Research on Integrating Addiction and Medical Care at BMC: The First 25 Years

Richard Saitz MD MPH FACP DFASAM
Chair, Department of Community Health Sciences (CHS)
Professor of Community Health Sciences & Medicine

Special thanks to Abigail Kim for slide development and preparation

Boston University School of Public Health
THINK. TEACH. DO.
FOR THE HEALTH OF ALL.

Grayken Center for Addiction
Boston Medical Center

CARE
Clinical Addiction Research and Education

Boston Medical
Boston University School of Medicine
General Internal Medicine

Boston University
School of Medicine

The effect of alcohol on the nervous system
VICTOR, M.. AND ADAMS, R.D.
In: Metabolic and Toxic Diseases of the Nervous System.
Baltimore: Williams and Wilkins Company, 1953

- Systematic observational studies on alcohol withdrawal in general medical hospital setting

Care Integration: Screening

Alcohol Abuse and Dependence in Latinos Living in the United States

Validation of the CAGE (4M) Questions

Richard Saitz, MD, MPH; Mark F. Lepore, BA; Lisa M. Sullivan, PhD; et al

» Author Affiliations | Article Information

Arch Intern Med. 1999;159(7):718-724. doi:10.1001/archinte.159.7.718

Table 5. Sensitivity, Specificity, Likelihood Ratio, and Posttest Probability of CAGE (4M) Scores and *Current* Alcohol Abuse or Dependence*

CAGE (4M) Score	Sensitivity, %	Specificity, %	Likelihood Ratio	Posttest Probability, %†
0	. . .	. . .	0	0‡
1	100	54 (47-61)	0.8 (0.2-2.9)	6 (0-14)
2	88 (71-100)	71 (64-77)	2.2 (0.9-5.6)	15 (2-29)
3	63 (39-86)	82 (77-87)	2.6 (1.0-6.6)	17 (2-33)
4	38 (14-61)	92 (88-96)	4.5 (2.1-10.0)	27 (9-46)

Support: CSAP FDP

2009

JGIM

ORIGINAL ARTICLES

Primary Care Validation of a Single-Question Alcohol Screening Test

Peter C. Smith, MD, MSc[1,5], Susan M. Schmidt[1], Donald Allensworth-Davies, MSc[2], and Richard Saitz, MD, MPH[3,4]

Table 2. Sensitivity, Specificity and Likelihood Ratios for the Detection of Unhealthy Alcohol Use: Single Screening Question and AUDIT-C (n=286)

For detection of:	Sensitivity (95% CI)		Specificity (95% CI)	
	Single Question	AUDIT-C	Single Question	AUDIT-C
Risky consumption amounts	84% (75%, 91%)	74% (64%, 83%)	78% (72%, 84%)	81% (76%, 86%)
Alcohol related problems or disorder	84% (74%, 91%)	80% (69%, 88%)	75% (69%, 80%)	80% (74%, 85%)
Current alcohol use disorder	88% (73%, 95%)	88% (73%, 95%)	67% (61%, 72%)	72% (67%, 78%)
Unhealthy alcohol use (risky amounts or disorder)	82% (73%, 89%)	73.9% (64%, 82%)	79% (73%, 84%)	83% (77%, 87%)
For detection of:	Positive LR (95% CI)		Negative LR (95% CI)	
	Single Question	AUDIT-C	Single Question	AUDIT-C
Risky consumption amounts	3.9 (3.0, 5.2)	4.0 (2.9, 5.5)	0.2 (0.1, 0.3)	0.3 (0.2, 0.4)
Alcohol related problems or disorder	3.4 (2.6, 4.3)	4.0 (3.0, 5.4)	0.2 (0.1, 0.4)	0.3 (0.2, 0.4)
Current alcohol use disorder	2.6 (2.1, 3.3)	3.2 (2.5, 4.0)	0.2 (0.1, 0.4)	0.2 (0.1, 0.4)
Unhealthy alcohol use (risky amounts or disorder)	4.0 (3.0, 5.3)	4.3 (3.1, 6.0)	0.2 (0.1, 0.4)	0.3 (0.2, 0.4)

NIAAA R01-AA010870

2010

A Single-Question Screening Test for Drug Use in Primary Care

Peter C. Smith, MD, MSc; Susan M. Schmidt, BA; Donald Allensworth-Davies, MSc; et al

» Author Affiliations | Article Information

Arch Intern Med. 2010;170(13):1155-1160. doi:10.1001/archinternmed.2010.140

Table 2. Sensitivity, Specificity, and Likelihood Ratios for the Detection of Drug Use: Single Screening Question

