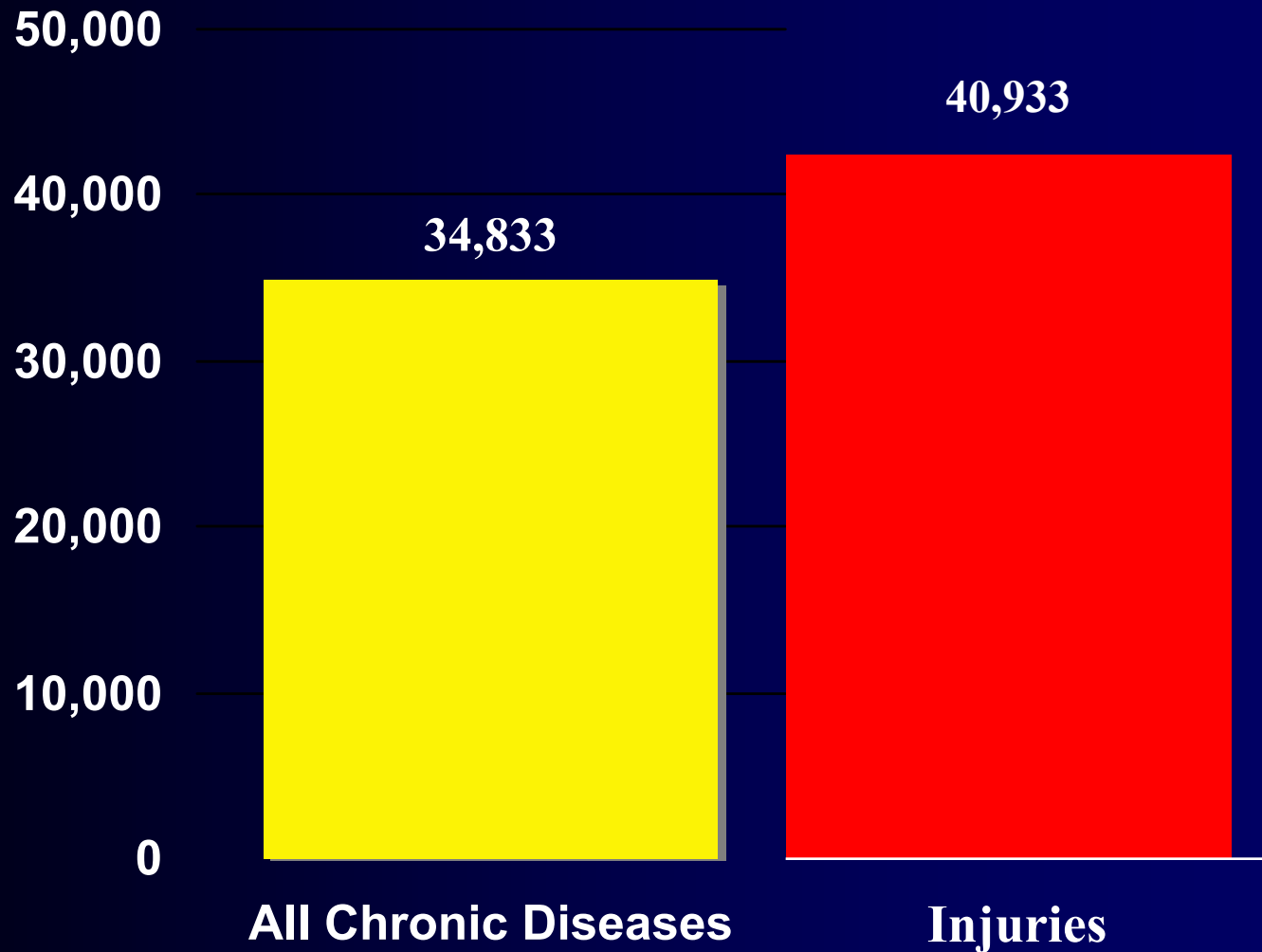


Screening and Intervention in Acute Health Care Settings

Larry Gentilello, MD
Professor of Surgery,
Management, Policy, and Community Health
University of Texas

QuickTime™ and a
decompressor
are needed to see this picture.

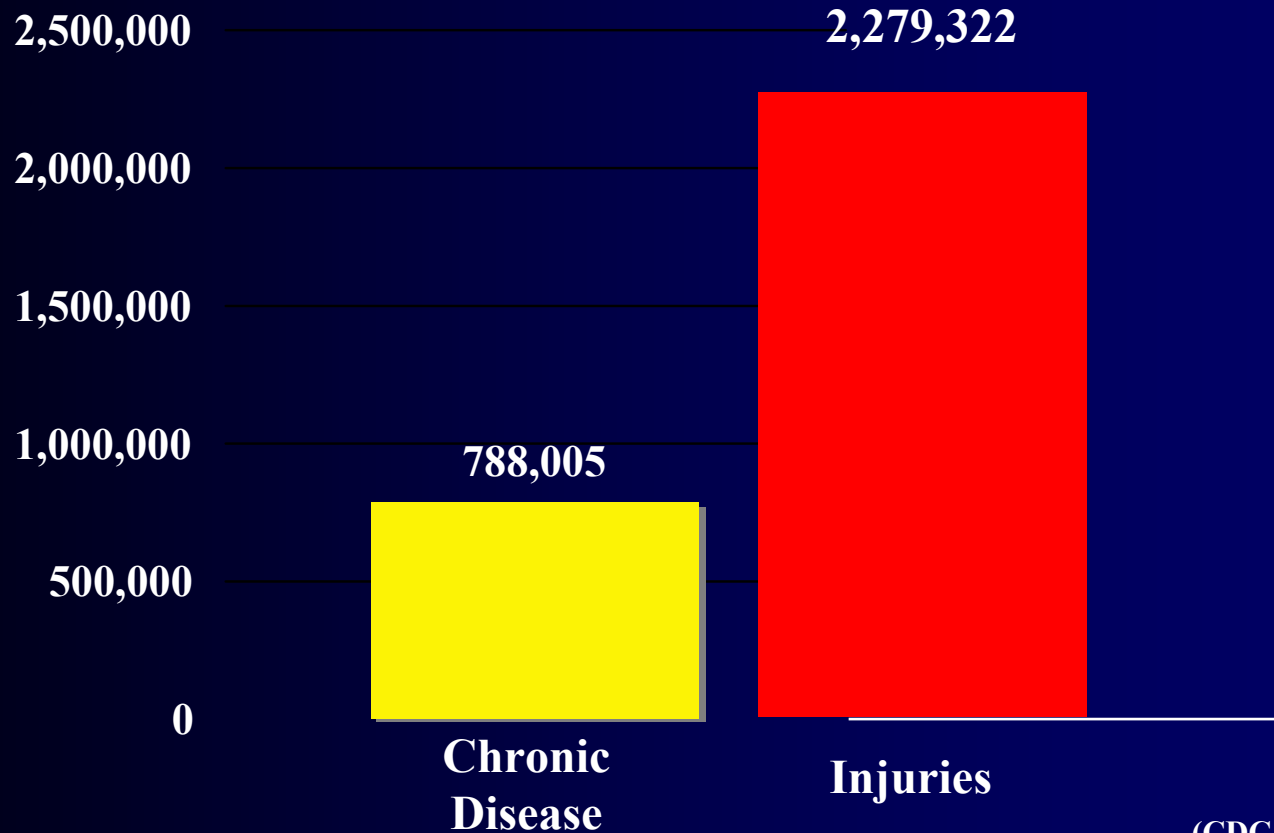
Alcohol-Related Mortality



(CDC - MMWR, 2004)

