The Future of Hospital SBIRT

SBIRT Colorado Annual Conference August 8, 2012

Eric Goplerud, Ph.D.

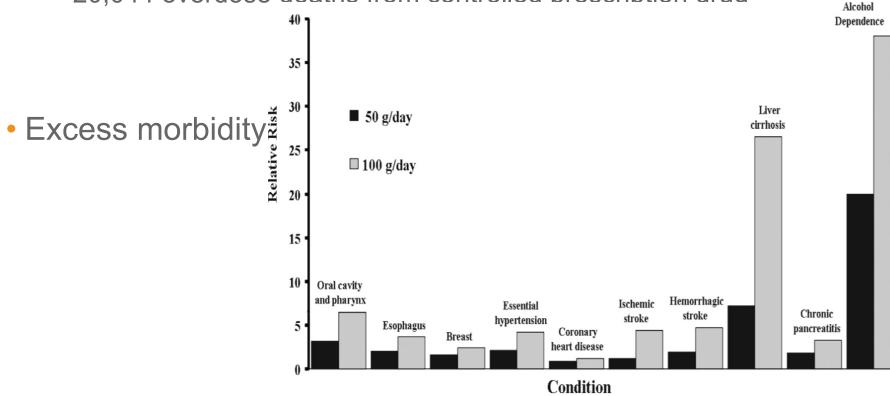
Senior Vice President Director, Substance Abuse, Mental Health and Criminal Justice Studies goplerud-eric@norc.org 301-634-9525



Substance Use Disorders and Risky Substance Use:

Significant Public Health Problem

- Excess mortality:
 - 98,334 deaths annually from alcohol-related causes
 - 16,044 deaths annually from illicit drugs
 - 20,044 overdose deaths from controlled prescription drug





Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2004). Actual causes of death in the United States, 2000. JAMA, 291(10), 1238-1245.

- SUDs are public health issues, but how do SUDs impact hospitals?
 - More prevalent in Colorado than elsewhere
 - Alcohol, drugs, and increasingly, prescription drug use are crowding Colorado EDs
 - Expensive ED visits, especially for uncompensated care and returning ED visits by uninsured
 - Common complicating problem of Colorado hospitalized patients
 - Medical complications (MICU, return to surgery, longer length of stays)
 - Unstable discharges, rehospitalization



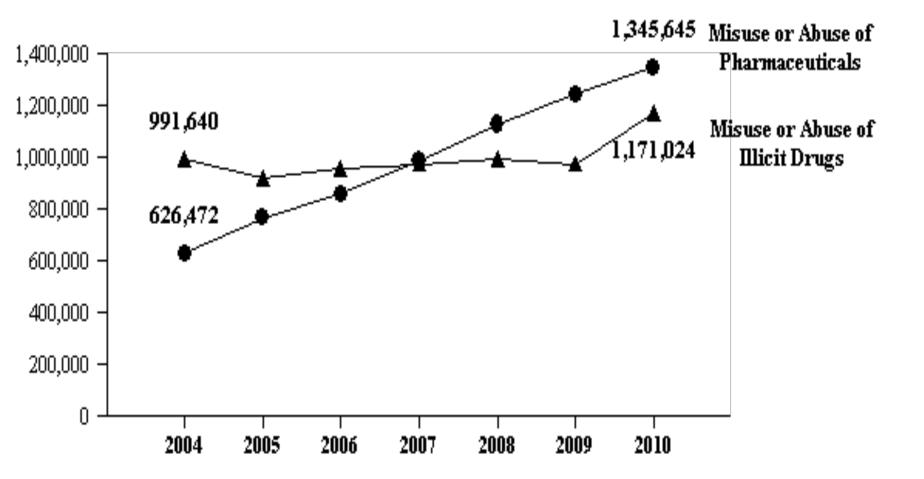
Why Hospital SBIRT: Prevalence of risky substance use among

Colorado adults and adolescents

COLORADO	PAST MONTH BINGE ALCOHOL	ALCOHOL DEPENDENT OR ABUSE	DRUG DEPENDENT OR ABUSE	PAIN MEDICATION MISUSE	
Region 1	27.5	10.5	3.2	5.47	
Region 2 & 7	27.2	10.3	3.5	5.57	
Region 3	21.4	8.2	2.8	5.71	
Region 4	22.2	8.5	2.7	4.84	
Region 5 & 6	27.6	7.9	3.0	4.92	
Colorado	26.2	9.9	3.8	5.26	
National	23.2	7.5	2.8	REGION	
National 23.2 7.5 2.8					



Why Hospital SBIRT: Drug-Related Emergency Department Visits: 2004 to 2010





SOURCE: Adapted by CESAR from Substance Abuse and Mental health Services Administration (SAMHSA), "Highlights of the 2010 Drug Abuse Warning Network (DAWN) Findings on Drug-Related Emergency Department Visits," *The DAWN Report*, July 2, 2012. Available online at http://www.samhsa.gov/data/2k12/
 DAWN096/SR096EDHighlights2010.pdf.

