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Addiction



Advances in Addiction Science and Treatment

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Treatment Research Institute
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Presentation

1. What is driving the increased focus on addictions and their treatment?
   - Costs
   - Prescription Drugs
2. What are the new technologies and best practices in treatment of addictions?
   - SBI ++
   - Medications
   - Continuum of Care
3. What are the policy issues we must address?

What Do Substance Use Disorders Cost?

- Close to one-quarter of patients in medical settings have substance use disorders (SUDs)
- Health care costs – about $41billion in health care alone for alochol and drugs, and $96 billion for tobacco
- Individuals with untreated SUDs have higher medical costs than those without SUDs especially for ED visits and hospitalizations
- Use of medications in treatment, including in primary care, drives down medical costs significantly for alcohol or opiate dependence driven yet accounts for only 1% of spending for drug and alcohol treatment due to low utilization

What Do Substance Use Disorders Cost?

- Families of untreated individuals with SUDs use about 5X more health care for hospitalizations, pharmacy costs, and primary care visits
- Drug or alcohol disorders are identified in 3% of all hospital stays totaling $12 billion in hospital costs
- Among both the uninsured and Medicaid patients, about 25% of hospital stays are the result of alcohol disorders; about 20% of Medicaid hospital costs are associated with substance use

Alcohol and Addiction

- Alcohol consumption is the third leading cause of death in the U.S. (Mokdad AH et al., JAMA,2000)
- Among the top 25 diseases, patients with alcohol-use disorders are least likely to receive evidence-based care. (McGlynn EA et al., N Engl J Med. 2003)
- Prevalence of severe alcohol addictions is about 3.8% or 8 million adults.
- Use of medications increases other treatment options for moderate and severe alcohol addiction (Aetna, 2012)