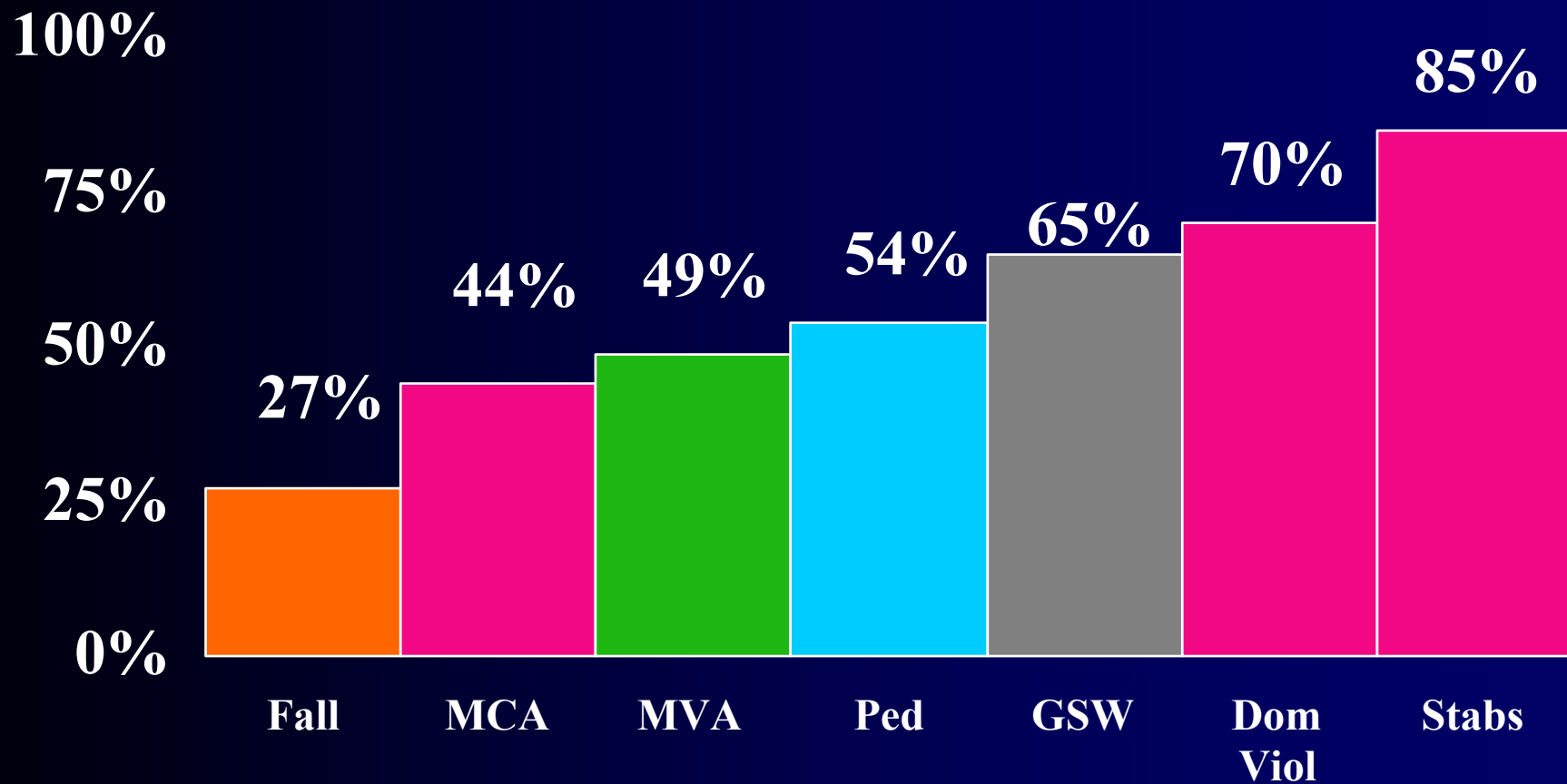
Years of Potential Life Lost - YPLL's

Alcohol - Related Diseases



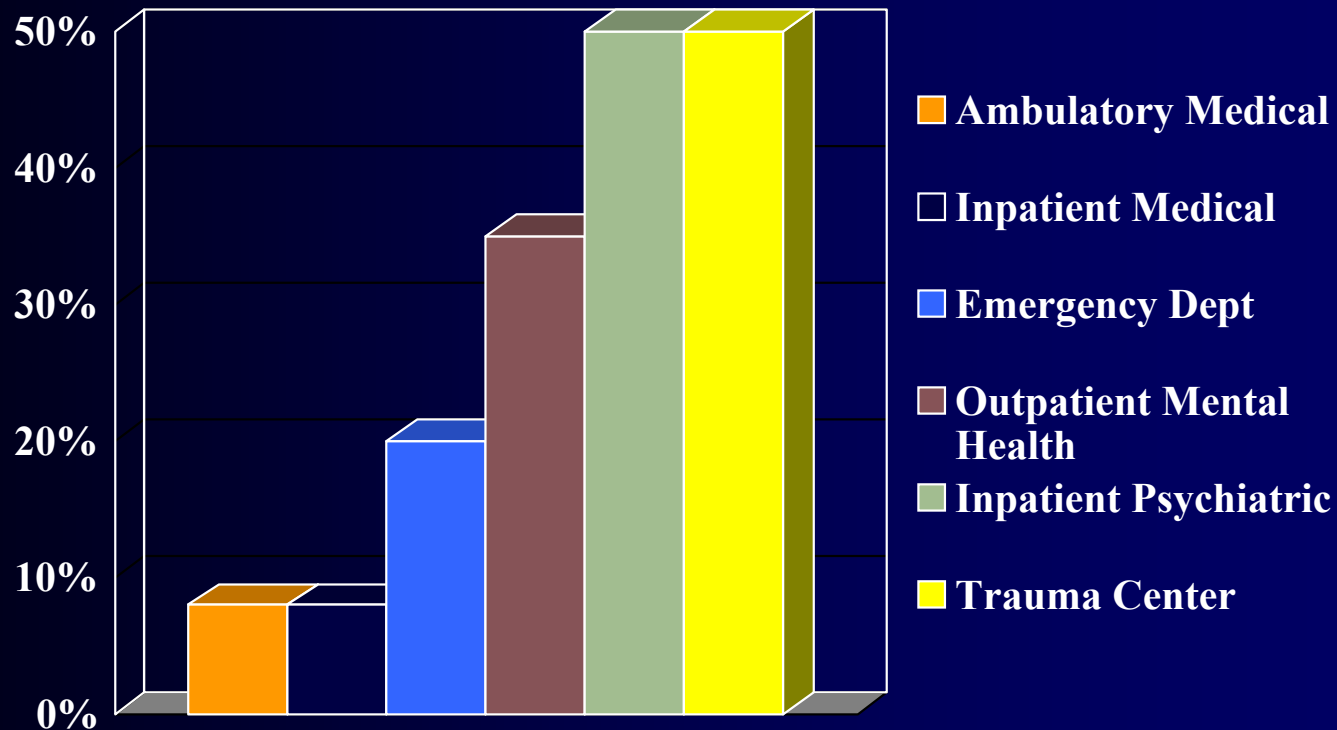
(CDC - MMWR, 2004)