Detection	Sensitivity, % (95% CI)	Specificity, % (95% CI)	Positive LR,[a] (95% CI)	Negative LR,[b] (95% CI)	AUC
Current use, self-reported (n=286)[c]	92.9 (86.1-96.5)	94.1 (89.8-96.7)	15.8 (8.9-28.1)	0.08 (0.04-0.2)	0.93
With drug problem or drug use disorder[d]	93.5 (86.5-97.0)	91.2 (86.4-94.5)	10.7 (6.8-16.8)	0.07 (0.03-0.2)	0.90
Current use, either self-reported or a positive oral fluid test result (n=217)[c]	84.7 (75.6-90.8)	96.2 (91.4-98.4)	22.4 (9.4-53.1)	0.2 (0.1-0.3)	0.92
With drug problem or drug use disorder[e]	84.8 (75.3-91.1)	92.8 (87.2-96.0)	11.7 (6.4-21.4)	0.2 (0.1-0.3)	0.89
Current drug use disorder (n=286)[c]	100 (90.6-100)	73.5 (67.7-78.6)	3.8 (3.1-4.6)	NC	NC

NIAAA R01-AA010870

Care Integration: SBI

Substance Abuse, Vol. 21, No. 1, 2000

2000

Training Community-Based Clinicians in Screening and Brief Intervention for Substance Abuse Problems: Translating Evidence into Practice

Support: CSAP FDP

Richard Saitz, M.D., M.P.H.,[1,2] Lisa M. Sullivan, Ph.D.,[1] and Jeffrey H. Samet, M.D., M.A., M.P.H.[1]

107TH CONGRESS
2D SESSION

S. 1966

To educate health professionals concerning substance abuse and addiction.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 26, 2002

Mr. BIDEN introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

---

A BILL

a parent or other primary caretaker. Boston University Medical School researchers designed and conducted a seminar on detection and brief intervention of substance abuse for doctors, nurses, physician's assistants, social workers and psychologists. Follow-up studies reveal that 91 percent of those who participated in the seminar report that they are still using the techniques up to 5 years later.

Annals of Internal Medicine®

Ann Intern Med. 2003 Mar 4;138(5):372-82.

Addressing alcohol problems in primary care: a cluster randomized, controlled trial of a systems intervention. The screening and intervention in primary care (SIP) study.

Saitz R[1], Horton NJ, Sullivan LM, Moskowitz MA, Samet JH.

- Prompting physicians with alcohol screening results and recommendations for action increased discussions with patients and reduced alcohol use

Support: RWJF GPFSP

2005

Available online at www.sciencedirect.com
SCIENCE DIRECT®
Drug and Alcohol Dependence 77 (2005) 49–59
DRUG and ALCOHOL DEPENDENCE
www.elsevier.com/locate/drugalcdep

Brief motivational intervention at a clinic visit reduces cocaine and heroin use

Judith Bernstein[a,c], Edward Bernstein[a,b,*], Katherine Tassiopoulos[b], Timothy Heeren[d], Suzette Levenson[e], Ralph Hingson[b]

[a] Department of Emergency Medicine, Boston University School of Medicine, 818 Harrison St. (Dowling 1), Boston, MA 02118, USA
[b] Department of Social and Behavioral Sciences, Boston University School of Public Health, Boston, MA 02118, USA
[c] Department of Maternal and Child Health, Boston University School of Public Health, Boston, MA 02118, USA
[d] Department of Biostatistics, Boston University School of Public Health, Boston, MA 02118, USA
[e] Data Coordinating Center, Boston University School of Public Health, Boston, MA 02118, USA

Table 2
Biochemical confirmation of cocaine and heroin in hair: rates of abstinence at 6 months

Abstinent from	Intervention group	Control group	OR[a]	Adjusted OR[b]
Both cocaine and opiates				
Number negative at 6 months	70 (17.4%)	48 (12.8%)	1.43	1.51
Number positive at study entry	403	375	(0.96, 2.13) $p = 0.076$	(0.98, 2.26) $p = 0.052$
Cocaine				
Number negative at 6 months	84 (22.3%)	58 (16.9%)	1.42	1.51
Number positive at study entry	376	344	(0.98, 2.06) $p = 0.065$	(1.01, 2.24) $p = 0.045$
Opiates				
Number negative at 6 months	76 (40.2%)	49 (30.6%)	1.52	1.57
Number positive at study entry	189	160	(0.98, 2.38) $p = 0.063$	(1.00, 2.47) $p = 0.050$

[a] Significance via the Chi-square test.
[b] Significance via logistic regression, model adjusted for variables that groups differed on at baseline (health insurance, homelessness).