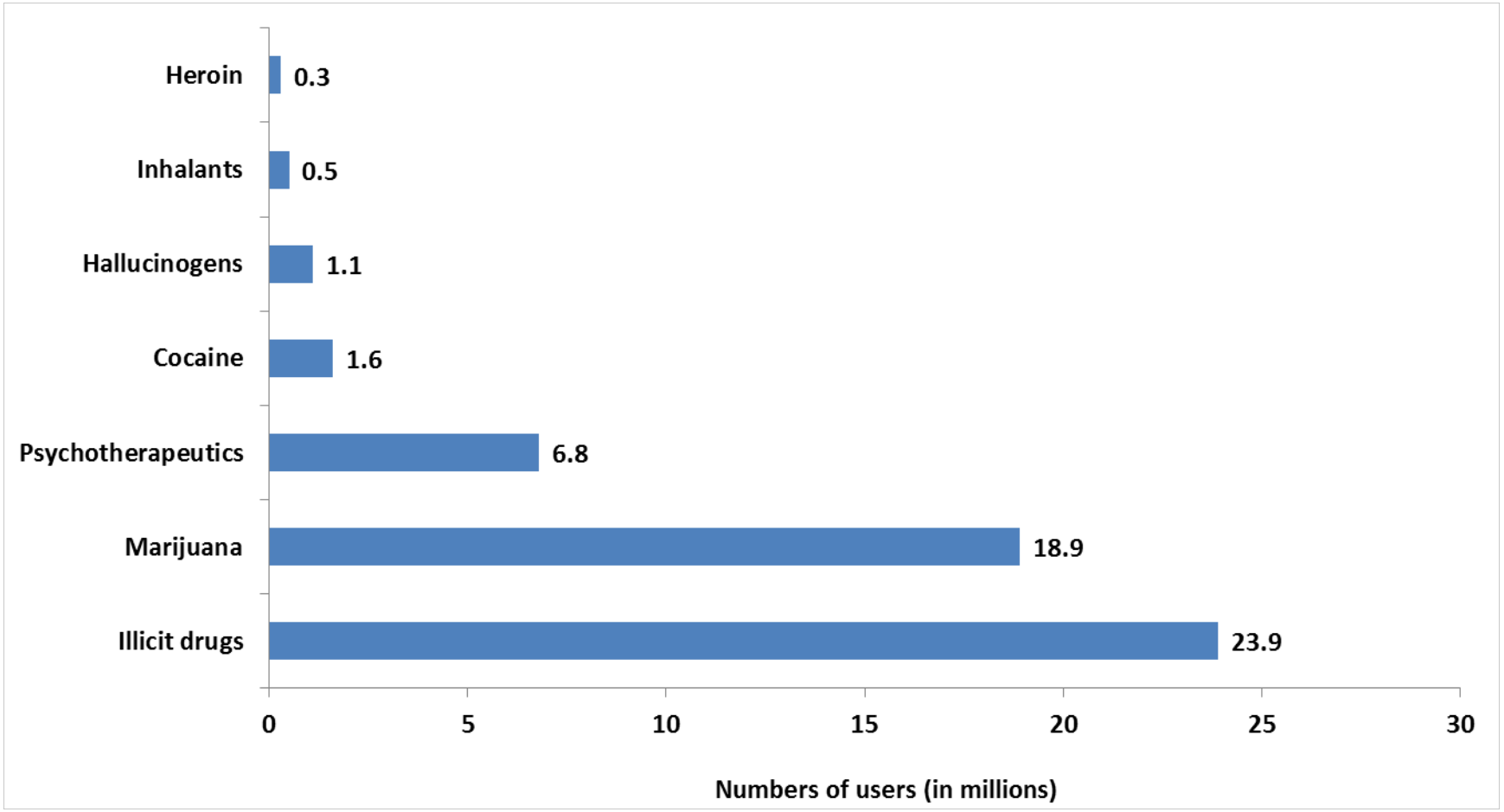
Adolescent Alcohol Use and Its Sequelae

- 6.9 million young people had 5 or more drinks on the same occasion, within a few hours, at least once in the past month.
- 2.1 million young people had 5 or more drinks on the same occasion on 5 or more days over the past month
  (National Survey on Drug and Alcohol Use (NSDUH) 2009)
- Research shows that people who start drinking before the age of 15 are four times more likely to meet the criteria for alcohol dependence at some point in their lives.

Drug Disorders

- **After alcohol, marijuana has the highest rate of dependence or abuse among all drugs.**
  - In 2012, 4.3 million Americans met clinical criteria for substance used disorders related to marijuana in the past year—more than twice the number for substance use disorders related to prescription pain relievers (2.1 million) and four times the number related to cocaine (1.1 million).