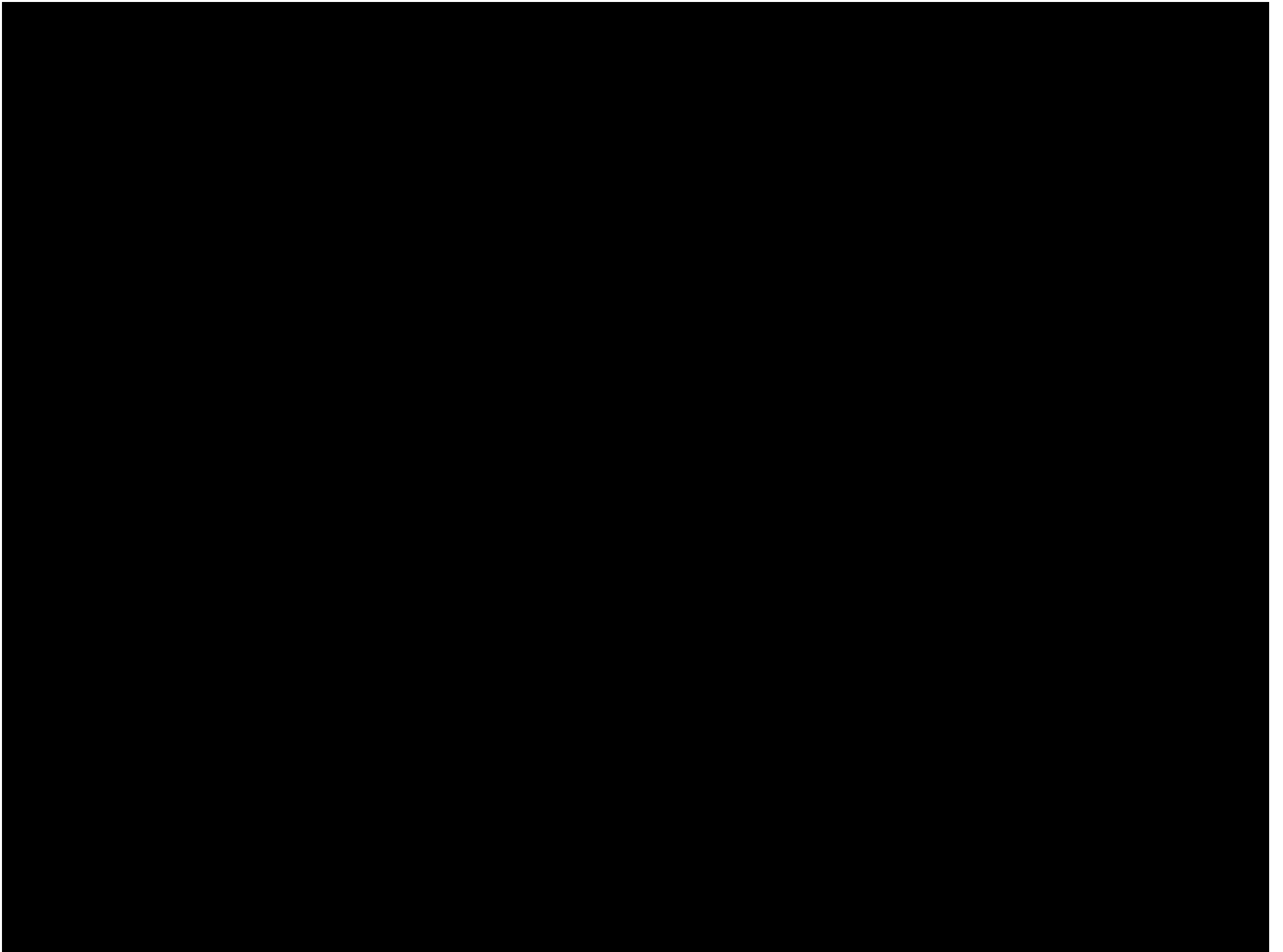
Alcohol and Trauma



(Gentilello, Am J Surg 1988)

Positive Alcohol Screens





QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

Major Injury as a Unique Opportunity to Initiate Treatment in the Alcoholic

**Larry M. Gentilello, MD, Pat Duggan, MS, CAC, Dean Drummond, Katy, Texas, Alan Tonnesen, MD, Houston, Texas,
Eugene E. Degner, MD, Katy, Texas, Ronald P. Fischer, MD, PhD, R. Lawrence Reed II, MD, Houston, Texas**

(Gentilello, Am J Surgery, 1988)

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Trauma Recidivism

- **5 year follow-up of 246 patients**
 - **40% readmission rate**
 - **20% mortality rate**
 - **77% of deaths due to continuing substance abuse**

(Sims, et al, J Trauma)

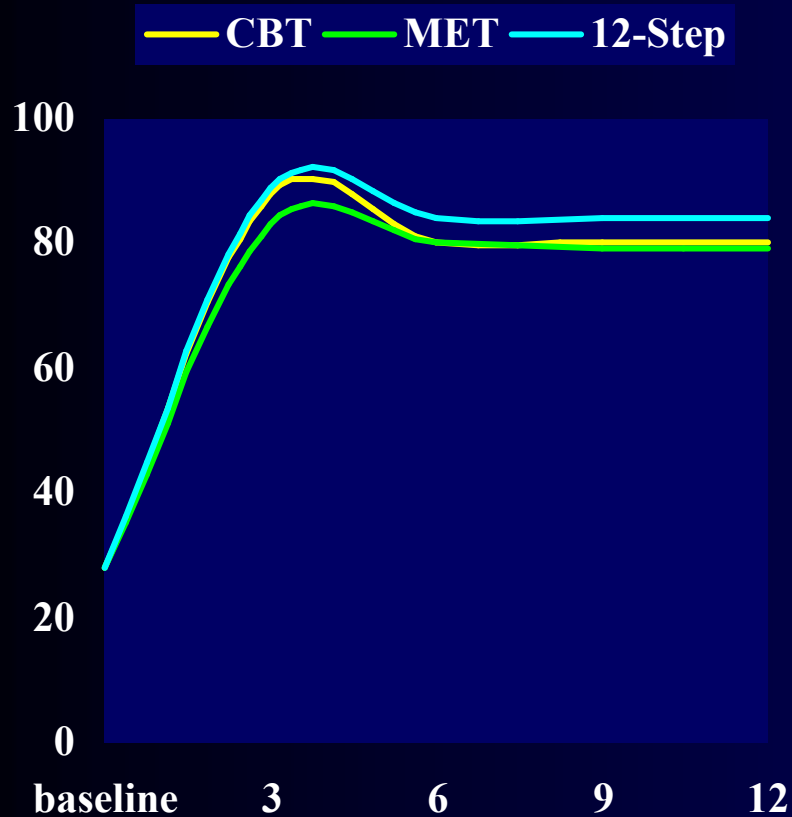
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Severity of Alcohol Problems

