓ Drug Abuse Screening Test (DAST-10, 20, 28)

Drug versus Alcohol Screening

- USPSTF (2008): “Current evidence is insufficient to assess the balance of benefits and harms of screening adolescents, adults and pregnant women for illicit drug use”.
- USPSTF (2008):Recommends Alcohol Screening for adults, pregnant women
  - ?adolescents? Insufficient evidence

Empirical Support

- Large numbers of individuals at risk of developing serious alcohol or other drug problems may be identified through primary care screening
- Reduce the frequency and severity of drug and alcohol use
- Reduce the risk of traumatic injury
- Increase the percent of patients who enter specialized substance abuse treatment
- SBIRT also has been associated with fewer hospital days and fewer emergency department visits
- Cost-effective

- LIMITS: ?How well does it work in large patient samples/practices where low SUD prevalence???

Screening Method

- *Tension between*
  - *Being evidence based*
  - *Understanding clinical practice*
- *Simplification needed*
  - no paper forms or weighted scoring
  - easy to remember
  - reinforce health education message

Brief Intervention

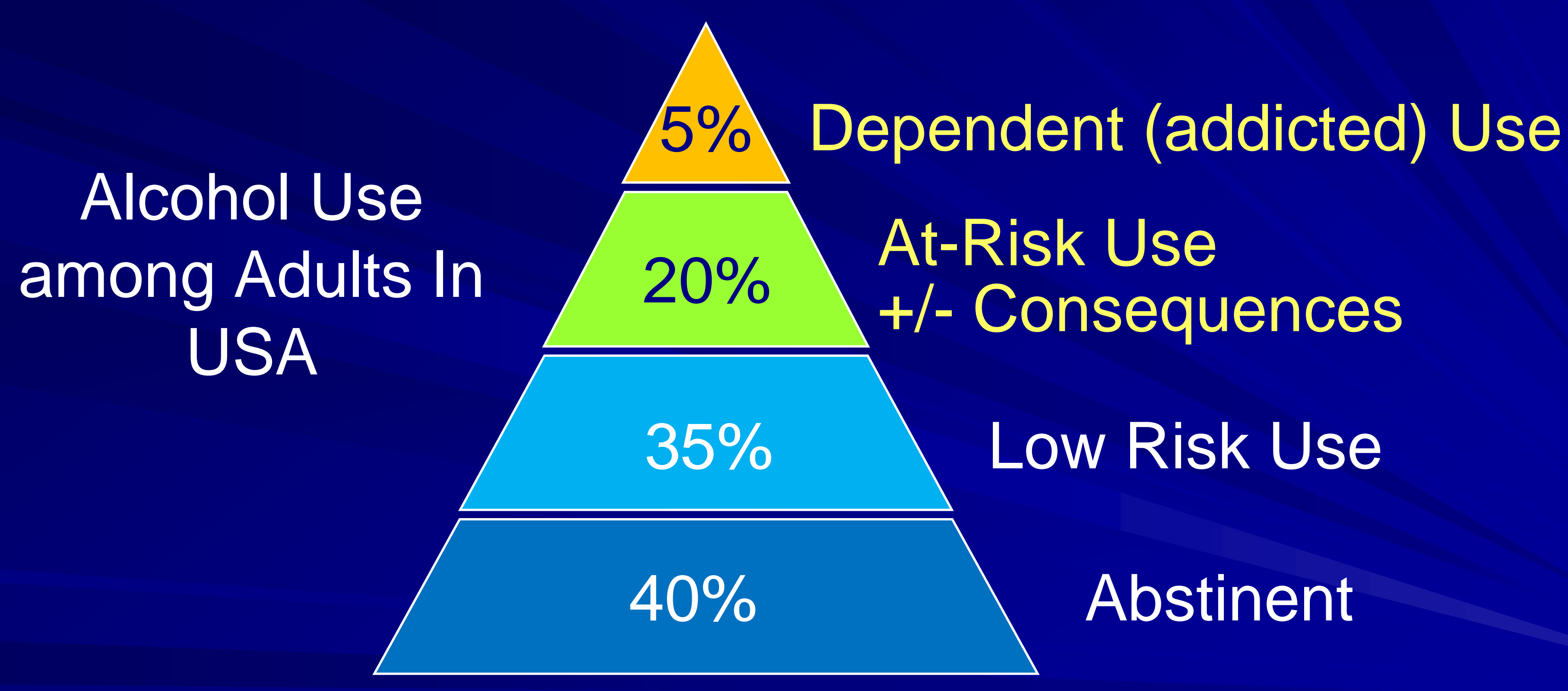
Alcohol and other drug use are top causes of death in USA