NIDA R01 DA 10792

August 6, 2014

Screening and Brief Intervention for Drug Use in Primary Care

The ASPIRE Randomized Clinical Trial

Richard Saitz, MD, MPH[1,2]; Tibor P. A. Palfai, PhD[3]; Debbie M. Cheng, ScD[2,4]; et al

» Author Affiliations | Article Information

JAMA. 2014;312(5):502-513. doi:10.1001/jama.2014.7862

NIDA R01 DA025068

Screening and Brief Intervention and Referral to Treatment for Drug Use in Primary Care: Back to the Drawing Board

Ralph Hingson, ScD, MPH; Wilson M. Compton, MD, MPE

Abstract | Full Text

JAMA. 2014;312(5):488-489. doi:10.1001/jama.2014.7863

2007

Annals of Internal Medicine | ARTICLE

Ann Intern Med. 2007;146:167-176.

Brief Intervention for Medical Inpatients with Unhealthy Alcohol Use

A Randomized, Controlled Trial

Richard Saitz, MD, MPH; Tibor P. Palfai, PhD; Debbie M. Cheng, ScD; Nicholas J. Horton, ScD; Naomi Freedner, MPH; Kim Dukes, PhD; Kevin L. Kraemer, MD, MSc; Mark S. Roberts, MD, MPP; Rosanne T. Guerriero, MPH; and Jeffrey H. Samet, MD, MA, MPH

Table 2. **Receipt of Alcohol Assistance by 3 Months in Patients with Alcohol Dependence***

Analysis†	Numbers and Proportions		Odds Ratio (95% CI) (In Intervention Group)	Intervention–Control Difference (95% CI), *Percentage Points*	*P* Value
	Control Group	Intervention Group			
Unadjusted, % *(n/n)*‡	39 (44/112)	52 (50/97)	1.6 (0.9 to 2.8)	12 (−1 to 26)	0.08
Adjusted, %§	44	49	1.2 (0.6 to 2.5)‖	5 (−8 to 19)	0.55

- No difference in alcohol consumption at 12 months

2009

Some Medical Inpatients With Unhealthy Alcohol Use May Benefit From Brief Intervention

Journal of Studies on Alcohol and Drugs, 70(3), 426–435 (2009).

Article Tools

Richard Saitz , Tibor P. Palfai , Debbie M. Cheng , Nicholas J. Horton , Kim Dukes , Kevin L. Kraemer , Mark S. Roberts , Rosanne T. Guerriero , Jeffrey H. Samet ,

- More receipt of treatment among women, younger adults w/dependence
- Less drinking and better physical HRQOL among patients without dependence

ADOPT
ALCOHOL DISORDER HOSPITAL TREATMENT

- Comparative effectiveness RCT
- Beginning injectable XR-NTX or oral NTX for AUD in medical inpatients. Effects on:
  - Alcohol consumption and consequences, and
  - Acute healthcare utilization (including hospital readmission and emergency visits) and cost-effectiveness

TO FOLLOW: U54 OPTIONAL FUNCTION, AND U01 PROPOSAL JULY 2018 TO SERVE AS NATIONAL CENTER AND IMPLEMENT HOSPITAL-BASED OPIOID TREATMENT (PAR 18-244, COLLABORATIVE INNOVATION, CTSA)

ClinicalTrials.Gov: NCT02478489
R01AA021335

Care Integration: Disorder, Implementation and Services in Medical Settings

THE AMERICAN JOURNAL of MEDICINE®

Official Journal of the Alliance for Academic Internal Medicine

Alcohol Abusers in Primary Care: Readiness to Change Behavior

Volume 105, Issue 4, Pages 302–306

Jeffrey H. Samet, MD, MA, MPH, Patrick G. O'Connor, MD, MPH

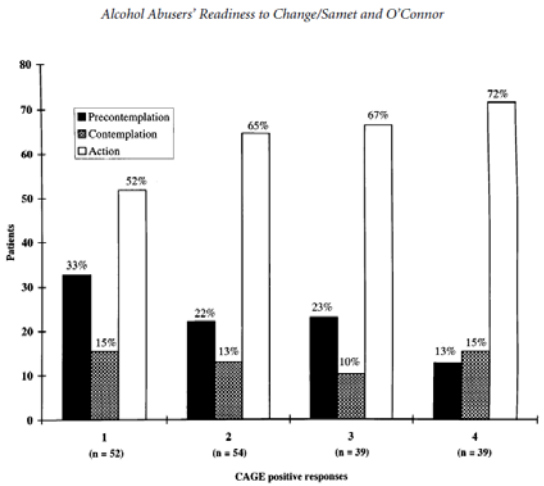

Figure 2. Patients' stage of change stratified by number of positive CAGE responses. X axis = CAGE, number of positive responses; Y axis = percentage of patients.