Why Hospital SBIRT: Costly Patients in the ED

Excess ED Costs -- \$248 million annually

TEST OR PROCEDURE	COST	ETOH +	ETOH -
Ambulance transportation	\$ 600.00	47.7%	18.5%
CBC	\$ 8.97	32.6%	11.7%
Electrolytes	\$ 9.80	16.0%	4.0%
Blood Glucose testing	\$ 5.48	17.2%	5.2%
Urinalysis	\$ 4.43	18.0%	7.2%
Chest X-Ray	\$ 26.88	19.2%	10.0%
CAT Scan/MRI	\$ 440.21	29.4%	8.7%
EKG	\$ 17.01	16.6%	6.4%
Urinary catheterization	\$ 90.38	3.8%	1.3%
IV fluid administration	\$ 40.23	28.8%	9.9%



SOURCE: Terence O'Keeffe, Shahid Shafi, Jason L. Sperry, and Larry M. Gentilello The implications of alcohol intoxication and the Uniform Policy Provision Law on trauma centers; a national trauma data bank analysis of minimally injured patients. J Trauma. 2009 February; 66(2): 495–498.

Why Hospital SBIRT? Colorado ED Visits Likely Positive for

Risky Substance Use, Costs & Savings*

	Likely to Screen Positive	Annual Costs Undetected	Savings if Detected
All Payers ED Visits	123,398	\$175,101,664	\$35,328,918
Insurance ED Visits	34,405	\$ 61,030,664	\$12,077,104
Medicaid ED Visits	18,183	\$ 32,253,864	\$ 6,382,385
Medicare ED Visits	4,941	\$ 8,763,843	\$ 1,734,240
Uninsured ED Visits	43,120	\$ 76,848,444	\$15,135,188



* Of 1,045,155 ED visits 2006; Schur, Goplerud (2007) Estimating the costs and benefits of routine emergency department SBI.

Why Hospital SBIRT? Problem Drinking Causes Disease and Injury

AGES 18 AND UP, MALES AND FEMALES

Alcoholic psychoses, alcohol		Alcoholic liver cirrhosis	1.00	1	
dependence, nondependent use of alcohol, ethanol toxicity, accidental		Chronic pancreatitis	0.84		
poisoning by alcohol (E-code),		Gastrointestinal hemorrhage			
alcohol use/abuse (E-code)	1.00	unspecified	0.50		_
Accidental aspiration	1.00	Chronic hepatitis	0.50		0
Assault	0.47	Gastro-esophageal hemorrhage	0.47		v
Accidents caused by fire	0.44	Malignant gum neoplasm	0.45		v
Hypothermia	0.42	All liver cirrhosis	0.45		е
Accidental drowning	0.34	Esophageal varices	0.45		r
Firearm injuries, accidental or		Laryngeal cancer	0.39		
undetermined intent	0.25	Esophageal cancer	0.33		
Accidental falls (males, under 65)	0.22	Hemorrhagic stroke	0.26		3
Suicide, self-inflicted injury	0.20	Oropharyngeal cancer	0.26		_
Child abuse	0.16	Liver cancer	0.25		5
Accidental falls (females, under 65)	0.14	Acute pancreatitis	0.24		
Accidental falls (males, 65+)	0.12	Supraventricular cardiac	1141.00		
Motor vehicle traffic accidents		dysrhythmias	0.22		У
(road injuries)	0.10	Psoriasis	0.22		r
Work/machine injuries	0.07	Stomach cancer	0.20		
Accidental falls (females, 65+)	0.04	Epilepsy	0.15		S
Alcoholic polyneuropathy	1.00	Esophagitis	0.10		
Alcoholic cardiomyopathy	1.00	Gastroesophageal reflux disease	0.10		
Alcoholic gastritis	1.00	Gastric diverticulum	0.10		
Alcoholic hepatitis	1.00	Duoden or Peptic ulcer	0.10	J	



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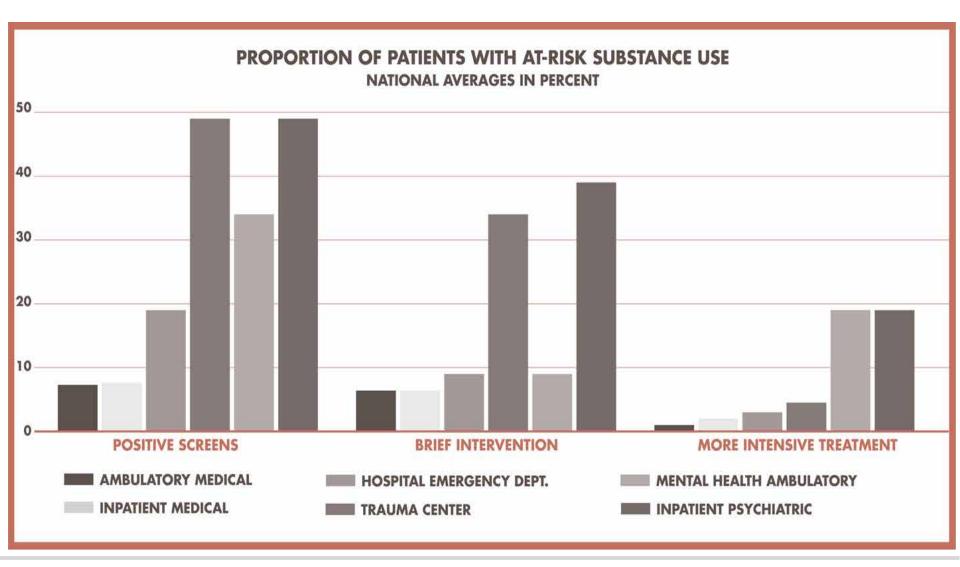
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	Total hospital discharges	Medicare 32%	Medicaid 12%	Self pay 8%	Insurance 42%	Other, charity 6%
Colorado Inpatient Discharges 2009	349,613	111,876	41,954	27,969	146,837	20,977
Colorado Inpatients with likely substance use disorders	22,725	2,363	2,550	3,054	8,552	2,291
Colorado Inpatients with likely SUDs or unhealthy substance use	48,946	5,090	5,492	6,578	18,419	4,934