Rank	Cause	Total (%) Deaths	
1	Tobacco	435,000	(18)
2	Poor diet & activity	400,000	(17)
3	Alcohol use &	85,000	(4)
	Alcohol related motor vehicle deaths	16,700	(1)
9	Illicit drug use	17,000	(1)

1 of 20 deaths

Mokdad et al. JAMA. 2004;291:1238-1245

Most health risk & disease from substance use is suffered by people who are not addicted



National Longitudinal Alcohol Epidemiology Study 1992, National Comorbidity Study, 1992

At-Risk Use

- At-Risk Alcohol Use (NIAAA Guidelines)
  - Men

    > 14 drinks per week, or

    > 4 drinks per occasion
  - Women

    > 7 drinks per week, or

    3 drinks per occasion
- At-Risk Drug Use (Illinois SBIRT)

  Any illicit drug use in past 3 months

What is a standard drink?

12 oz. of beer or cooler	8–9 oz. of malt liquor	5 oz. of table wine	3–4 oz. of fortified wine	2–3 oz. of cordial, liqueur, or aperitif	1.5 oz. of brandy	1.5 oz. of spirits
	8.5 oz. shown in a 12-oz. glass that, if full, would hold about 1.5 standard drinks of malt liquor		(such as sherry or port) 3.5 oz. shown	2.5 oz. shown	(a single jigger)	(a single jigger of 80-proof gin, vodka, whiskey, etc.) Shown straight and in a highball glass with ice to show the level before adding a mixer*
~5% alcohol	~7% alcohol	~12% alcohol	~17% alcohol	~24% alcohol	~40% alcohol	~40% alcohol
12 oz.	8.5 oz.	5 oz.	3.5 oz.	2.5 oz.	1.5 oz.	1.5 oz.

NIAAA. Helping Patient' who drink too much: A Clinician's Guide. 2005

What are brief interventions?

Brief interventions

- Provided in general healthcare settings
- 10-15 minute behavioral counseling with or without follow-up
- Target specific health behavior (drinking, drug use)
- Rely on use of screening/brief assessment data
- Goal to reduce alcohol/drug consumption; facilitate treatment engagement if needed

FRAMES

- Feedback *"I am specifically concerned about your substance use because…"*
- Responsibility *"What you do with your substance use is up to you."*
- Advice *"In my medical opinion, you can best minimize your health risks by…"*
- Menu *"What do you think would work for you if you decided to make a change?"*
- Empathy *"It is not easy to change."*
- Self-Efficacy *"I can see that you are a strong person."*

Motivational interviewing style

- Directive but non-authoritarian
  - Patient centered, elicits patient's goals
  - Responsibility for change is patient's
- Uses supportive strategies
  - Avoids judgmental & argumentative language
  - Explores patient's ambivalence
  - Moves toward change using patient's own concerns and arguments

Brief intervention (BI) decreases at-risk alcohol use and its consequences

- Effective in randomized controlled trials in diverse settings: Hospital inpatient units, primary care offices, emergency departments, & trauma centers
- Outcomes measured
  - ↓ alcohol consumption
  - ↓ abnormal liver enzymes
  - ↓ driving after drinking, ↓ new injuries
  - ↓ sick days
  - ↓ hospital days

USPSTF recommends screening and BI for at-risk alcohol use in primary care settings