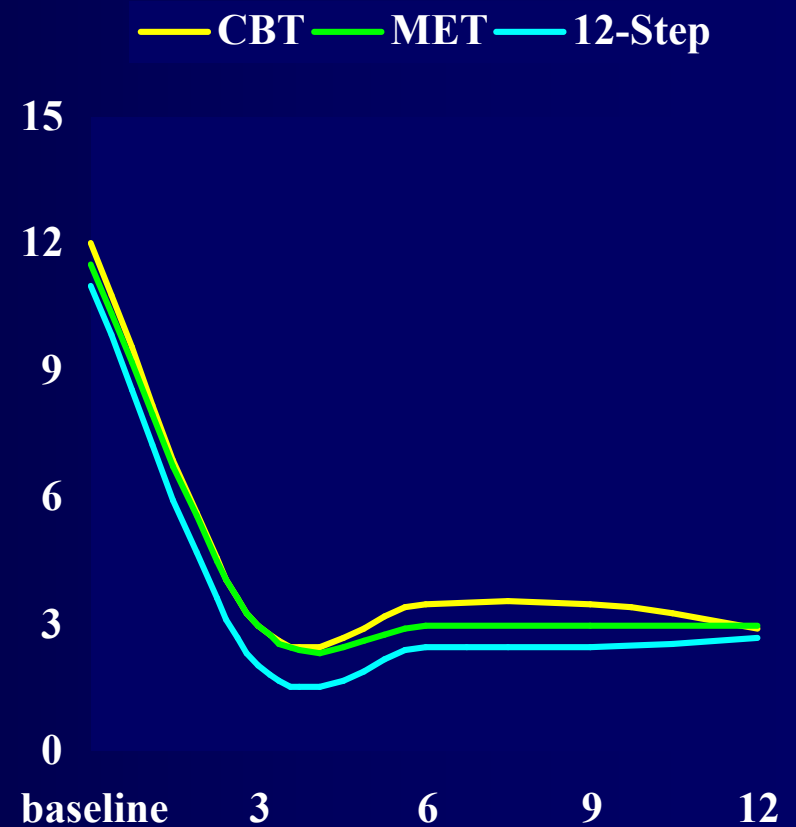


Brief Intervention Outcomes

1,735 patients



percent days abstinent

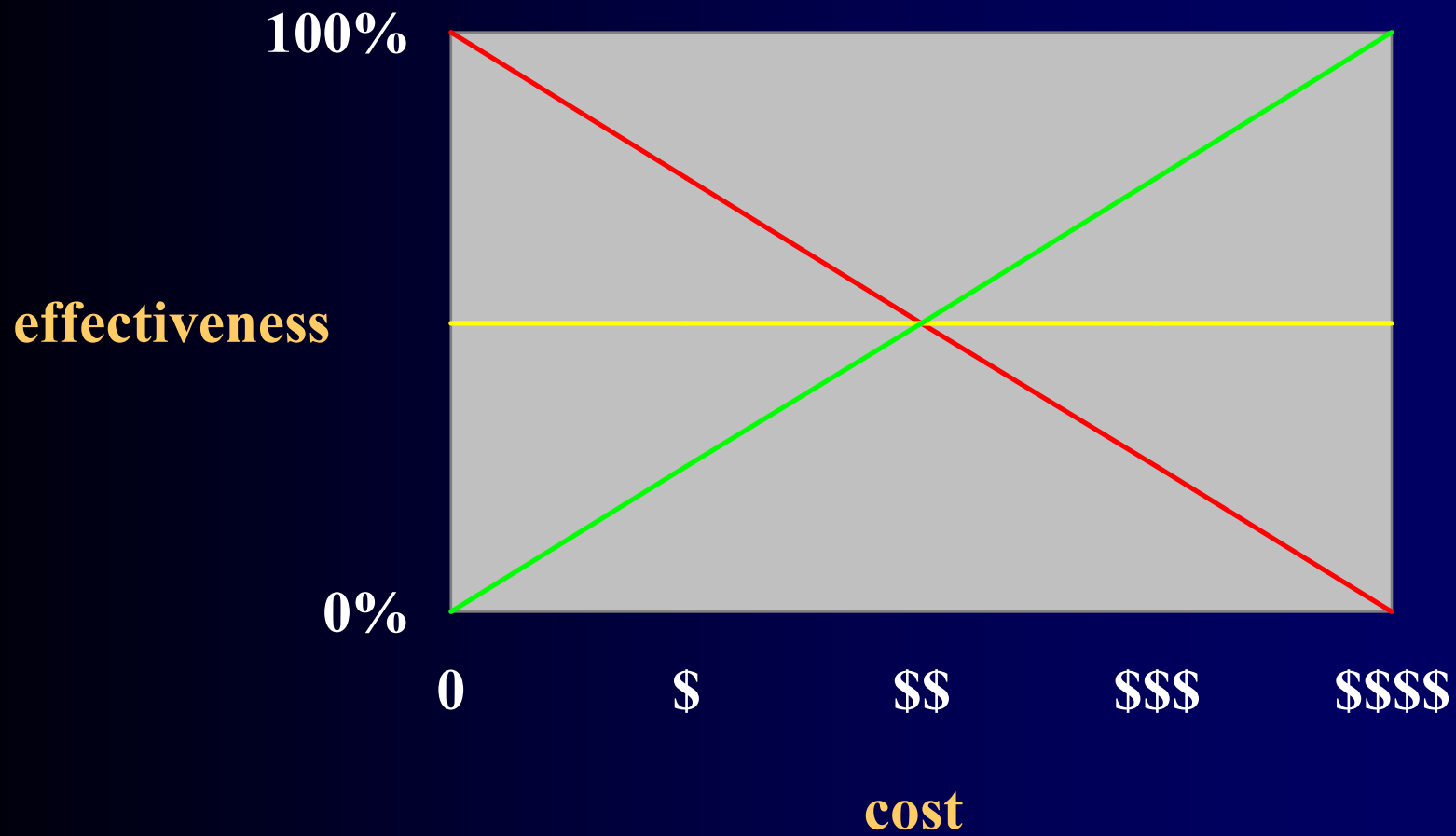


drinks per drinking day

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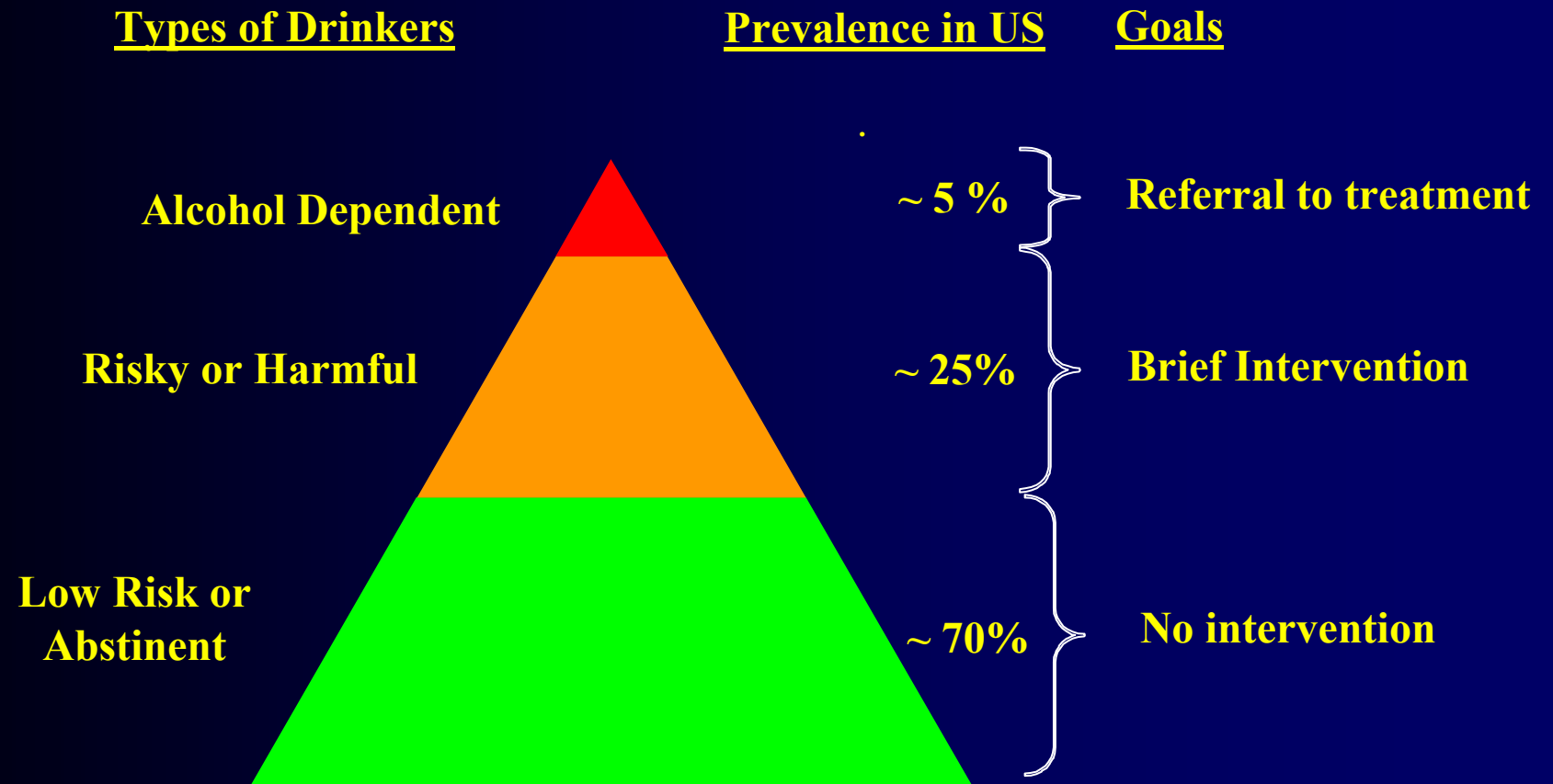
(Miller WR, 1995)

Cost-Effectiveness



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Drinking Pyramid





Do you think this patient will change his drinking or reduce his risk as a result of this conversation?

MOTIVATIONAL INTERVIEWING

- **No confrontation, labeling, stereotyping**
- **Ask open-ended questions**
- **Reflective listening to encourage talk about drinking**
- **Offer information in a non-personal manner.**
- **Make connection between drinking and ED visit**
- **“What do you like about drinking?”**
- **“What do you like less about drinking?”**



Hypothesis

Alcohol interventions as a routine component of trauma care will reduce subsequent alcohol intake, and decrease the rate of trauma recidivism

Detrimental Effects of Alcohol

“Wine is a bad thing.