Concentrated substance use risk in specific hospital services





Consequences that matter to hospitals Unstable discharges, rehospitalization risk

Crude Rates and Risks of Recurrent Acute Care Hospital Utilization Within 30 Days After Index Hospitalization

	No SUDs (n = 615)	SUDs(n = 123)	Р
Rates of reutilization			
Acute care reutilizations*: visits/patient/30 days	0.32	0.63	<0.01
ED visits: no. visits/patient/30 days	0.16	0.37	0.02
Rehospitalization: visits/patient/30 days	0.16	0.26	0.09
Risks of reutilization			
Subjects with any acute care reutilization* in 30 da	ays 38%	52%	<0.01
Subjects with any ED visit in 30 days	23%	34%	<0.01
Subjects with any rehospitalization in 30 days	23%	33%	0.02



Forsythe S, Chetty VK, Mitchell S, Jack BW. Acute care hospital utilization among medical inpatients discharged with a substance use disorder diagnosis. J Addict Med 2012;6:50-56. Rubinsky AD, Sun H, Blough D et al. AUDIT-C alcohol screening results and postoperative inpatient health care use. J Am Coll Surg 2012;213:296-305.

Consequences that matter to hospitals Surgical complications, infection risk, longer hospital stays, return to MICU and surgery Low AUDIT High AUDIT P

Post operative hospital length of stay	5.0	5.8
ICU days	2.8	4.5
Probability of return to OR w/in 30 days	5%	10%

AUDIT-C and Post-operative Complications*



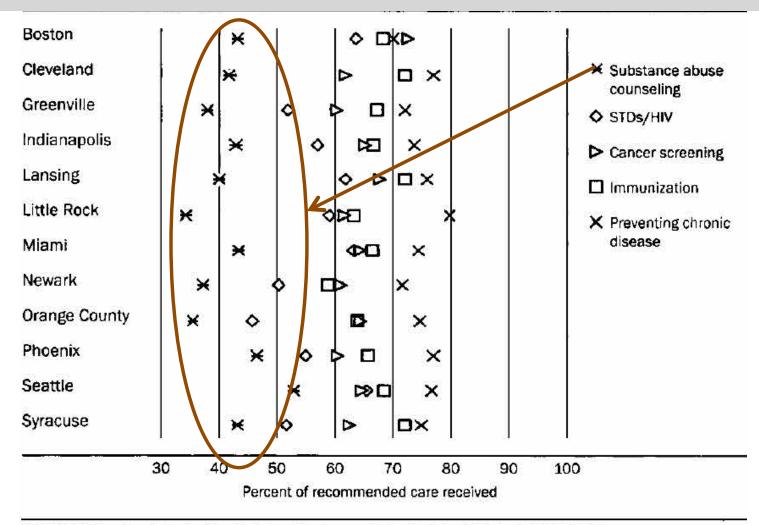
*Adjusted for age, smoking, & time from screen to surgery

Bradley JGIM 2010



Forsythe S, Chetty VK, Mitchell S, Jack BW. Acute care hospital utilization among medical inpatients discharged with a substance use disorder diagnosis. J Addict Med 2012;6:50-56. Rubinsky AD, Sun H, Blough D et al. AUDIT-C alcohol screening results and postoperative inpatient health care use. J Am Coll Surg 2012;213:296-305.

Huge Gap between Current and Evidence-based Practices



SOURCE: Authors' analysis of original data from the Community Quality Index (CQI) study, 1998–2000. **NOTES:** STD is sexually transmitted disease. HIV is human immunodeficiency virus.



SOURCE: Kerr EA, McGlynn EA et al. Profiling the quality of care in 12 communities: Results from the CQI study. Health Affairs. 2004; 23(3): 247-56.