- Most patients who have detectable unhealthy alcohol use on CAGE questionnaire are already addressing their substance use or are in recovery.

April 15, 1998

Management of Adults Recovering From Alcohol or Other Drug Problems

Relapse Prevention in Primary Care

Peter D. Friedmann, MD, MPH; Richard Saitz, MD, MPH; Jeffrey H. Samet, MD, MA, MPH

JAMA. 1998;279(15):1227-1231. doi:10.1001/jama.279.15.1227

1998

2001

- PCPs can aid in long-term management
  - Identify
  - Support
  - Regular follow-up
  - Develop plans

Potential Benefits of Linking Primary Care and Substance Abuse Care Services

Patient perspective
Benefits overall care
Facilitates access to substance abuse treatment for patients in medical care settings
Enhances access to primary medical care for clients receiving substance abuse treatment
Improves patient well-being in terms of substance abuse severity and medical problems
Provides care that is more convenient
Increases patient satisfaction with health care
Primary care provider and mental health care provider perspective
Promotes screening for alcoholism in patients
Facilitates inclusion of alcoholism and drug abuse when considering a differential diagnosis
Broadens access to the overall substance abuse treatment system
Improves prevention of relapse to alcoholism and drug abuse
Encourages mental health services for primary care patients
Improves adherence to appointments and medical regimens
Provides substance abuse training for staff
Substance abuse provider perspective
Improves substance abuse treatment outcomes
Reduces medical providers' perceived stigma associated with substance abuse
Provides training in substance abuse–related medical conditions
Promotes overall healthier behavior (ie, improves smoking and sexual habits)
Improves medical providers' appreciation of substance abuse treatment
Creates support for reimbursement parity for substance abuse services
Develops ongoing quality improvement in substance abuse programs
Societal perspective
Reduces health care costs and overall long-term costs
Diminishes duplication of services and administrative costs
Improves health outcomes in specific populations

Benefits of Linking Primary Medical Care and Substance Abuse Services

Patient, Provider, and Societal Perspectives

Jeffrey H. Samet, MD, MA, MPH; Peter Friedmann, MD, MPH; Richard Saitz, MD, MPH

» Author Affiliations | Article Information

Arch Intern Med. 2001;161(1):85-91. doi:10.1001/archinte.161.1.85

2002

BRIEF REPORTS
Volume 17, Issue 5

Professional Satisfaction Experienced When Caring for Substance-abusing Patients

Faculty and Resident Physician Perspectives

Richard Saitz, MD, MPH, Peter D. Friedmann, MD, MPH, Lisa M. Sullivan, PhD, Michael R. Winter, MPH, Christine Lloyd-Travaglini, MPH, Mark A. Moskowitz, MD,† Jeffrey H. Samet, MD, MA, MPH

Table 2. Professional Satisfaction of Primary Care Physicians Caring for Patients with Addictions and Other Diagnoses

% Who Experience "A Great Deal" or a "Moderate" Amount of Satisfaction When Caring for Patients With...	Residents	Faculty
Alcohol problems*	32‡	49§
Drug problems	30‡	31¶
Depression†	43‡	69
Hypertension	79	76

R01-AA10870

ADDICTION SSA SOCIETY FOR THE STUDY OF ADDICTION

Addiction. 2003 Apr;98(4):509-16.

Linking alcohol- and drug-dependent adults to primary medical care: a randomized controlled trial of a multi-disciplinary health intervention in a detoxification unit.

Samet JH[1], Larson MJ, Horton NJ, Doyle K, Winter M, Saitz R.

Table 1 Kaplan–Meier estimates of the proportion of subjects linking to primary care at 12-months after randomization to the HELP clinic or control group—overall results and stratified by drug of choice.

*Subjects**	*Intervention linked*	*Control linked*	*P-value***
All ($n = 317$)	69%	53%	0.0003
Alcohol† ($n = 199$)	72%	52%	0.0006
Cocaine or Heroin† ($n = 247$)	67%	54%	0.006

*Study subjects with follow-up at 6 or 12 months. **Log rank test. †Subjects reporting this substance as their first or second drug of choice (alcohol and drug groups are not mutually exclusive).