It makes you argue with your wife.

It makes you quarrel with your neighbor.

It makes you shoot at your landlord.

It makes you miss him.”

(trauma patient)

Alcohol Interventions in a Trauma Center

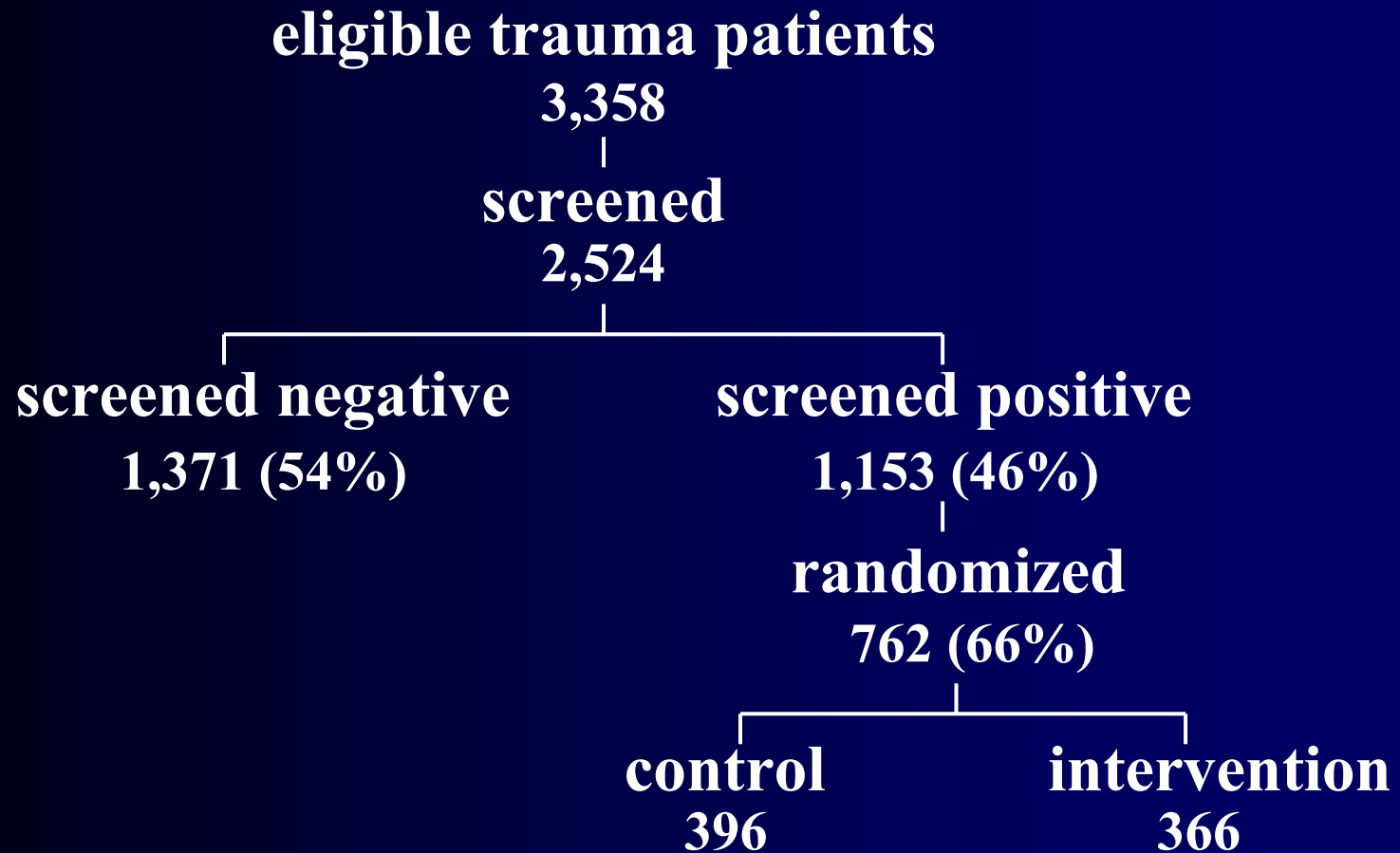
- **Study design**
 - **Harborview Medical Center, Seattle**
 - **October 1994 to November 1997**
 - **NIH sponsored RCT**
 - **patients screened with BAC and questionnaire**
 - **consent for follow-up only**
 - **randomized**
 - **15 - 30 minute intervention plus follow-up letter**
 - **standard trauma care**

Follow-up

- **Objective**
 - Harborview ED records for one year after discharge
 - statewide database of all trauma admissions
 - police department records
 - Department of Licensing records (motor vehicle)
- **Self-report**
 - 6 and 12 month patient interviews
 - corroboration interviews with family members