Current and Near Future Developments in Hospital SBIRT

- EBPs growing from research and practice experience
- Reimbursement base improving
- Training and practice support networks strengthening
- Accreditation requirements
- Performance Metrics and Incentives to Report
- Electronic Health Records (EHRs) and Health Information Exchanges (HIEs)



Screening, Brief Interventions for Alcohol:

Major Impact of SBI on Morbidity and Mortality

Study	Results - conclusions	Reference
Trauma patients	48% fewer re-injury (18 months) 50% less likely to re-hospitalize	Gentilello et al, 1999
Hospital ER screening	Reduced DUI arrests 1 DUI arrest prevented for 9 screens	Schermer et al, 2006
Physician offices	20% fewer motor vehicle crashes over 48 month follow- up	Fleming et al, 2002
Meta-analysis	Interventions reduced mortality	Cuijpers et al, 2004
Meta-analysis	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)	Burke et al, 2003
Meta-analysis	Interventions can provide effective public health approach to reducing risky use.	Whitlock et al, 2004



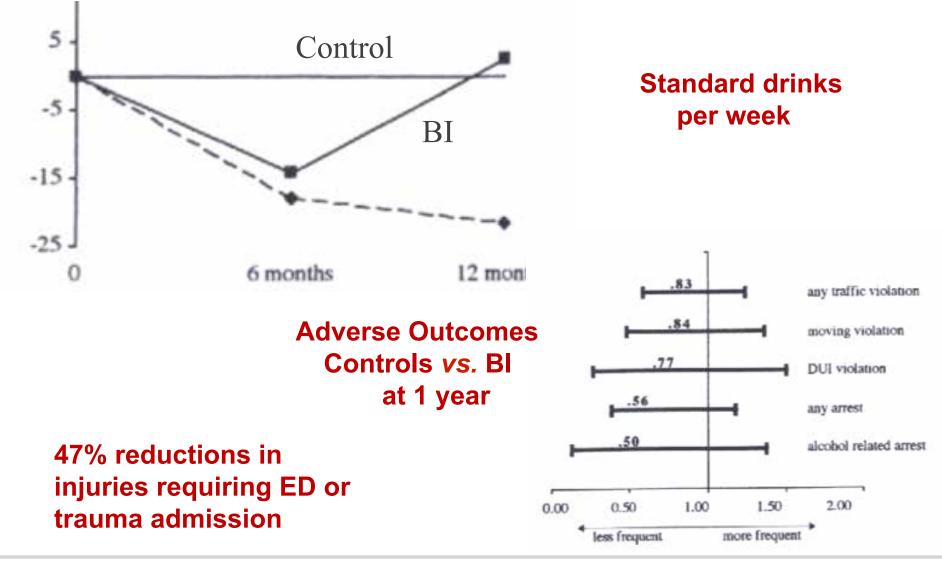
Screening, Brief Interventions for Alcohol:

Saves Healthcare Costs

Study	Cost Savings	Reference
Randomized trial of brief treatment in the UK	Reductions in one-year healthcare costs \$2.30 cost savings for each \$1.00 spent in intervention	(UKATT, 2005)
Project TREAT (Trial for Early Alcohol Treatment) randomized clinical trial: Screening, brief counseling in 64 primary care clinics of <i>nondependent alcohol misuse</i>	Reductions in future healthcare costs \$4.30 cost savings for each \$1.00 spent in intervention (48-month follow-up)	(Fleming et al, 2003)
Randomized control trial of SBI in a Level I trauma center Alcohol screening and counseling for trauma patients (>700 patients).	Reductions in medical costs \$3.81 cost savings for each \$1.00 spent in intervention.	Gentilello et al, 2005)



Research Base Expanding: SBIRT Effectiveness in Hospitals





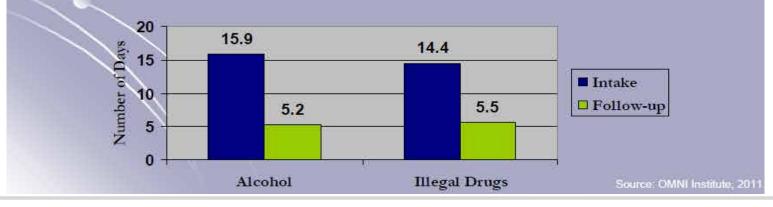
Gentilello LM, Rivara FP, Donovan DM, Jurkovich GJ, et al: Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. Ann Surg, 1999;230: 473-483.

Practice-based SBIRT Outcomes: Denver Health

Between April 2007 and April 2011 Denver Health hospital staff and health educators have provided SBIRT services to 52,805 patients.

Services Provided at Denver Health:					
Tobacco Intervention	13,448 - 28%				
Brief Intervention (at-risk)	7,625 - 16%				
Brief Therapy	1,965 - 4%				
Referral to Treatment	1,643 - 3%				
Screening & Feedback	24,091 - 49%				

Average Number of Days of Use in the Past 30 Days at Intake and at Follow-up (6 Months Later)





Effectiveness of medical treatment of substance use that convinces payers: Data from a major health insurer's claims