Past month illicit drug use among persons aged 12 years and older



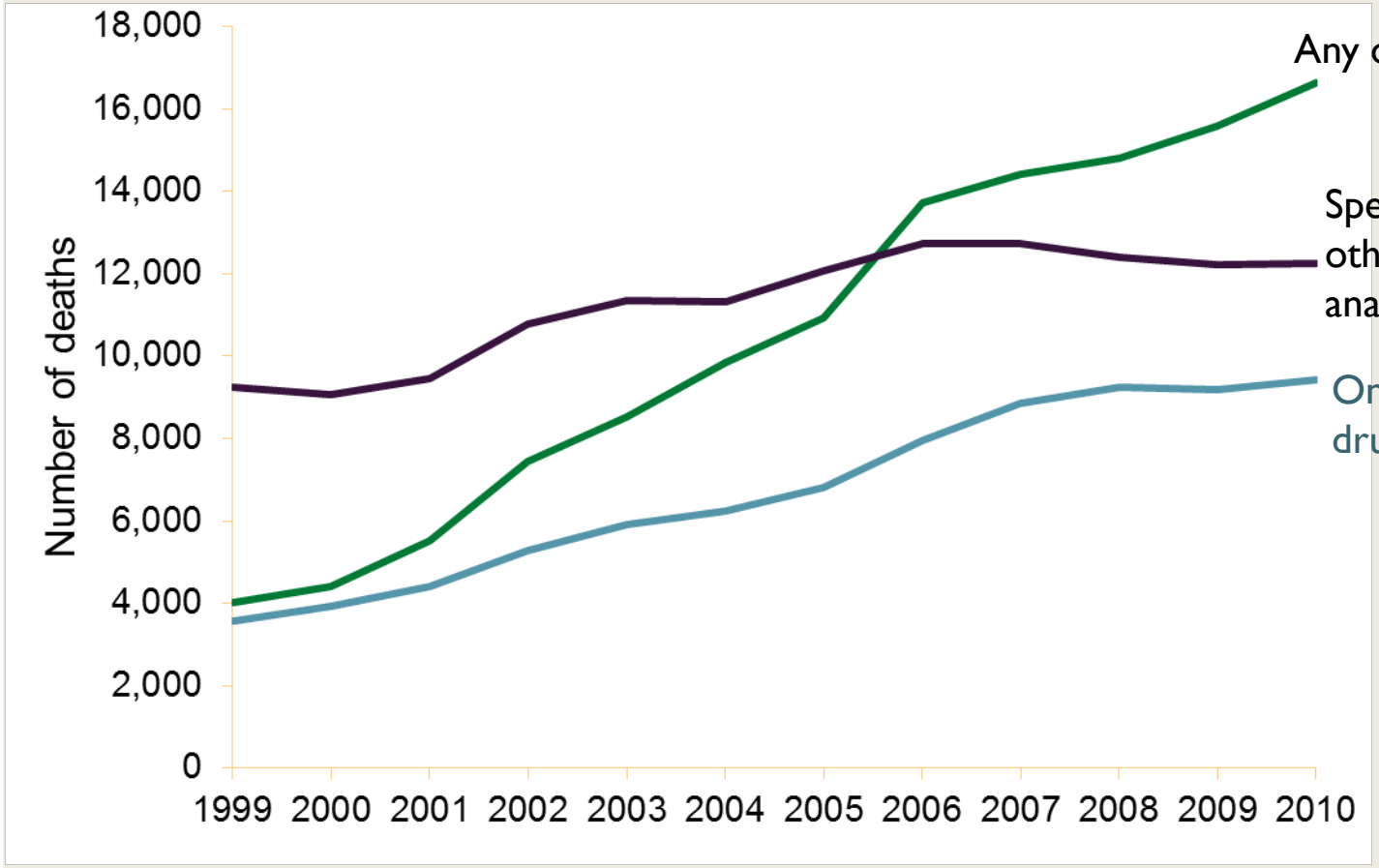
SAMHSA NSDUH 2013

Drug Overdose Deaths

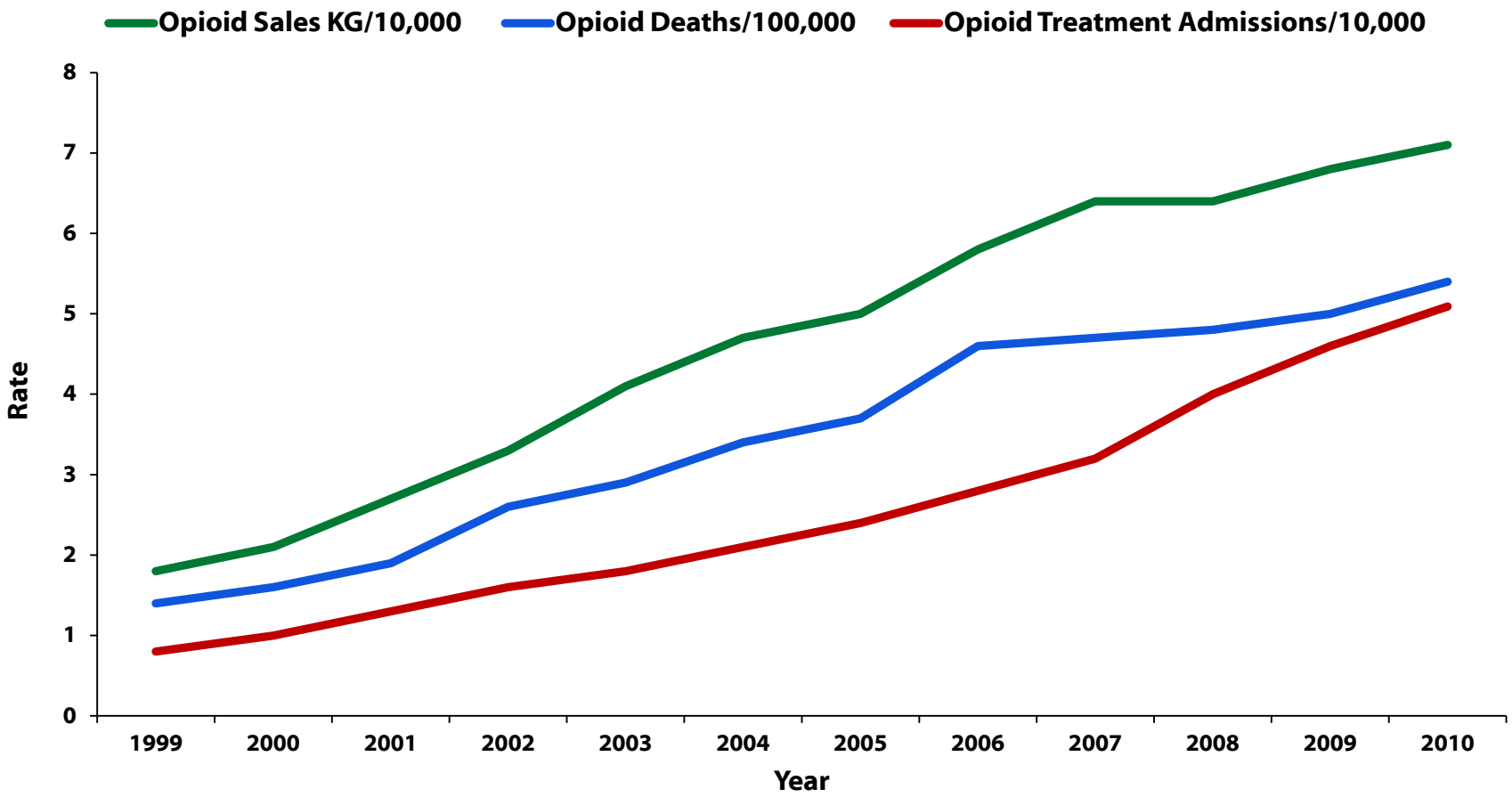
- Drug overdose deaths outnumbered motor vehicle deaths in 10 states in 2005.
  - In 2010, overdose deaths outnumbered motor vehicle deaths in **31 states.** **(CDC, 2013)**
- Most common drugs associated with misuse resulting in ED visits:
    - Cocaine (~500,000)
    - Cannabinoids (~480,000)
    - Benzodiazepines (~450,000)
    - Opioid analgesics (~450,000)
    - Heroin (~275,000)
    - Antidepressants (~175,000)

(SAMHSA, DAWN 2011)

Number of drug overdose deaths involving opioid pain relievers and other drugs
US, 1999-2010



Rates of opioid overdose deaths, sales and treatment admissions increased in parallel in the United States



National Vital Statistics System, DEA's Automation of Reports and Consolidated Orders System, SAMHSA's TEDS

Treatment Gap

- There continues to be a large “treatment gap” in this country.
  - In 2012, an estimated 23.1 million Americans (8.9 percent) needed treatment for a problem related to drugs or alcohol, but only about 2.5 million people (1 percent) received treatment at a specialty facility.