- Linked people with alcohol and drug dependence to primary medical care
- Using “reachable” moment

NIAAA R01-AA10870
NIDA R01-DA10019

ADDICTION

SSA SOCIETY FOR THE STUDY OF ADDICTION

Full Access

Primary medical care and reductions in addiction severity: a prospective cohort study

Richard Saitz, Nicholas J. Horton, Mary Jo Larson, Michael Winter, Jeffrey H. Samet

First published: 10 December 2004 | https://doi-org.ezproxy.bu.edu/10.1111/j.1360-0443.2005.00916.x

- Receipt of primary care was associated with lower odds of drug use or alcohol intoxication

NIAAA: R01-AA10870
NIDA: R01-DA10019

ADDICTION

SSA SOCIETY FOR THE STUDY OF ADDICTION

Full Access

Persistent pain is associated with substance use after detoxification: a prospective cohort analysis

Mary Jo Larson, Michael Paasche-Orlow, Debbie M. Cheng, Christine Lloyd-Travaglini, Richard Saitz, Jeffrey H. Samet

First published: 2 March 2007 | https://doi-org.ezproxy.bu.edu/10.1111/j.1360-0443.2007.01759.x

- Pain in detox patients common (16% had persistent pain, 54% intermittent pain)
- Persistent pain associated with increased odds for use of any substance

NIAAA: R01 AA10870
NIDA: R01 DA10019

September 18, 2013

Chronic Care Management for Dependence on Alcohol and Other Drugs

The AHEAD Randomized Trial

Richard Saitz, MD, MPH[1,2,3]; Debbie M. Cheng, ScD[1,2,4]; Michael Winter, MPH[5]; et al

» Author Affiliations | Article Information

JAMA. 2013;310(11):1156-1167. doi:10.1001/jama.2013.277609

- No difference in abstinence from opioids, stimulants, or heavy drinking between CCM and control
- No differences for secondary outcomes of addiction severity, health0related quality of life, or drug problems.

Journal of Substance Abuse Treatment 43 (2012) 389–396

Contents lists available at SciVerse ScienceDirect

Journal of Substance Abuse Treatment

Effect of quality chronic disease management for alcohol and drug dependence on addiction outcomes

Theresa W. Kim M.D. [a,*], Richard Saitz M.D., M.P.H. [a,b], Debbie M. Cheng Sc.D. [a,c], Michael R. Winter M.P.H. [d], Julie Witas M.S.W. [a], Jeffrey H. Samet M.D., M.A., M.P.H. [a,e]

- High quality CDM for AOD dependence may improve addiction outcomes

NIDA: R01 DA010019
NIAAA: R01 AA010870

2011
2016

March 14, 2011

Collaborative Care of Opioid-Addicted Patients in Primary Care Using Buprenorphine

Five-Year Experience

Daniel P. Alford, MD, MPH; Colleen T. LaBelle, RN; Natalie Kretsch, BA; Alexis Bergeron, MPH, LCSW; Michael Winter, MPH; Michael Botticelli, MEd; Jeffrey H. Samet, MD, MA, MPH

» Author Affiliations | Article Information

Arch Intern Med. 2011;171(5):425-431. doi:10.1001/archinternmed.2010.541

- At year 1, 196 of 382 patients (51%) had successful treatment
- 154 of 169 (91%) of patients remaining in treatment at 12 months, were no longer using illicit opioids or cocaine

ELSEVIER

Journal of Substance Abuse Treatment

Volume 60, January 2016, Pages 6-13

Regular article

Office-Based Opioid Treatment with Buprenorphine (OBOT-B): Statewide Implementation of the Massachusetts Collaborative Care Model in Community Health Centers

Colleen T. LaBelle B.S.N., R.N.-B.C., C.A.R.N. [a, b], Steve Choongheon Han B.A. [b], Alexis Bergeron M.P.H. L.C.S.W. [a], Jeffrey H. Samet M.D., M.A., M.P.H. [a, b, c]

- Central role for nurses to evaluate and monitor patients
- Increased waiver-trained doctors
- Efficient alternative model for physicians who prescribe buprenorphine

JAMA Pediatrics | Original Investigation

Trends in Receipt of Buprenorphine and Naltrexone for Opioid Use Disorder Among Adolescents and Young Adults, 2001-2014

Scott E. Hadland, MD, MPH, MS; J. Frank Wharam, MB, BCh, BAO, MPH; Mark A. Schuster, MD, PhD;

JAMA Pediatr. 2017 Aug 1;171(8):747-755. doi: 10.1001/jamapediatrics.2017.0745.