- Best results with 5-15 minute interventions plus at least one follow-up
- Intervention as well as control patients reduced their drinking
  - 10-19% more BI patients were drinking at safe levels compared to controls
  - BI patients reduced their drinks/week by 13-34% more than controls

Whitlock EP et al. Ann Intern Med. 2004; 140:557-568

Evidence for BI with other substances

- MTP Research Group et al. (2004) – Cannabis (USA)
- Copeland et al. (2001) - Cannabis (Australia)
- Heather et al. (2004) - Benzodiazepines (UK)
- McCambridge , Strang (2004) - Cigarettes and Cannabis (UK)
- Bernstein et al (2005) - Cocaine and Heroin (US)
- Significant literature for smoking cessation

Patient self-report at baseline & 6 months after SBIRT intervention (N = 902)

"In the last 30 days…"	Baseline	At 6 Months*
Average days of alcohol use	7.8	4.4
Average days of alcohol use to intoxication - 5 or more drinks	3.2	1.8
Average days of cocaine/crack use	3.8	1.2
Average days of marijuana use	2.8	1.6
Average days of heroin use	5.4	1.8

Illinois SBIRT Initiative, 2008.

*P Value < .01

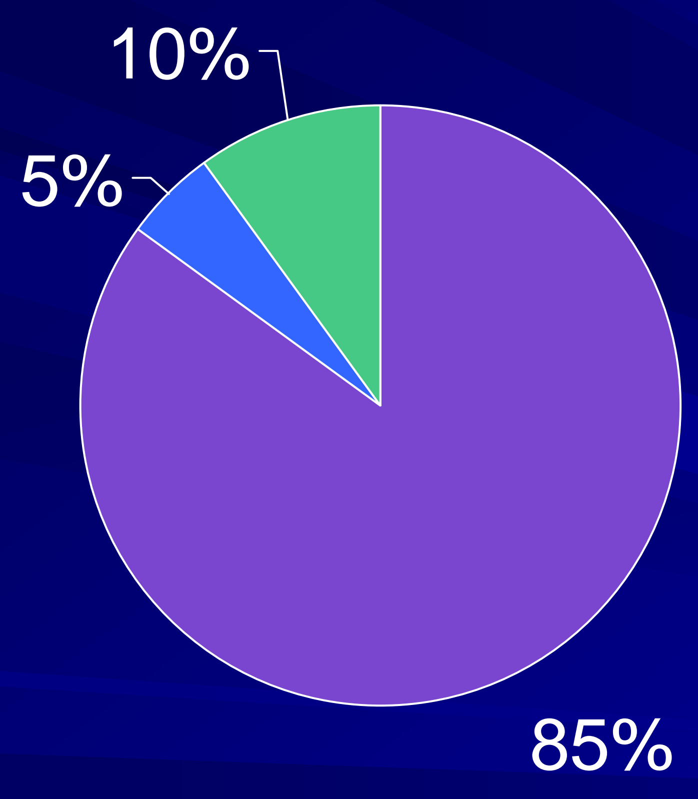
Cost of screening and brief intervention

- Private insurance & Medicare, 2008 CPT billing codes:
  - 99408/G0396 (15-30 min) = $22
  - 99409/G0397 (30+ min) = $55
- Analysis of organizational cost of SBIRT services at Cook County (Stroger) Hospital:
  - $16 (15-30 min), $34 (30+ min)

Brief interventions in general health care settings are moderately effective, at reasonable cost, for decreasing at-risk substance use.

What about interventions in general healthcare settings for substance dependence disorders?