How Do We Treat Addictions?

- SBI + outpatient detox + counseling in primary care and stabilization
- Clinical Management
  - Specialty Treatment with evidence-based practices along the full continuum of care – severity, complexity
  - Use of Medications
  - Recovery Support Services
- Self-Management
  - Continued Monitoring and Telephone Follow-up
  - Recovery Support Services

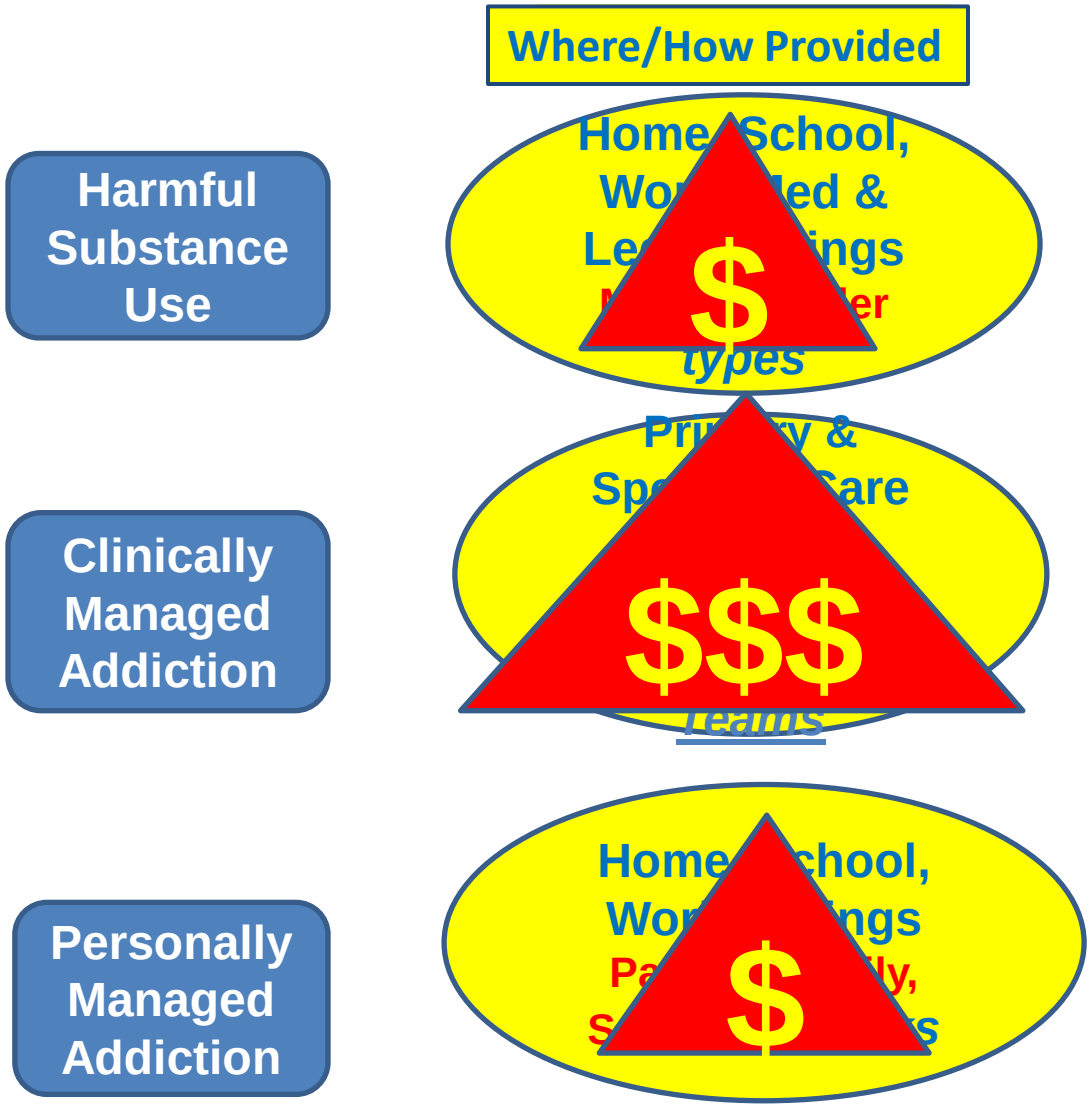
SPECTRUM OF ILLNESS & CONTINUUM OF CARE:
Type 2 Diabetes

TRI Science Addiction

What is Needed?

Pre-Diabetes	Screening those at risk Motivational education Behavioral Interventions Electronic Monitoring
Clinically Managed Diabetes	Behavioral Interventions Medications Family/Peer Support Close Monitoring
Personally Managed Diabetes	Electronic Monitoring Social/Environment Services Family/Peer Supports

SPECTRUM OF ILLNESS & CONTINUUM OF CARE:
Substance Use Disorders



SBI

- Ongoing controversy about the usefulness of screening and brief interventions among some clinicians and researchers
  - Appropriate vs. inappropriate use of brief interventions
  - Standardization of screening
  - How brief interventions are received by patients based on who carries them out
  - Questions about screening if evidence-based treatments are not available

Referrals to Treatment (the RT in SBIRT)

- Significant problems with referrals to treatment
  - Lack of access to evidence-based care
  - Lack of standards for treatment programs
  - Lack of patient readiness
  - Lack of knowledge by referring clinicians about treatment programs and availability
  - Lack of networks among specialty providers

What To Do

- Stop screening and conducting brief interventions in primary care and other health care settings?
- Create standards of care for treatment programs, i.e., verify ASAM criteria?
- Create incentives for treatment programs to improve quality of care?
- Stop referring patients to treatment?