- Dispensing of buprenorphine and naltrexone increased over time
- Only 1 in 4 commercially insured youth with OUD received pharmacotherapy
  - Disparities based on sex, age and race/ethnicity

Journal of General Internal Medicine
August 2010, Volume 25, Issue 8, pp 803–808 | Cite as

A Transitional Opioid Program to Engage Hospitalized Drug Users

2010

Authors Authors and affiliations

Christopher W. Shanahan, Donna Beers, Daniel P. Alford, Eileen Brigandi, Jeffrey H. Samet

- Identified at-risk hospitalized, out-of-treatment opioid-dependent drug users
- Offered range of treatment options
- Engaged a majority into addiction treatment

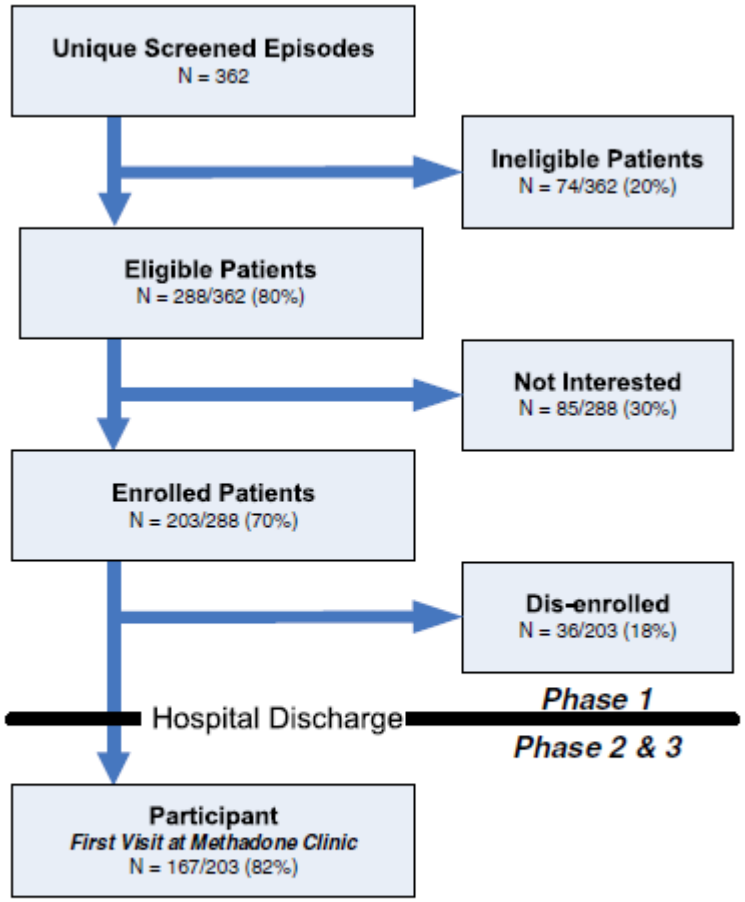

Figure 1. Screening and enrollment schema of the transitional opioid program.

2017

Journal of Substance Abuse Treatment 79 (2017) 1–5

Contents lists available at ScienceDirect

Journal of Substance Abuse Treatment

Regular articles

Addition consultation services – Linking hospitalized patients to outpatient addiction treatment

Paul Trowbridge [a,b,*], Zoe M. Weinstein [a], Todd Kerensky [a], Payel Roy [a], Danny Regan [a], Jeffrey H. Samet [a,c], Alexander Y. Walley [a]

[a] Department of Medicine, Section of General Internal Medicine, Clinical Addiction Research and Education Unit, Boston University School of Medicine & Boston Medical Center, 801 Massachusetts Avenue, Boston, USA
[b] Spectrum Health Center for Integrative Medicine, 75 Sheldon Blvd SE, Grand Rapids, MI, USA
[c] Department of Community Health Sciences, Boston University School of Public Health, 801 Massachusetts Avenue, Boston, MA, USA

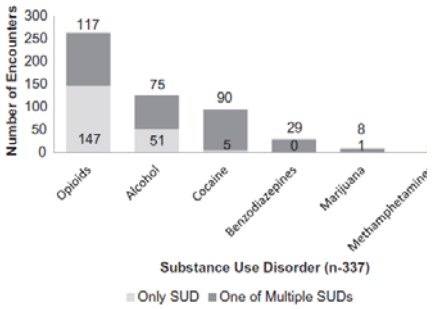

Fig. 1. Substance use disorders diagnosed.