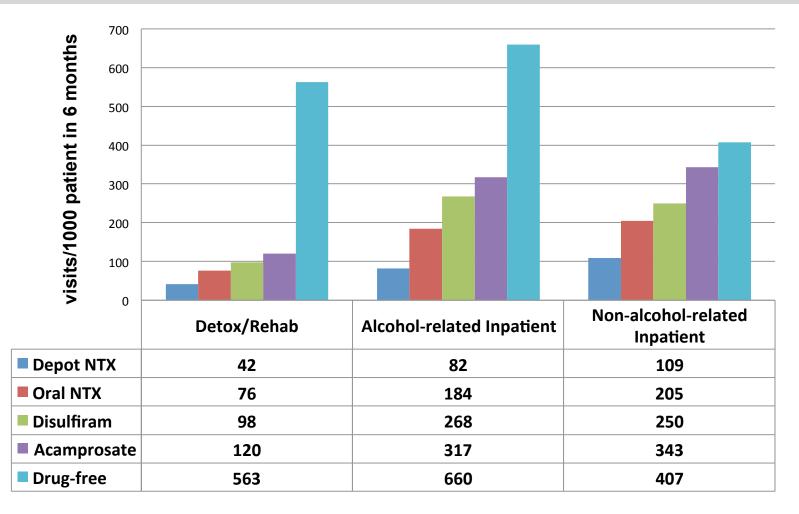
	Vivitrol	Acamprosate	Disulfram	Naltrexone
BH IP Days/1000	-30%	-33%	<mark>-38%</mark>	-31%
Medical IP Days/1000	-76%	-57%	<mark>-49%</mark>	- <mark>67%</mark>
BH IOP Days/1000	29%	97%	42%	48%
Psychiatrist Visits/1000	41%	130%	36%	133%
Psychotherapy Visits/1000	93%	56%	49%	85%
ER Visits/1000	-13%	12%	0%	12%

16 to 35% Net Medical Cost Savings



know*

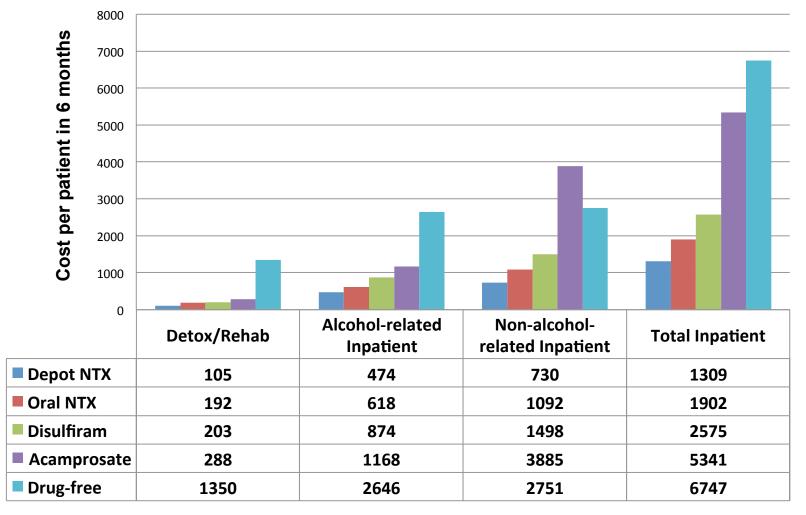
Inpatient Utilization per 1,000 Alcohol-Dependent Patients in 6 months following diagnosis



Baser O, Chalk M, Fiellin DA, Gastfriend DR. Alcohol dependence treatments: comprehensive healthcare costs, utilization outcomes, and pharmacotherapy persistence. Am J Manag Care. 2011:17(8);S222-234.



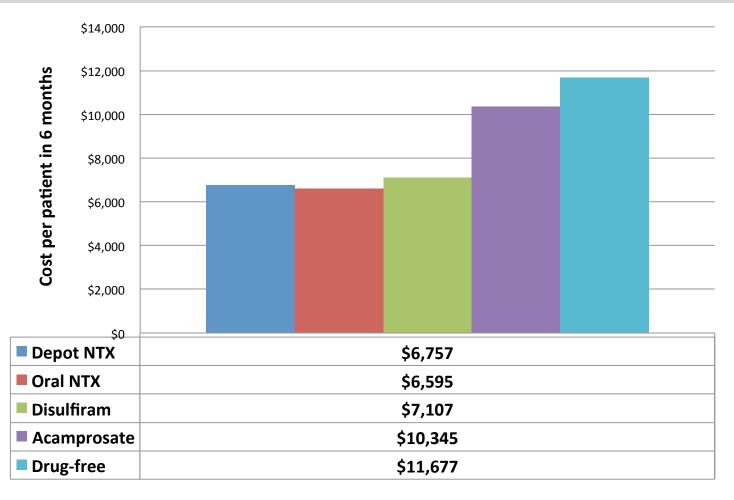
Inpatient Cost/Alcohol-Dependent Patient in 6 months following diagnosis



Baser O, Chalk M, Fiellin DA, Gastfriend DR. Alcohol dependence treatments: comprehensive healthcare costs, utilization outcomes, and pharmacotherapy persistence. Am J Manag Care. 2011:17(8);S222-234.



Total Cost/Alcohol Dependent Patient in 6 months following diagnosis



Baser O, Chalk M, Fiellin DA, Gastfriend DR. Alcohol dependence treatments: comprehensive healthcare costs, utilization outcomes, and pharmacotherapy persistence. Am J Manag Care. 2011:17(8);S222-234.