90% of people with active substance use disorders are untreated



- Did not feel need for treatment
- Felt need for treatment but did not receive
- Received specialized treatment

National Survey on Drug Use and Health, SAMHSA, 2005

People with substance use disorders seek care in general medical settings

Where Persons w/ SUD Sought Treatment

General medical (ED, MD office)	43%
Specialty mental health	43%
Professional human services	19%
Self-help groups	8%
Specialty addiction	6%

Narrow et al. Arch Gen Psychiatry. 1993;50:95-107

Prevalence of substance dependence disorder among primary care patients

Study	Patients	# Patients	Alcohol Dependence	Illicit Drug Use
Fleming (1998)	Men & women 18-65 y	21,282	5%	5%
Piccinelli (1997)	Men & women 18-65 y	482	2%	-
Volk (1997)	Men & women mean age 39-47 y	1,333	5-7% women 11-14% men	-

Prevalence of Substance Dependence Disorder among General Hospital Admissions

Study	Facility Patient type	# Patients	Alcohol Depend	Illicit Drug Depend
Smothers (2003)	90 Hospitals 18+ y, All	2,040	6%	*11%* *(Drug Use)*
Brown (1998)	Univ Hospital 18-49 y, Med/Surg	374	11%	3%
Soderstrom (1997)	Level 1 Trauma 18+ y, Trauma	1,118	24%	18%
Canning (1999)	Teaching Hospital 18-85 y, Med	2,988	-	*4%* *(Drug Use)*

Screening for substance use in Cook County Bureau of Health 4 Years – 102,790 Patient Encounters

Patient Substance Use	ED/Trauma	Hospitals	Clinics
Low Risk Use	15,569 (69%)	54,285 (77%)	8,445 (86%)
At-Risk Use +/- Consequences	4,005 (18%)	8,218 (12%)	1,013 (10%)
Dependent Use	2,924 (13%)	7,941 (11%)	390 (4%)

Referral to addiction treatment from Cook County Bureau of Health 4 Years – 4,636 individuals referred

- 47% of patients who screen positive for at-risk substance use in emergency department or hospital have untreated substance dependence disorder
- Most have never received treatment for their addiction
- While in hospital and emergency department, dependent patients express high motivation to change - Average response “8” (out of 10) to “How ready are you to change your substance use?”
- Over 75% of patients with substance dependence disorders want addiction treatment and accept help to enter treatment

Brief interventions in general health care settings are moderately effective, at reasonable cost, for decreasing at-risk substance use.

General healthcare settings, especially hospitals and emergency departments, are opportune settings to diagnose and initiate treatment for substance dependence disorders.

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Illinois SBIRT Initiative

- Partners collaboration—DASA managed
- Brief Treatment Providers (DASA licensed)
- DASA SBIRT Brief Treatment Model
- Telephonic BT
- Bedside BT
- Interim Methadone and BT
- Systems Integration
- BT Sustainability

Illinois BT Model
Design

- to meet anticipated program needs of the Illinois SBIRT initiative
- Provide treatment to a **large number** of individuals with SUD identified through SBIRT
- Enhance **access** to SUD treatment services for the primary care medical community
- **Broaden the continuum of services** to include treatment for individuals with ***non-dependent***, but high risk or harmful substance use

Illinois BT Model Design

- **Broaden the continuum of services** to include a ***"low demand"*** treatment intervention for individuals who may be in ***early stages of change*** and not committed to abstinence
- **Enhance the skills of the treatment workforce** in include new engagement strategies and motivational interviewing
- **Promotes systems change** and the use of evidence based clinical practices

Illinois BT Model
Clinical Practice

- The clinical practice for SBIRT BT is based on motivational interviewing but is not formal Motivational Enhancement Therapy (MET). The model supports the use of a motivational counseling style and includes (but is not limited to) the following basic principles and components:

Illinois BT Model
Clinical Practice

- **Motivational interviewing** approach, techniques and strategies
- **Client centered** focus of therapy
- Emphasizes early **engagement and retention** in treatment
- **Flexible** and adaptable goals and scheduling
- Assess the client's readiness for change and provides **treatment interventions matched** to the clients stage of change

Illinois BT Model
Clinical Practice

- Can be a **stand alone treatment** or may lead to other traditional treatment levels of care
- **Meets the client "where they're at"** and develops goals with the client in partnership
- The course of BT for any client is completed when the **agreed upon goals** are attained
- Works to **enhance self-efficacy**
- **Does not require abstinence** as a goal especially for non-dependent users
- Supports the **"healthy choices"** decision making approach utilized at CCBHS