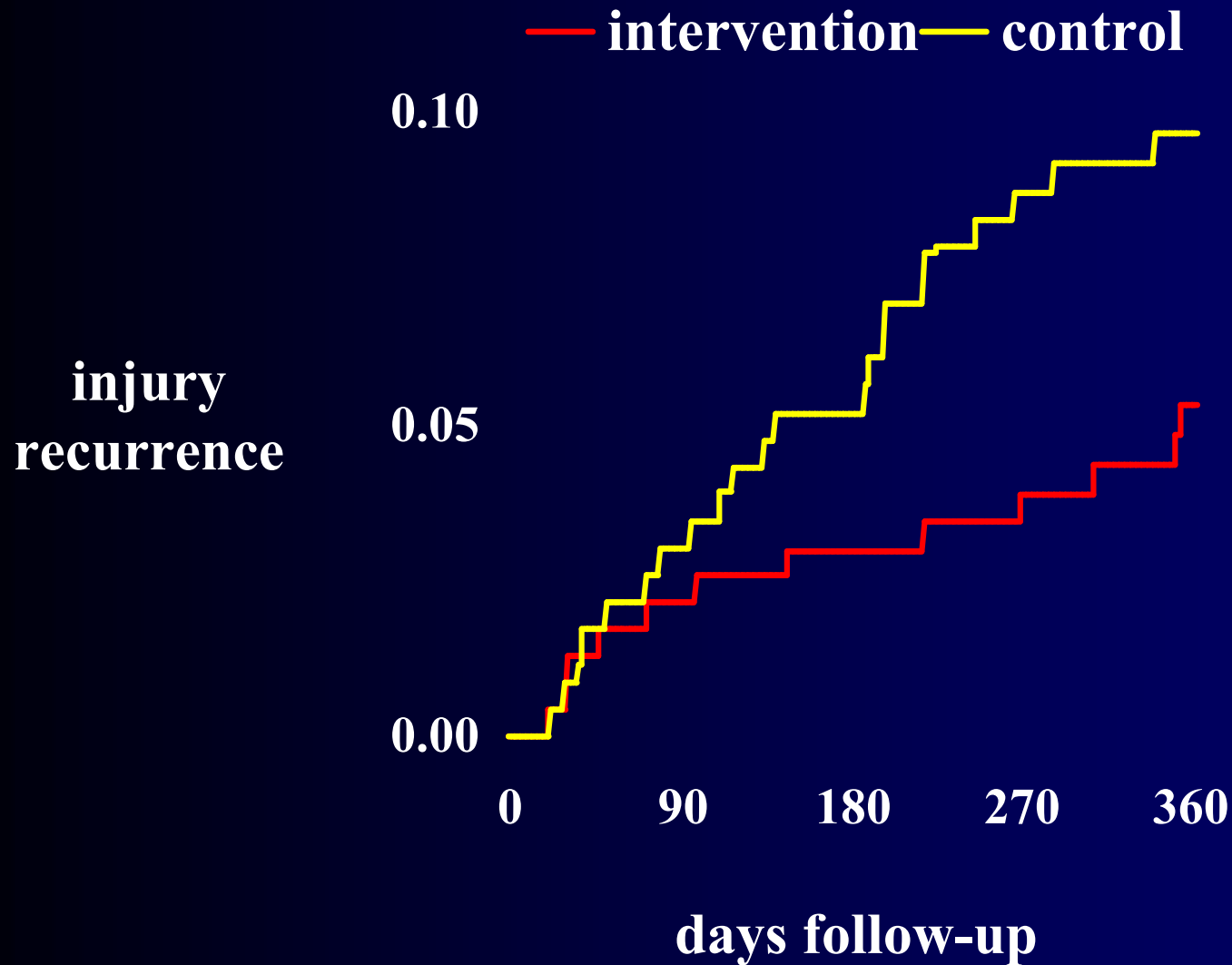
Patient Enrollment



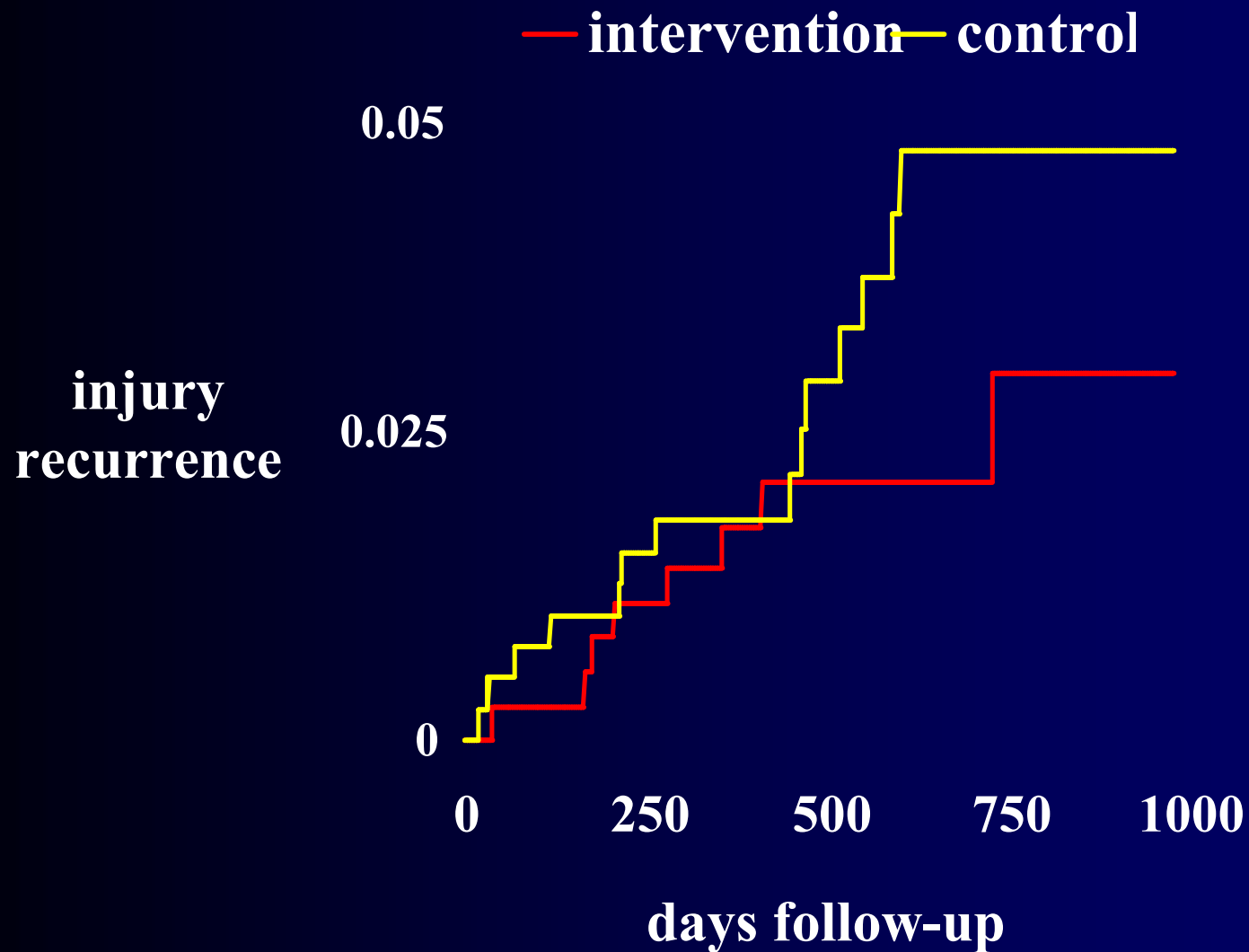
Baseline Characteristics

	intervention	control
Age (years)	35.4	36.8
male	82	82
married	15%	14%
high school or less	53%	51%
employed	52%	48%
drug use	47%	53%
BAC (mean)	153 mg%	151 mg%
sMAST score >8	20%	15%