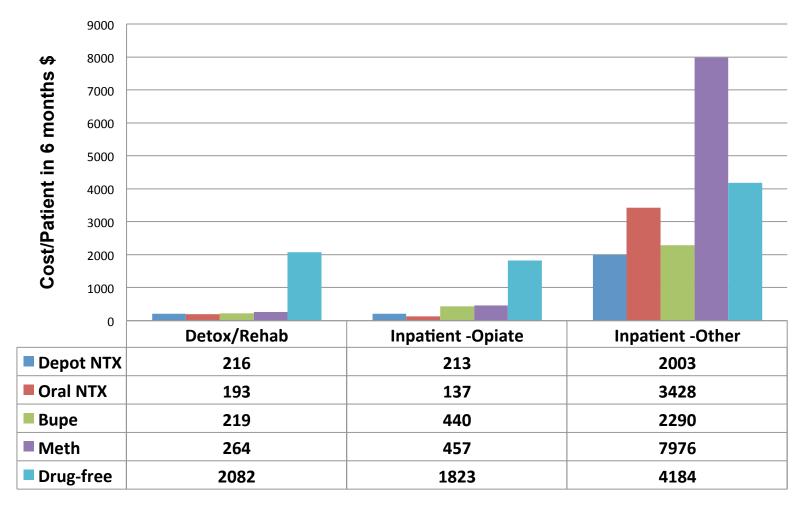
Hospital Admissions/1000 Opiate Dependent Patients in 6 months following diagnosis Admissions/1000 patients

0			
	Detox/Rehab	Inpatient -Opiate	Inpatient -Other
Depot NTX	69	93	234
Oral NTX	84	145	387
Bupe	79	249	397
Meth	101	198	561
Drug-free	770	677	731

Baser O, Chalk M, Fielin DA, Gastfriend DR. Cost and utilization outcomes of opioid-dependence treatments. Am J Managed Care, 2011:17(6);S235-248.



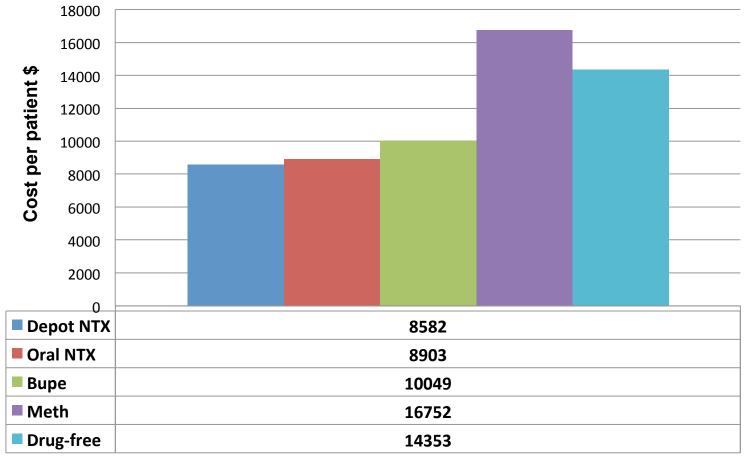
Inpatient Costs/Opiate-Dependent Patient in 6 months following diagnosis



Baser O, Chalk M, Fielin DA, Gastfriend DR. Cost and utilization outcomes of opioid-dependence treatments. Am J Managed Care, 2011:17(6);S235-248.



Total Cost/Opiate Dependent Patient in 6 months following diagnosis



Baser O, Chalk M, Fielin DA, Gastfriend DR. Cost and utilization outcomes of opioid-dependence treatments. Am J Managed Care, 2011:17(6);S235-248.



SBIRT Reimbursement: Improving

http://www.sbirtoregon.org/

Medicaid (Oregon Health Plan)	Medicare		Commercial	Clinician notes
Service	Code	Reimburseme amount	19.0.59	Description
Full screen only	99 <mark>4</mark> 20	\$7.23	the AUDIT	ation and interpretation of or DAST screening tool, or roved screening tools (see ow).
Full screen + brief intervention	99408	\$26.43	personnel interpretir	nutes of aggregate time administrating and ng the full screen, plus g a brief intervention.
	99409	\$51.75	 Same as a minutes 	bove, only greater than 30

Who can bill?

- DO; MD; PA; NP; RN; LPN
- And other individuals, if the billing provider is a MD or DO

This follows "Incident to" rules and must be signed by the billing provider:

- For example, a LCSW or CADC would be the service provider, while the MD or DO would be the billing provider.
- o "Incident to" rules loosely defines that a PCP has already seen and established care with the patient.
- Supervised means there is a physician present at the facility who can be readily present. The physician does not have to be in the exam room.
- Usually the claims will leave a primary care office with the person who provided the service (rendering) and a primary care doctors name as the billing provider.

Notes

- Other screening tools eligible for 99420 include the AUDIT-C, ASSIST, CAGE- 4, TWEAK and T-ACE, CRAFT, DUDIT, and GAIN.
- Oregon Health Plan members enrolled with state Managed Care Organizations, e.g., CareOregon, may see reimbursement
 rates that vary.

Reimbursement: Improving

http://www.sbirtoregon.org/

Medicaid (Oregon Health Plan) Me	dicare	Commercial	Clinician notes	
Service	Reimbursement Code amount *			Description	
Full screen only	99420	\$18	the AUD other ap	 Administration and interpretation of the AUDIT or DAST screening tool, or other approved screening tools (see notes below). 	
Full screen + brief intervention	СРТ 99408	\$33.41	personne interpret	 15 - 30 minutes of aggregate personnel time administrating and interpreting the full screen, plus performing a brief intervention. 	
	CPT 99409	\$65.51	 Same as minutes 	above, only greater than 30	

Who can bill?