Illinois BT Model
Clinical Practice

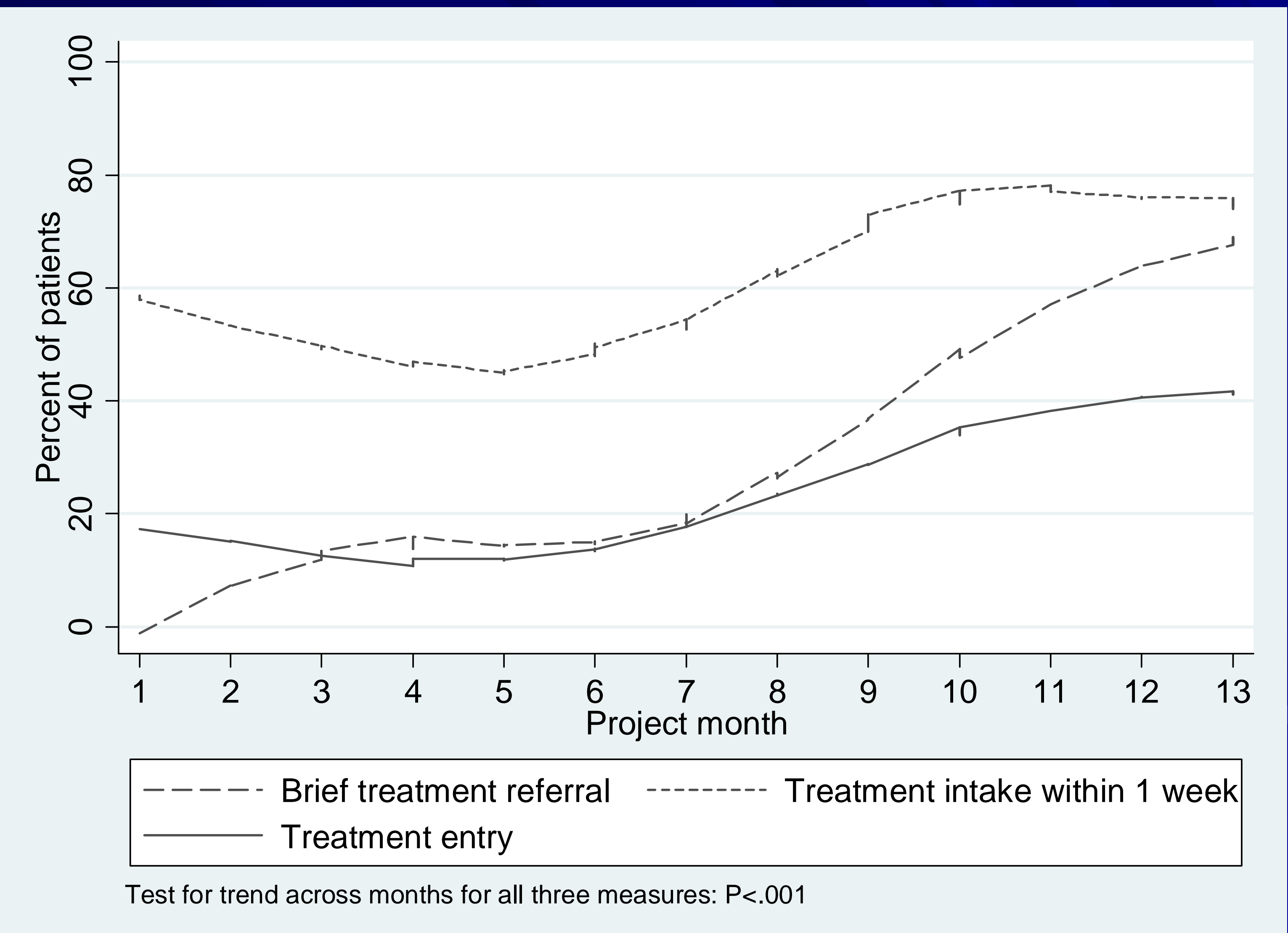
- Incorporates the perspective that addiction is a **chronic and progressive disease** and may require a long term recovery plan and recovery support services
- Understands that **relapse behaviors** are part of any chronic illness and a return to substance use should not be punished or stigmatized
- **Involves families and significant others** in the clients support system
- Utilizes a **recovery management** approach

Illinois BT Model
Structure

- **Access to care** should be efficiently coordinated with other SBIRT units and the time to first appointment not be delayed due to DASA agency restrictions (treatment on demand?)