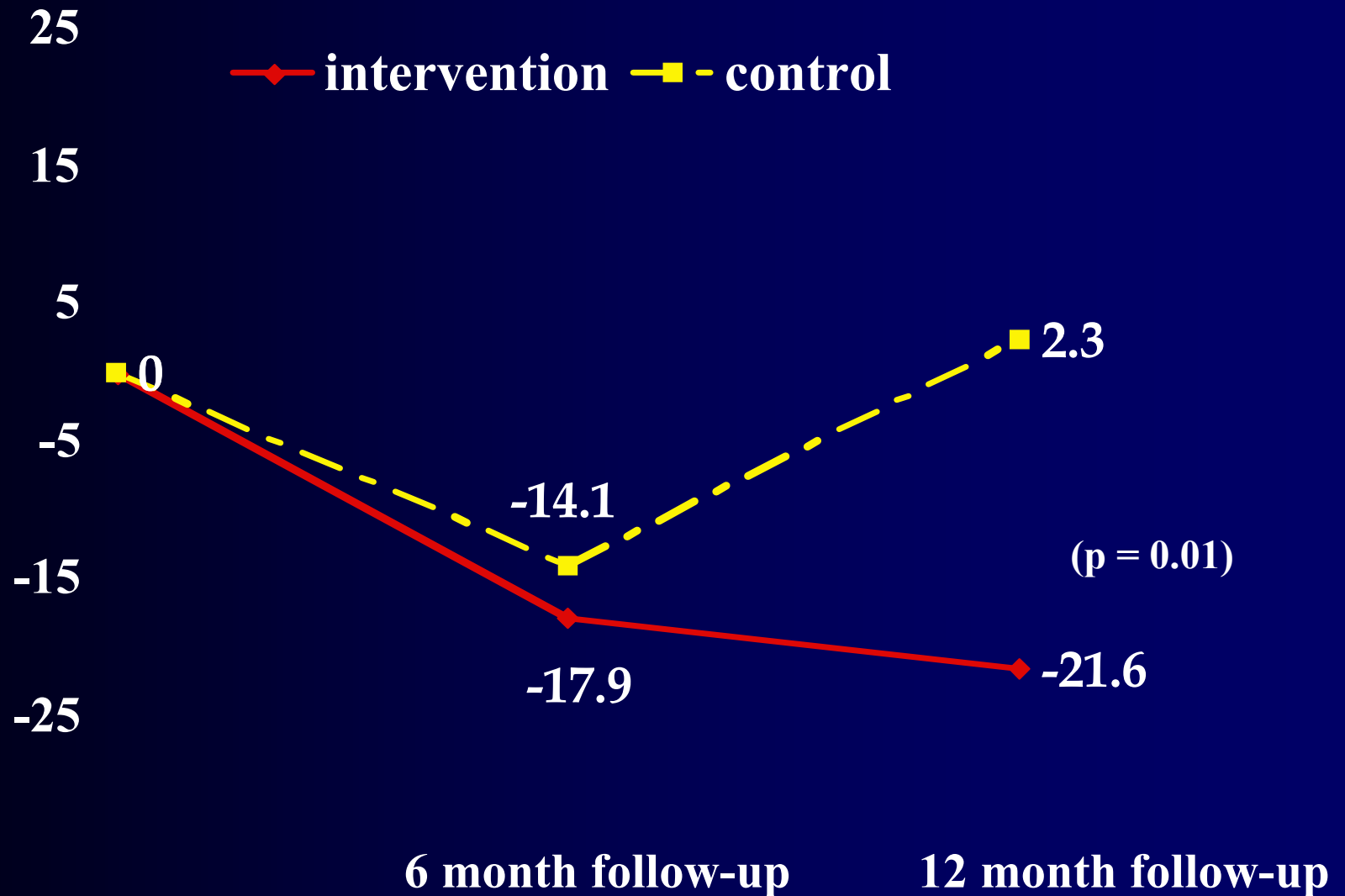
Trauma Recidivism - HMC



Trauma Recidivism - Statewide



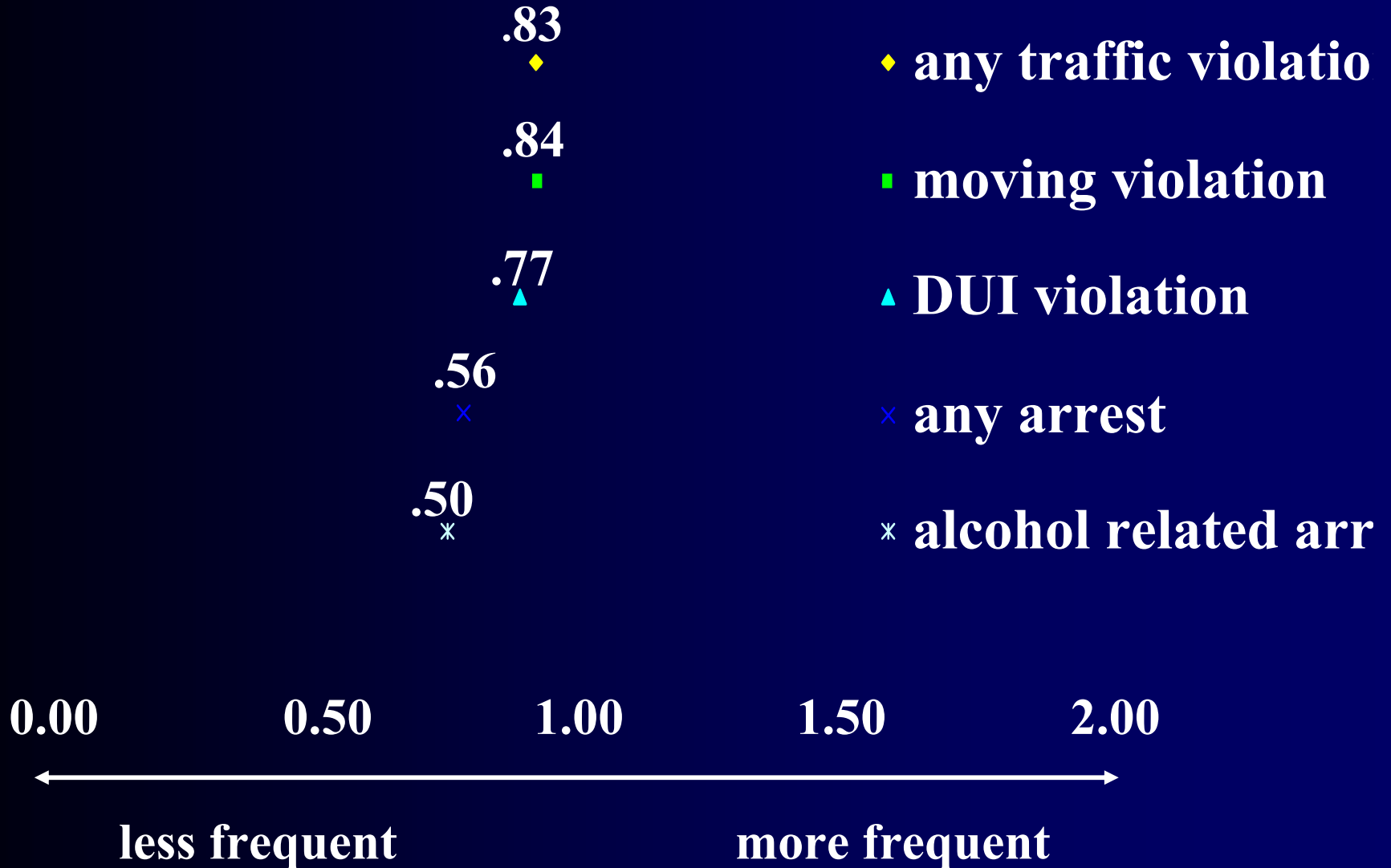
Changes in Alcohol Intake



Changes in Alcohol Use at One Year

	Intervention	Control	p
sMAST 3-8	- 22	+ 2	0.01
Single/div/wid	- 22	- 3	0.01
Married	- 25	- 21	0.81
Unemployed	- 26	- 1	0.03
Employed	- 18	- 13	0.51
Prior ETOH Rx	- 32	- 12.5	0.15
No Prior ETOH Rx	- 16	+ 16	< 0.01

Other Outcomes



Alcohol Interventions for Trauma Patients Treated in Emergency Departments and Hospitals

A Cost Benefit Analysis

Larry M. Gentilello, MD,* Beth E. Ebel, MD, MPH,†|| Thomas M. Wickizer, MPH, PhD,‡
David S. Salkever, PhD,§ and Frederick P. Rivara, MD, MPH†||

Objective: To determine if brief alcohol interventions in trauma centers reduce health care costs.

Summary Background Data: Alcohol-use disorders are the leading cause of injury. Brief interventions in trauma patients reduce subsequent alcohol intake and injury recidivism but have not yet been widely implemented.

Methods: This was a cost-benefit analysis. The study population consisted of injured patients treated in an emergency department or admitted to a hospital. The analysis was restricted to direct injury-related medical costs only so that it would be most meaningful to hospitals, insurers, and government agencies responsible for health care costs. Underlying assumptions used to arrive at future benefits, including costs, injury rates, and intervention effectiveness, were derived from published nationwide databases, epidemiologic, and clinical trial data. Model parameters were examined with 1-way sensitivity analyses, and the cost-benefit ratio was calculated. Monte Carlo analysis was used to determine the strategy-selection confidence intervals.

Results: An estimated 27% of all injured adult patients are candidates for a brief alcohol intervention. The net cost savings of the intervention was \$89 per patient screened, or \$330 for each patient offered an intervention. The benefit in reduced health expenditures resulted in savings of \$3.81 for every \$1.00 spent on screening and intervention. This finding was robust to various assumptions regard-

ing probability of accepting an intervention, cost of screening and intervention, and risk of injury recidivism. Monte Carlo simulations found that offering a brief intervention would save health care costs in 91.5% of simulated runs. If interventions were routinely offered to eligible injured adult patients nationwide, the potential net savings could approach \$1.82 billion annually.

Conclusions: Screening and brief intervention for alcohol problems in trauma patients is cost-effective and should be routinely implemented.

(*Ann Surg* 2005;241: 541–550)

Alcohol intoxication is the leading risk factor for injury.^{1–3} As a result, it offers the most promising and obvious target for injury-prevention programs. Brief alcohol interventions in trauma patients have been shown to reduce subsequent alcohol intake and injury recidivism.^{4–8} Given accumulating evidence to support their use, a variety of expert and consensus group panels have concluded that the scientific basis for their routine provision in hospitals and emergency departments has been established, and it is time to move towards national implementation.^{7,9–16}





Volume 27 • Number 2 • September 2001
Supplement

Full Text Online from 1999
www.jtrauma.com

The Journal of
TRAUMA[®]
Injury, Infection, and Critical Care



**Alcohol and Other Drug Problems
Among Hospitalized Trauma Patients:**

**Controlling Complications, Mortality,
and Trauma Recidivism**

Conference Proceedings, Arlington, Virginia

American Association for the Surgery of Trauma

Eastern Association for the Surgery of Trauma

Trauma Association of Canada/Association
Canadienne de Traumatologie

Western Trauma Association



www.jtrauma.com

Trauma Center Requirements

- Physical therapy
- Occupational therapy
- Vocational therapy
- Speech therapy
- Spinal chord therapy
- Nutritional therapy
- Play therapy
- *Alcohol therapy?*