Integration 2.0

- SBI+ - behavior change, focusedcounseling sessions, and use of medications in primary care settings

- Providing screening, referral, and supports for engagement in treatment in other health care settings, e.g., mental health settings, hospital medical and surgical units

- Evidence-based clinical assessment that assures appropriate level of care and treatment planning.

SBI+

- TRI research --- PA CURE Foundation
  - Training for behavioral health specialists (manualized) in cross-substance screening and counseling
  - SBI plus assessment and 4-6 sessions of behavioral health counseling (if appropriate) in nurse-managed FQHCs
  - On-going telephone follow up if needed
  - Referral to treatment if needed

SBI++

- SBI ++ --- TRI grant to PCORI for care provided in nurse-managed FQHCs:
  - SBI, PLUS psych evaluation PLUS consultation on ambulatory detox PLUS prescription and initiation of medication by psychiatric nurse practitioner PLUS daily follow up as appropriate PLUS 2x per week counseling for 4-6 weeks by behavioral health counselor (MET with incentives) PLUS peer recovery specialists 2x per week

Specialty Treatment

Clinical Management

- Specialty Treatment with evidence-based practices along the full continuum of care – severity, complexity
- Use of Medications
- Recovery Support Services

Major Domains of Evidence-based Behavioral Therapies

- Brief Intervention
- Motivational Interviewing
- Contingency Management
- Cognitive-Behavioral, Social Learning, Skills Training
- Social Support, Social Network, and Family/Couples Therapy

Source: Miller & Carroll (2006)

Use of Medications

Conceptual Issue

Should medications be used in the treatment of addictions?

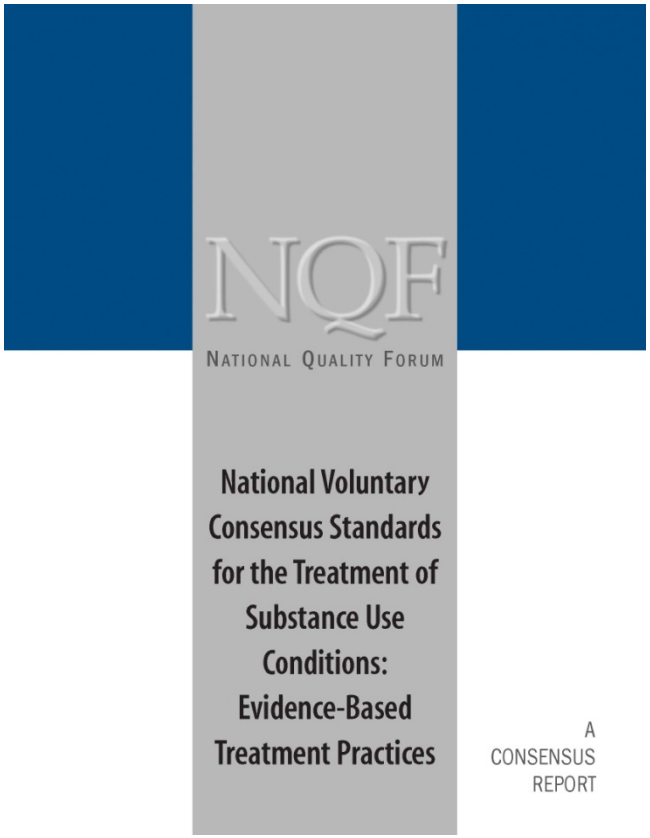
- Is this a philosophical question?
  - Is this a scientific question?
  - Is this a practical question?

Rationale for Medications

- Reduce craving
- Protect against lapses, which should be expected
- Reduce high rates of readmission to detoxification and hospital levels of care
- Improve treatment retention
- Improve outcomes

Standards of Care are Changing

National Consensus Standards



Use Pharmacotherapy

5. Healthcare providers should systematically promote patient initiation of care and engagement in ongoing treatment for substance use illness. Patients with substance use illness should receive supportive services to facilitate their participation in ongoing treatment.

Withdrawal Management

6. Supportive pharmacotherapy should be available and provided to manage the symptoms and adverse consequences of withdrawal, based on a systematic assessment of the symptoms and risk of serious adverse consequences related to the withdrawal process. Withdrawal management alone does not constitute treatment for dependence and should be linked with ongoing treatment for substance use illness.

Therapeutic Interventions to Treat Substance Use Illness

Psychosocial Interventions

7. Empirically validated psychosocial treatment interventions should be initiated for all patients with substance use illnesses.