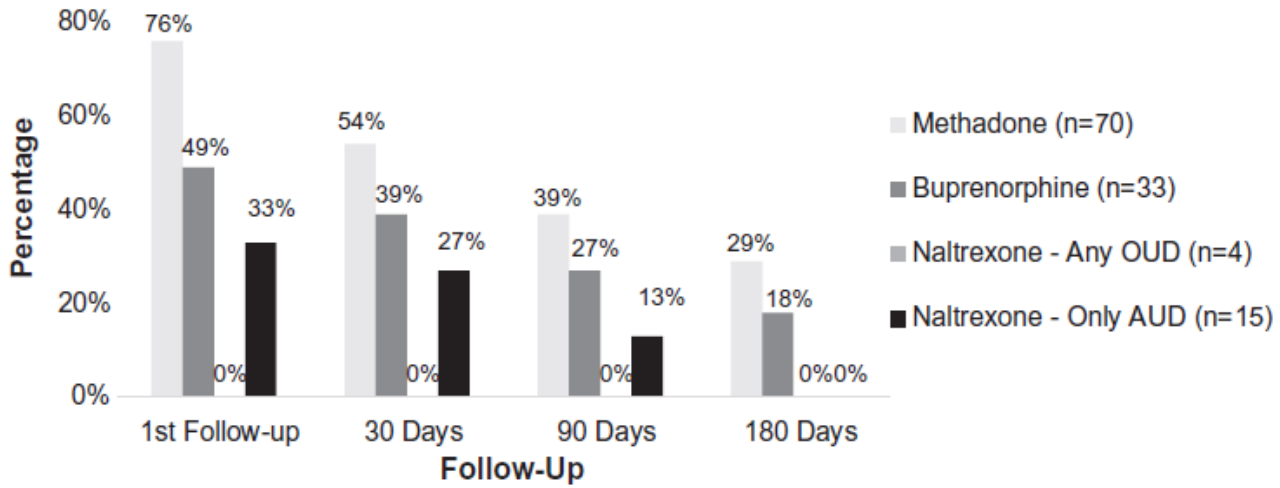

Fig. 3. Follow-up rates by medication.

HIV

2007

J Acquir Immune Defic Syndr. 2007 October 1; 46(2): 194–199.

Alcohol Consumption and HIV Disease Progression

Jeffrey H. Samet, MD, MA, MPH[*,†], Debbie M. Cheng, ScD[*,‡], Howard Libman, MD[§], David P. Nunes, MD[‖], Julie K. Alperen, DrPH[*], and Richard Saitz, MD, MPH[*,¶]

- Heavy alcohol use affects HIV disease progression in those not on ART

2008

Published in final edited form as:
AIDS. 2008 January 30; 22(3): 415–420.

Recent drug use, homelessness and increased short-term mortality in HIV-infected persons with alcohol problems

Alexander Y. Walley[a], Debbie M. Cheng[a,d], Howard Libman[c], David Nunes[b], C. Robert Horsburgh Jr.[e], Richard Saitz[a,e,f], and Jeffrey H. Samet[a,g]

- Recent heroin or cocaine use and homelessness was associated with increased short-term mortality in HIV-infected patients with alcohol problems

Risk factors for recent nonfatal overdose among HIV-infected Russians who inject drugs

Alexander Y. Walley, Debbie M. Cheng, Sharon M. Coleman, Evgeny Krupitsky, Anita Raj, Elena Blokhina, Carly Bridden, Christine E. Chaisson, Marlene C. Lira & Jeffrey H. Samet ...show less

AIDS Care

- Nonfatal overdose common (76% ever, 16% past 3 mo)
  - Risk factor: more frequent injection

NIAAA: R01- AA016059

Opioids

BMJ 2013;346:f174 doi: 10.1136/bmj.f174 (Published 31 January 2013)

Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis

Alexander Y Walley *assistant professor of medicine, medical director of Massachusetts opioid overdose prevention pilot*[1 3], Ziming Xuan *research assistant professor*[2], H Holly Hackman *epidemiologist*[3], Emily Quinn *statistical manager*[4], Maya Doe-Simkins *public health researcher*[1], Amy Sorensen-Alawad *program manager*[1], Sarah Ruiz *assistant director of planning and development*[3], Al Ozonoff *director, design and analysis core*[5 6]

Figures

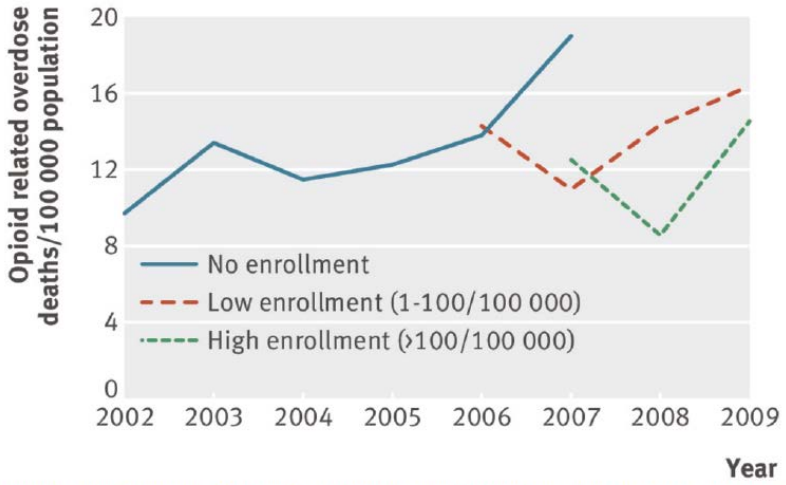

Fig 1 Unadjusted unintentional opioid related overdose death rates in 19 communities with no, low, and high enrollment in overdose education and nasal naloxone distribution program in Massachusetts, 2002-09