- Provider coverage depends on patients' commercial coverage; however, most plans allow coverage by a DO; MD; PA; NP; and Licensed Psychologists.
- Non-physicians are reimbursed for 85% of the amounts shown above.
- These codes may be reported to commercial payers that are reimbursing for SBIRT services when provided and billed by a
 credentialed provider.
- Ancillary staff, including health educators, behavioral health councilors, licensed clinical social workers, physician assistants may perform SBIRT services under the supervision of a credentialed provider.
- The services should relate to a plan of care and will require billing under the supervising physician.

at the UNIVERSITY of CHICAGO

Reimbursement: Improving

http://www.sbirtoregon.org/

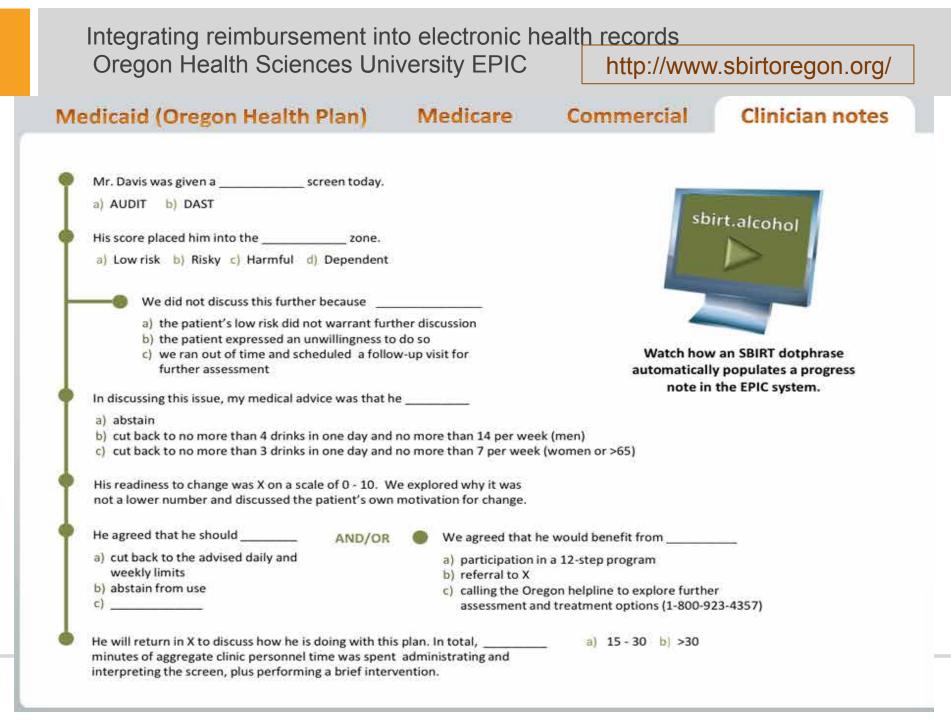
Medicaid (Oregon Health Pla	n) M	edicare	Commercial	Clinician notes
Service	Code	Reimburseme amount	nt Description	
Full screen only	None			
Full screen + brief intervention	G0396	\$29.42	 15 - 30 minutes of aggregate personnel time administrating an interpreting the full screen, plus performing a brief intervention. 	
	G0397	\$57.69	• Same as minutes	above, only greater than 30

Who can bill?

- DO; MD; PA; NP;
- And other individuals, as long as the billing provider is a MD or DO. Non-physicians are reimbursed for 85% of the amounts shown above.

This follows "Incident to" rules and must be signed by the billing provider:

- For example, an RN, LPN, LCSW or CADC would be the service provider, while the MD or DO would be the billing provider.
- o "Incident to" rules loosely defines that a PCP has already seen and established care with the patient.
- Supervised means there is a physician present at the facility who can be readily present. The physician does not have to be in the exam room.
- Usually the claims will leave a primary care office with the person who provided the service (rendering) and a primary care doctors name as the billing provider.



Other Hospital SBIRT Reimbursement Supports

Payer	Code	Description	ED Fee Schedule
Commercial Insurance, Medicaid	99408	Alcohol and/or substance abuse structured screening and brief intervention services; 15 to 30min	\$85
Commercial Insurance, Medicaid	99409	Alcohol and/or substance abuse structured screening and brief intervention services; greater than 30min	\$185
Medicare	G0396	Alcohol and/or substance abuse structured screening and brief intervention services; 15 to 30min	\$32
Medicare	G0397	Alcohol and/or substance abuse structured screening and brief intervention services; greater than 30min	\$65
Medicare	G0442	Prevention: Screening for alcohol misuse in adults including pregnant women once per year. (outpatient) No coinsurance; no deductible for patient <u>www.cms.gov/medicare-coverage-database/details/nca-decision-</u> <u>memo.aspx</u>	\$17
Medicare	G0443	Prevention: Up to four, 15 minute, brief face-to-face behavioral counseling interventions per year for individuals, including pregnant women, who screen positive for alcohol misuse; No coinsurance; no deductible for patient (outpatient) <u>http://www.cms.hhs.gov/medicare-coverage-database/details/nca- decision-memo.aspx?NCAId=249</u>	\$25
Medicaid	H0049	Alcohol and/or drug screening (code not widely used)	\$24.00
Medicaid	H0050	Alcohol and/or drug service, brief intervention, per 15 min (code not widely used)	\$48.00