Pharmacotherapy

8. Pharmacotherapy should be recommended and available to all adult patients diagnosed with opioid dependence and without medical contraindications. Pharmacotherapy, if prescribed, should be provided in addition to and directly linked with psychosocial treatment/support.
9. Pharmacotherapy should be offered and available to all adult patients diagnosed with alcohol dependence and without medical contraindications. Pharmacotherapy, if prescribed, should be provided in addition to and directly linked with psychosocial treatment/support.
10. Pharmacotherapy should be recommended and available to all adult patients diagnosed with nicotine dependence (including those with other substance use conditions) and without medical contraindications. Pharmacotherapy, if prescribed, should be provided in addition to and directly linked with brief motivational counseling.

Continuing Care Management of Substance Use Illness

11. Patients with substance use illness should be offered long-term, coordinated management of their care for substance use illness and any coexisting conditions, and this care management should be adapted based on ongoing monitoring of their progress.

Slow Adoption of Medication

Policy & Financing Change

Counselors and Clients Wary

Advancing Recovery: Implementing Evidence-Based Treatment for Substance Use Disorders at the Systems Level

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ABSTRACT. Objective: A multisite evaluation examined the process and outcomes of Advancing Recovery, a Robert Wood Johnson Foundation initiative to overcome barriers to implementing evidence-based treatments within alcohol and drug treatment systems. **Method:** We report findings from a 3-year, mixed-method study of how treatment systems promoted two evidence-based practices: medication-assisted treatment and continuing care management. We compared outcomes and implementation strategies across 12 state/county agencies responsible for alcohol and drug treatment and their selected treatment centers. Each partnership received 2 years of financial and technical support to increase adoption of evidence-based treatments. **Results:** Partnerships flexibly applied the Advancing Recovery model to promote the adoption of evidence-based treatments. Most sites achieved a measurable increase in the numbers of patients served with evidence-based practices, up from a baseline of virtually no use. Rates of adopting medication-based treatments were higher than those for continuing care management. Partnerships used a menu of top–down and bottom-up strategies that varied in specifics across sites but shared a general process of incremental testing and piecemeal adaptation. **Conclusions:** Supported partnerships between providers and policymakers can achieve wider adoption of evidence-based treatment practices. Systems change unfolds through a trial-and-error process of adaptation and political learning that is unique to each treatment system. This leads to considerable state and local variation in implementation strategies and outcomes. (*J. Stud. Alcohol Drugs, 73,* 413–422, 2012)

ALTHOUGH NOT WITHOUT CONTROVERSY (Klingemann and Bergmark, 2006; Tanenbaum, 2005), there is growing consensus about the need to increase the adoption of new treatments for substance use disorders, including medication-based treatments and continuing care management (Lingford-Hughes et al., 2004; United Nations Office on Drugs and Crime and World Health Organization, 2008). Treatment systems, unfortunately, share in a common struggle to move promising new therapies from clinical trials to community-based practice. This was demonstrated when a national survey found that, on average, only 60% of U.S. medical patients receive health care consistent with clinical guidelines. Notably, patients with alcohol dependence were the least likely to receive optimal treatment, with only 10.5% receiving evidence-based care (McGlynn et al., 2003).

Advancing Recovery, a Robert Wood Johnson Foundation national initiative, provides a model for encouraging the diffusion of new therapies through systems-level change. Findings from our mixed-method evaluation show the outcomes and process that unfolded as partnerships between policymakers and providers collaborated to increase the adoption of evidence-based treatments.

Barriers to the adoption of evidence-based treatments

Research on barriers to implementing new therapies for alcohol and drug use disorders has focused on the individual clinician and, to a more limited extent, the treatment organization (Raghavan et al., 2008; Simpson, 2002). Clinicians often fail to adopt emerging treatment modalities because they lack awareness, education, training, and practical experience (Fuller et al., 2007; Squires et al., 2008). They may also reveal negative attitudes toward new treatment modalities and, sometimes, philosophical conflicts that stem from deeper differences in competing medical, psychiatric, and self-help orientations (Aarons, 2005; Forman et al., 2001; Mark et al., 2003).

Organizational climate and culture also affect clinician attitudes toward new therapies (Aarons and Sawitzky, 2006; Glisson et al., 2008). Management practices and staff turn-

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Regular article

Client and counselor attitudes toward the use of medications for treatment of opioid dependence

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Abstract

Attitudes, perceived social norms, and intentions were assessed for 376 counselors and 1,083 clients from outpatient, methadone, and residential drug treatment programs regarding four medications used to treat opiate dependence: methadone, buprenorphine, clonidine, and ibogaine. Attitudes, social norms, and intentions to use varied by treatment modality. Methadone clients and counselors had more positive attitudes toward the use of methadone, whereas their counterparts in residential and outpatient settings had neutral or negative assessments. Across modalities, attitudes, perceived social norms, and intentions toward the use of buprenorphine were relatively neutral. Assessments of clonidine and ibogaine were negative for clients and counselors in all settings. Social normative influences were dominant across settings and medications in determining counselor and client intentions to use medications, suggesting that perceptions about beliefs of peers may play a critical role in use of medications to treat opiate dependence. © 2007 Elsevier Inc. All rights reserved.