- The first therapy session emphasizes active **engagement strategies** and DASA 2060 Rule Exemptions have been granted to maximize the likelihood of clients returning for subsequent sessions

Trend in % of referred patients beginning treatment over first 12 months of SBIRT program



Illinois BT Model
Structure

- Services may be delivered as individual therapy, group therapy or a combination of both
- The initial course of BT may have up to twenty sessions but there is no specific number of sessions required to complete treatment
- **Documentation requirements** of BT activities designed to *support the BT clinical model* and are accompanied by **Rule 2060 documentation exemptions**

Illinois Brief Treatment

Focus on Engagement and Client Centered Services—(2060 Rule Exemptions)

- Abbreviated initial assessment
- Client centered goals
- Stages of change-URICA
- Decisional Balance Scale/Exercise
- Abstinence Self-Efficacy Scale (optional)
- Change Plan Worksheet
- Session Rating Scale

Illinois BT Model
Structure

- BT providers must participate in regularly scheduled BT supervision, technical assistance sessions and training
- Illinois BT is different from Brief Intervention and traditional out-patient treatment

Appeared to be generally liked by staff and patients—Developed a life of its own.

Illinois Brief Treatment

Barriers

- Treatment system (and staff) traditions
  - Addressed with exceptions, TA, support/sup.
- Show rates for intake
  - Outreach and linkage, incentives, travel
  - Persuasion and engagement
- Continued show for treatment--Patients in early stages of change
  - Motivational interviewing
  - Outreach and travel costs

Telephone Brief Treatment

- SBIRT Telephonic Brief Treatment (T-BT) is a telephone intervention aimed at providing substance abuse treatment for eligible clients who have barriers to physically attending treatment.
- Kind of a pilot for State telephonic counseling.

Telephone Brief Treatment

- Too medically ill
- Psychiatrically ill
- Problems with transportation
- Problems with childcare
- Social—other client conditions and barriers may require individual approval for T-BT services from DASA

Bedside Brief Treatment

- Telephone counseling required initial face to face session and provider training
- Procedures for first visit to be in hospital—expanded to Bedside BT
- Systems integration
- Services collaboration
- Training on “Hospital Culture”

Objectives

1. Describe the organizational structure of health care delivery in the CCBHS.
2. Identify key components of patients' health care team.
3. Describe the role and tasks of hospital staff.
4. Understand the principles and practices of medical charting.

Objectives (cont.)

5. Effectively cope with emotionally difficult situations.
6. Appropriately respond to patient needs and requests outside of SBIRT.
7. Understand the principles of infection control
8. Effectively communicate SBIRT findings and recommendations to primary care teams.

Bedside BT
Issues and Challenges

- Hospital logistics—SBIRT team
- Meeting the patient
- Confidentiality and Interruptions
- Interviewing sick patients in the hospital
- Difficult and awkward situations
- Relationships-boundaries with hospital staff
- Personal reactions and effects on BT counselors

Interim Methadone Program

- Initiated with SBIRT funds
- Patient referred from CCBHS accepted and receives medication next morning
- Receive transportation fare while in program
- 120 days to transfer to a methadone maintenance “home” or other treatment option

May 2006 – September 2007

541 patients referred (average 32/month)

63% initiated treatment

Illinois BT Model
Sustainability

- Bedside and telephonic
- Early recovery
- Co-occurring Disorders
- DUI education, probation and DCFS
- Methadone and Detox settings
- Adolescents
- Partners and Process