Training and implementation support networks

- BIG (Brief Intervention Group) Hospital Network
 - Collaborative
 - More than 200 hospitals participating
 - TA & Training & Mutual Support
 - Monthly calls 218-339-4600 426443#
 - August 20, 2012 from 2pm 3pm EST
 - September 17, 2012 from 2pm 3pm EST
 - Eric Goplerud 301-634-9525 goplerud-eric@norc.org
 - http://hospitalsbirt.webs.com





Training and implementation support networks

SAMHSA SBIRT grantees



- 21 states, 17 medical residency training, 15 college campus
- SBIRT Colorado Brie Reimann 303.369.0039 x245
- Emergency Nurses Assn SBIRT Mentors
 - 167 ED Sites, 70 Facility Leaders, 265 Nurse Mentees
 - Cydne Perhats 800/900-9659, x 4108







Accreditation and Performance Metrics

- American College of Surgeons-Committee on Trauma
 - Level I and Level II Trauma Center accreditation includes SBI
 - 203 Level I and 271 Level II Trauma Centers in US Hospitals
- Veterans Health Administration (VA)
 - Mandatory screening for risky alcohol use with AUDIT-C
- Joint Commission for Accreditation of Health Care Orgs
 - Hospital-based inpatient psychiatric services (HBIPS)
 - Mandatory reporting for 320 psychiatric hospitals since 2011
 - Optional for general hospitals with psychiatric units
 - HBIPS 1 includes alcohol and drug screening



Joint Commission: Substance Use Measures (SUB 1-4) Expectations for CMS IPPS 2014

• 4 hospital tobacco and 4 substance use SBIRT measures

Adopted by TJC 2011 as reportable measure sets for accreditation NQF review 2012, additional data submitted fall 2012

CMS Inpatient Prospective Payment System Rule (IPPS)

"Once the e-specifications and the EHR-based collection mechanism are available for the smoking and alcohol cessations measures developed by TJC, we intend to propose two TJC smoking and alcohol cessation measure sets for inclusion in the Hospital IQR Program." (p. 715)



Federal Register, 42 CFR Parts 412, 413, 424, et.al. Medicare Program; Hospital Inpatient Prospective Payment ³⁴Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Fiscal Year 2013 Rates, May 11, 2012:77(92) Part II. http://www.gpo.gov/fdsys/pkg/FR-2012-05-11/pdf/2012-9985.pdf

- Numerator: The number of patients who were screened for alcohol use using a validated screening questionnaire for unhealthy drinking
- Denominator: The number of hospitalized inpatients 18 years of age and older
- Key Point: Validated Questionnaire
 - Instrument that has been psychometrically tested for reliability, validity, sensitivity, and specificity. AUDIT, AUDIT-C, ASSIST.
 CAGE not recommended



SUB 2: Alcohol Use Brief Intervention Provided or Offered

- Numerator: The number of patients who received or refused a brief intervention
- Denominator: The number of hospitalized inpatients 18 years of age and older who screen positive for unhealthy alcohol use or an alcohol use disorder.
- Key Point: Components
 - Feedback on use compared with national norms
 - Discussion of consequences of use
 - Joint decision making re: plans for follow-up



SUB 3 Substance Use Disorder Treatment Provided or Offered at Discharge

- Numerator: The number of patients who received or refused at discharge a prescription for medication for treatment of alcohol or drug use disorder **or** received or refused a referral for addictions treatment.
- Denominator: The number of hospitalized inpatients 18 years of age and older identified with an alcohol or drug use disorder
- Key Point: TJC now testing SUB-3 in hospital selected services rather than whole hospital.



SUB-4 Alcohol & Drug Use: Assessing Status After Discharge

- Numerator: The number of discharged patients that are contacted within 30 days after hospital discharge and follow-up information regarding alcohol or drug use status is collected.
- Denominator: The number of discharged patients 18 years of age and older who screened positive for unhealthy alcohol use or who received a diagnosis of alcohol or drug use disorder during their hospital stay
- Key Point: TJC now testing SUB-4 only for patients identified in SUB-3 – patients with a substance use disorder



Developments: Looking into the near future

- Standardization of SBIRT
 - Screening, prescreening measures
 - Link with standard protocols for other routinely performed
 - Competencies and processes generalizable
 - Professional standards nursing, social work, medicine
- Training availability
 - Remote MedRespond
 - Discipline specific SBIRT Colorado leading
 - Competency standards
- Financial and clinical accountability
 - ACO and PCMH
 - Incentives through IPPS, bundled payment



Developments

EHRs and HIEs

- Prescreening and management to avoid surgical complications
- Avoid drug drug interactions
- Avoid risk potentials with opioids, other psychotropics
- Research
 - Hospital SBIRT, Hospital SBIRT with community linkages
 - Drug SBIRT
 - Nurse-led hospital SBIRT
 - High risk, high cost inpatients with SUDs
- Community SA treatment infrastructure development
 - Primary care
 - Medical treatment
 - Community BH and FQHCs



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