Keywords: Opioid dependence; Social norms; Attitudes

1. Introduction

Investments in the development of pharmacotherapies for the treatment of alcohol and drug dependence have begun to yield medications that enhance treatment effectiveness (Garbutt, West, Carey, Lohr, & Crews, 1999; Litten & Allen, 1999; O'Brien, 1997; Steenrod et al., 2001; Swift, 1999; Swift et al., 1998). Underutilization of these innovative pharmacotherapies, however, is a concern and points to the need for advancements in adoption and implementation strategies (Institute of Medicine, 1998). Speculation about resistance to the use of medications suggests that some patients and therapists believe that the use of medication to treat addiction is inconsistent with the experience of recovery (Institute of Medicine, 1995, 1997). Unfortunately, there is little empirical data on the attitudes and beliefs of clients and counselors toward using medication as part of a therapeutic plan for the treatment of drug dependence.

1.1. Attitudes toward the use of medications for opiate dependence

Investigations conducted in the early 1970s found ambivalent attitudes and beliefs about the use of methadone in treating opiate dependence (Brown, 1975). More contemporary investigations used a measure of "abstinence orientation" (beliefs that methadone use should be time limited) and assessed the opinions of staff in methadone programs in Australia (Caplehorn, Irwig, & Saunders, 1996a, 1996b) and New York City (Caplehorn, Hartel, & Irwig, 1997; Kang, Magura, Nwakeze, & Demsky, 1997). These studies found variations among programs in support for abstinence-oriented treatment and that an abstinent orientation had a negative effect on retention in care. Moreover, counselors with less education and

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Issues in Use of Medications

- Under-utilization of effective medications in comprehensive treatment prevents using medications to help stem the growth of overdose;
- Lack of Medicaid eligible and enrolled practitioners that can provide medications with appropriate counseling is significant.
- Non-quantitative treatment limitations (NQTLs) are frequent among private insurers despite the passage of the parity act (MHPAEA).
- A number of State legislatures and governors are limiting access, duration, and dosages for medications that are used to treat substance use disorders

Medication Diversion

- Patients may provide their medication to others
  - *For profit*
  - *To help with withdrawal*
  - *To get high*
- This has become a problem in some countries where there is a shortage of heroin
- Steps should be taken to minimize diversion
  - *Provide number of tablets commensurate with stay in treatment and progress*
  - *Get to know family members to have monitoring*
  - *Some ask for tablet counts at follow-up visits*
  - *Monitor urine testing to ensure the presence of buprenorphine*

Vocabulary

- Agonist – activates a receptor
  - Methadone
- Antagonist – blocks a receptor
  - Naltrexone
  - Long-acting, injectable naltrexone (Vivitrol)
- Partial agonist/antagonist – does some of both
  - Buprenorphine
  - Acamprosate ?

Medications for Alcohol or Opioid Disorders

Alcohol:

- Naltrexone – oral
- Naltrexone (Vivitrol) – long-acting, injectable
- Acamprosate
- Disulfram (Antabuse)

Opioids:

- Methadone
- Buprenorphine
- Naltrexone – oral
- Naltrexone (Vivitrol) – Long-acting, injectable

Office-Based Buprenorphine Treatment

- Physician Offices
  - With physician monitoring and advice
  - Referral to counseling and drug testing
    - *Added counseling not shown to be of extra benefit (Fiellin et al., 2006; Weiss et al., 2011)*
  - Doses self-administered through prescriptions
  - Widely used internationally
  - In U.S. often limited to insured patients

Buprenorphine Treatment

- Buprenorphine more effective than placebo
- Buprenorphine equally effective as moderate doses of methadone

Vivitrol for Opioid Dependence Treatment

TRI Science Addiction

Injectable extended-release naltrexone for opioid dependence: A double-blind, placebo-controlled, multicentre randomised trial

Evgeny Krupitsky, Edward V Nunes, Walter Ling, Ari Illeperuma, David R Gastfriend, Bernard L Silverman

Once-monthly XR-NTX

- Non-narcotic

Effective

- Confirmed abstinence
- ⑩↓ Craving
- ⑩↑ Retention
- Prevents relapse

No Risk

- Physical dependence
- Illegal diversion

New Treatment Option

- FDA approved
- ⑩↑ acceptance of opioid treatment medications

Effectiveness of Medications in Treatment

All medications for treatment of moderate and severe addiction to opioids and/or alcohol have shown clear clinical evidence of effectiveness in:

- reducing alcohol or opioid use and alcohol-use or opioid-use related symptoms of withdrawal and craving and,
- risk of infectious diseases and crime when used as part of a comprehensive approach in appropriate doses.

Adherence to oral medications is often a problem.

Effectiveness (con't)

- Effectiveness of these medications is true only when used as maintenance treatments.

- There is NO evidence of enduring benefits from any medications when used in any type of "detoxification only" regimen that does not include continuing treatment and recovery supports. Detoxification is not a treatment.

What are the characteristics of effective maintenance treatment?