- Opioid overdose death rates reduced in communities where OEND was implemented

Annals of Internal Medicine

ORIGINAL RESEARCH

Opioid Prescribing After Nonfatal Overdose and Association With Repeated Overdose

A Cohort Study

Marc R. Larochelle, MD, MPH; Jane M. Liebschutz, MD, MPH; Fang Zhang, PhD; Dennis Ross-Degnan, ScD; and J. Frank Wharam, MB, BCh, BAO, MPH

Ann Intern Med. 2016;164:1-9. doi:10.7326/M15-0038

- Over follow-up, opioid dispensed to 91% of patients after an overdose
  - 7% of patients had a repeated opioid overdose

September 2017

Improving Adherence to Long-term Opioid Therapy Guidelines to Reduce Opioid Misuse in Primary Care

A Cluster-Randomized Clinical Trial

Jane M. Liebschutz, MD, MPH[1,2]; Ziming Xuan, ScD, SM[3]; Christopher W. Shanahan, MD[1,2]; et al

» Author Affiliations | Article Information

JAMA Intern Med. 2017;177(9):1265-1272. doi:10.1001/jamainternmed.2017.2468

Table 2. Patient-Level Primary Outcomes at 12 Months by Intervention Status[a]

Variable	Baseline			Follow-up				
	Intervention (n = 586)	Control (n = 399)	*P* Value	Intervention (n = 586)	Control (n = 399)	*P* Value[b]	OR (95% CI)	AOR (95% CI)
Guideline-concordant care (agreement plus UDT)	241 (41.1)	168 (42.1)	.76	386 (65.9)	151 (37.8)	<.001	3.3 (1.9-5.6)	6.0 (3.6-10.2)
Signed agreement (ever)	376 (64.2)	233 (58.4)	.07	489 (83.5)	243 (60.9)	<.001	2.5 (1.4-4.5)	Not converge
No baseline agreement	210 (100)	166 (100)	NA	133 (53.8)	10 (6.0)	<.001	11.2 (4.1-30.7)	11.9 (4.4-32.2)
UDT (once in past 12 mo)	348 (59.4)	259 (64.9)	<.08	437 (74.6)	231 (57.9)	<.001	2.4 (1.3-4.4)	3.0 (1.8-5.0)
≥2 early refills[c]	145 (24.7)	94 (23.6)	.67	121 (20.7)	80 (20.1)	.82	1.1 (0.6-1.9)	1.1 (0.7-1.8)

NIDA: R01 DA034252

Terminology: Stigma and Accuracy

2016

International Statement Recommending Against the Use of Terminology That Can Stigmatize People

Richard Saitz, MD, MPH, FACP, DFASAM

(*J Addict Med* 2016;10: 1–2)

INTERNATIONAL SOCIETY OF ADDICTION JOURNAL EDITORS

NON-STIGMATIZING LANGUAGE	STIGMATIZING LANGUAGE
• Person with a substance use disorder	• Substance abuser or drug abuser • Alcoholic • Addict • User • Abuser • Drunk • Junkie
• Substance use disorder or addiction • Use, misuse • Risky, unhealthy, or heavy use	• Drug habit • Abuse • Problem
• Person in recovery • Abstinent • Not drinking or taking drugs	• Clean
• Treatment or medication for addiction • Medication for Addiction Treatment • Positive, negative (toxicology screen results)	• Substitution or replacement therapy • Medication-Assisted Treatment • Clean, dirty

Boston University School of Public Health

THINK. TEACH. DO.
FOR THE HEALTH OF ALL.

BOSTON MEDICAL CENTER
EXCEPTIONAL CARE. WITHOUT EXCEPTION.

BOSTON UNIVERSITY
School of Medicine

rsaitz@bu.edu

@unhealthyalcdrg
@JAM_lww

http://www.bumc.bu.edu/care/

http://www.bu.edu/sph/academics/departments/community-health-sciences/

Boston University School of Public Health
THINK. TEACH. DO.
FOR THE HEALTH OF ALL.

Grayken Center for Addiction
Boston Medical Center

CARE
Clinical Addiction Research and Education

Boston Medical Center
Boston University School of Medicine
General Internal Medicine

Boston University
School of Medicine