- Higher doses (individualized to patients' needs)
- Longer time in treatment
- Psychosocial services of appropriate intensity and duration

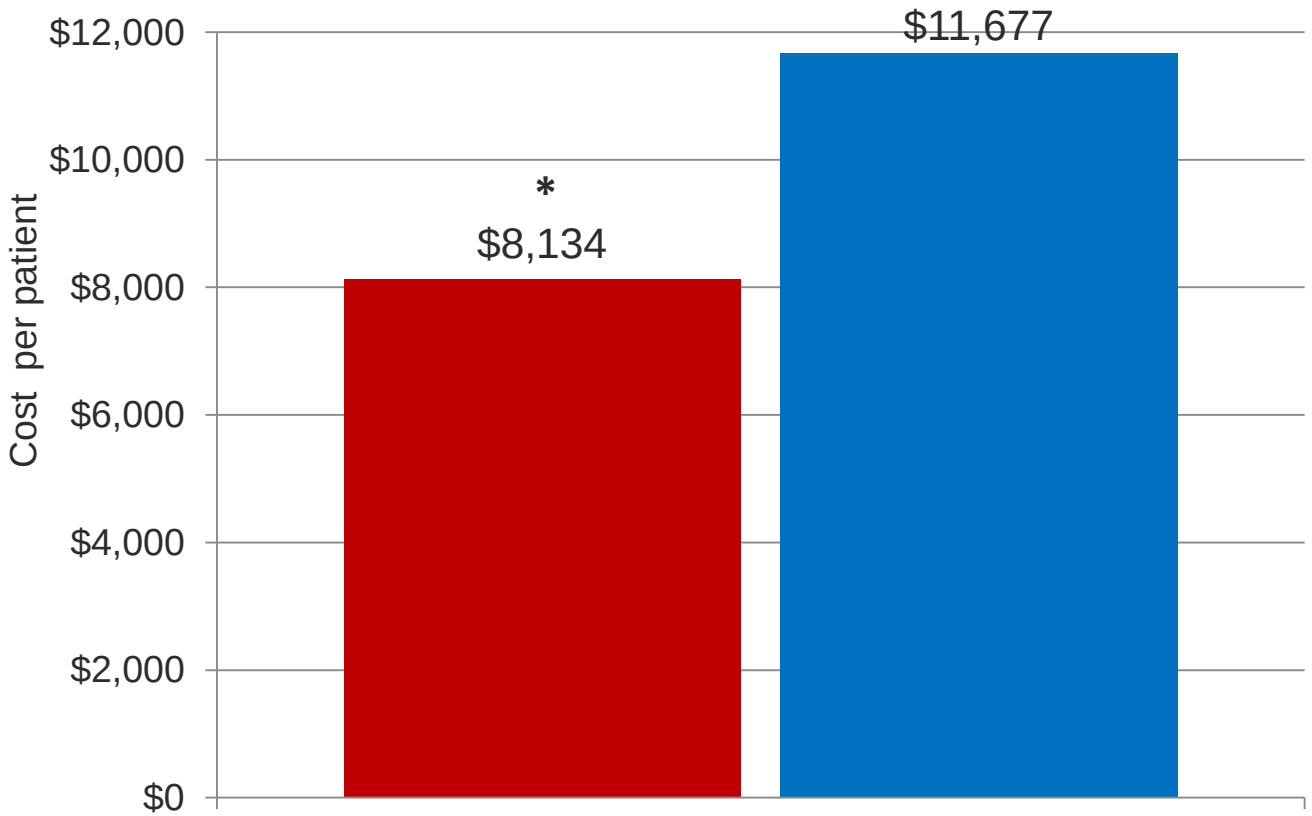
Discussion

- 40,000+ individuals treated with medication
  - 1,323 with XR-NTX
- Consistent effects for alcohol & opioid disorders
  - Patients using medication appear to have fewer detox and inpatient admissions.
  - Total costs of care appear to be lower for patients using medication
- XR-NTX associated with lower utilization & costs

Cost-Effectiveness

- All medications are cost-effective
  - Use of medications reduces inpatient hospital admissions for both alcohol- and drug-related issues and for other health issues including admissions to emergency departments
  - Use of medications increases use of outpatient psychotherapy – we speculate because patients taking medications have virtually no craving, are more stable and, therefore, better able to participate in outpatient treatment

Any vs. No Medication: TOTAL Cost per patient (inpatient + outpatient + pharmacy costs)



Cost Offsets

- Use of medications in treatment for both alcohol and opiate dependence results in significant reductions in overall healthcare costs as a direct result of reduced
  - ED visits
  - Inpatient detox and alcohol- or opiate-related hospitalizations
- Outpatient psychotherapy visits increase, a positive finding suggesting that patients are more able to make use of outpatient treatment services early in treatment.

Populations of Concern

- Adolescents
  - SBI
  - Medication Guidelines
- Pregnant Women
  - Integrated care
  - Medications
- Individuals at risk for HIV+ and HepC
  - Integrated care

Policy Issues

- How will the ACA and Parity play out?
  - Medical necessity criteria – studies reveal continued discrepant criteria
  - Network adequacy – specialty physicians – where are they?
- Organization of Care and Workforce
  - What should specialty treatment look like?
  - What should behavioral health in primary care look like?

THANKS!