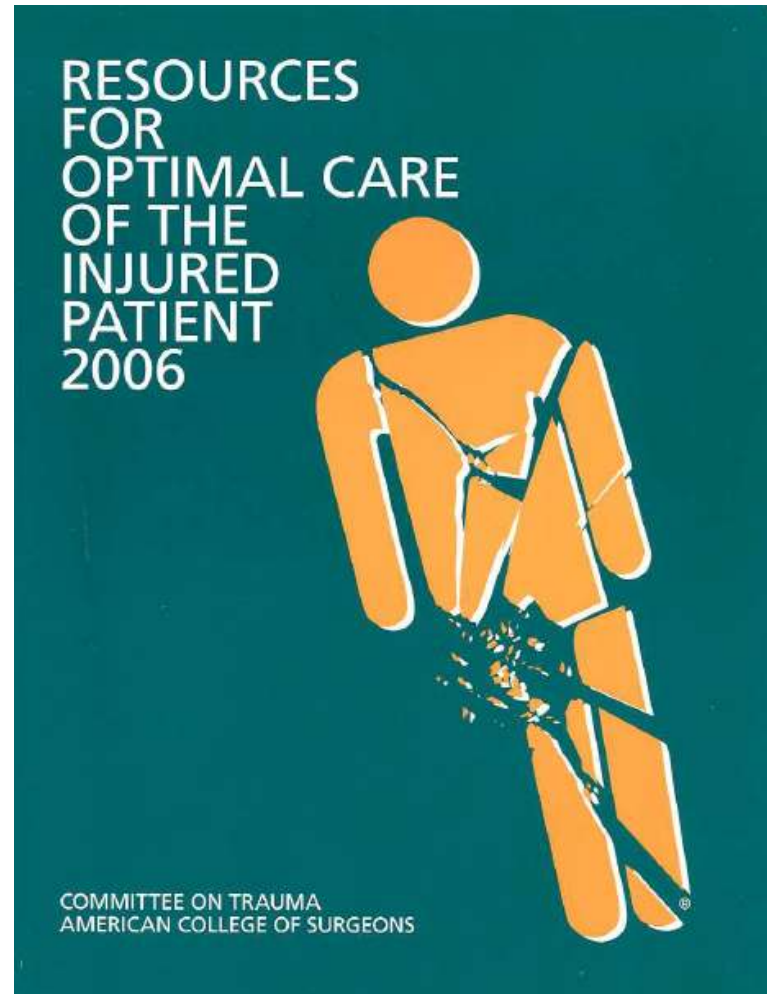
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Trauma Center Designation

Chapter 18- Prevention

The trauma center must have a mechanism to identify patients who are problem drinkers.

The trauma center must have a mechanism to provide an intervention for patients identified as problem drinkers.



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are needed to see this picture.

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TIFF (LZW) decompressor
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Screening and Brief Intervention Training For Trauma Care Providers

Learn to screen trauma patients and provide brief interventions for alcohol problems—important first steps in meeting the new COT verification requirement for Level I and II trauma centers.

SPONSORED BY

American College of Surgeons
Committee on Trauma

Department of Health and Human Services
Centers for Disease Control and Prevention
Substance Abuse and Mental Health Services Administration

National Highway and Traffic Safety Administration

March 15, 2007

Seattle, Washington

Research & Training (R&T) Building
Harborview Medical Center
300 Ninth Ave.
Seattle, WA 98104

April 12, 2007

Denver, Colorado

Rita Bass Trauma and
EMS Education Institute
190 West Sixth Ave.
Denver, CO 80204

May 4, 2007

Dallas, Texas

University of Texas
Southwestern Medical Center
Multi-Modality Education Center,
E6.200
5323 Harry Hines Blvd.
Dallas, TX 75390

June 5, 2007

Chicago, Illinois

Michael A. Bilandic Building
C-500
160 North LaSalle St.
Chicago, IL 60601

June 15, 2007

Washington, DC

George Washington Medical Center
6th Floor
2300 Eye St., NW
Washington, DC 20037

July 12, 2007

Boston, Massachusetts

Boston University School of Medicine
BUSM Instructional Building
Hiebert Lounge
80 E. Concord St.
Boston, MA 02118

July 26, 2007

Los Angeles, California

Cedars-Sinai Medical Center
Thalians Auditorium
8730 Alden Dr.
Los Angeles, CA 90048

Philadelphia, Pennsylvania

Time, date, and location TBD

September 11, 2007

Atlanta, Georgia

Global Health Odyssey
Tom Harkin Global Communications
Center
Centers for Disease Control and
Prevention
1600 Clifton Rd., N.E.
Atlanta, GA 30333

September 26, 2007

Las Vegas

Las Vegas Resort and Spa
221 N. Rampart Blvd.
Las Vegas, NV 89145

Note: The Las Vegas training is part of the American Association for the Surgery of Trauma (AAST) Annual Meeting (<http://www.aast.org/annual-meeting/AnnualMeeting.html>)

Trainers: Chris Dunn, PhD and Craig Field, PhD, MPH

Financial Costs in Minnesota

Failure to do SBIRT in ER's cost MN businesses and residents \$39 million each year in health care expenses

Estimated Annual Savings from Treating MN Emergency Patients for Alcohol Problems

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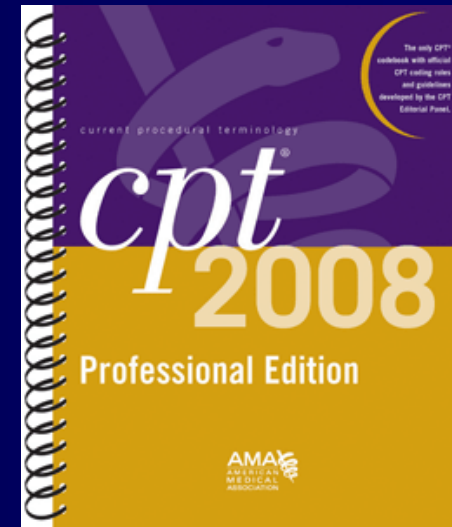
*Goplerud E. et al. <http://www.ensuringsolutions.org>.

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2008 CPT

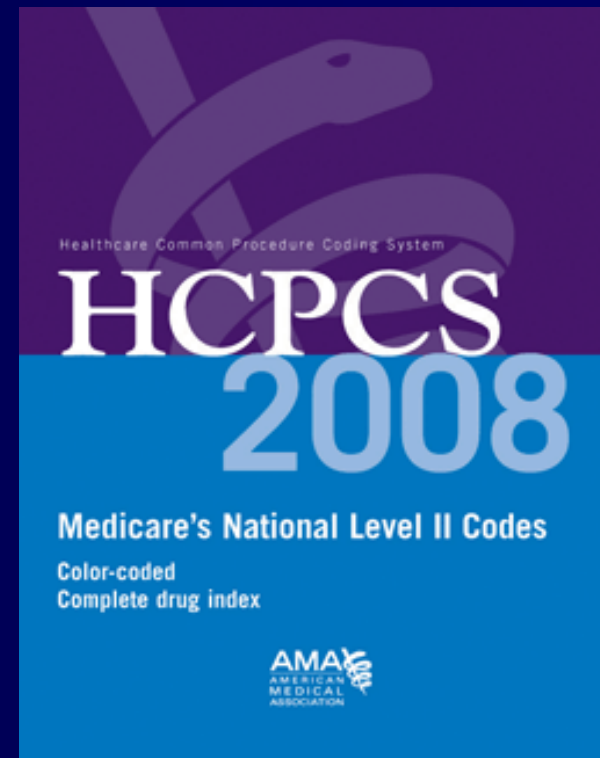
Common Procedure Terminology

- **New codes published Nov 2 in 2008 CPT Manual**
 - **99408**
 - **Alcohol and/or substance use structured screening (eg, AUDIT, DAST), and brief intervention (SBI) services; 15 to 30 minutes**
 - **99409**
 - **greater than 30 minutes**
- **Separate or added service**
- **Majority of major commercial health plans agree to pay in 2008**



New CMS Codes for SBI

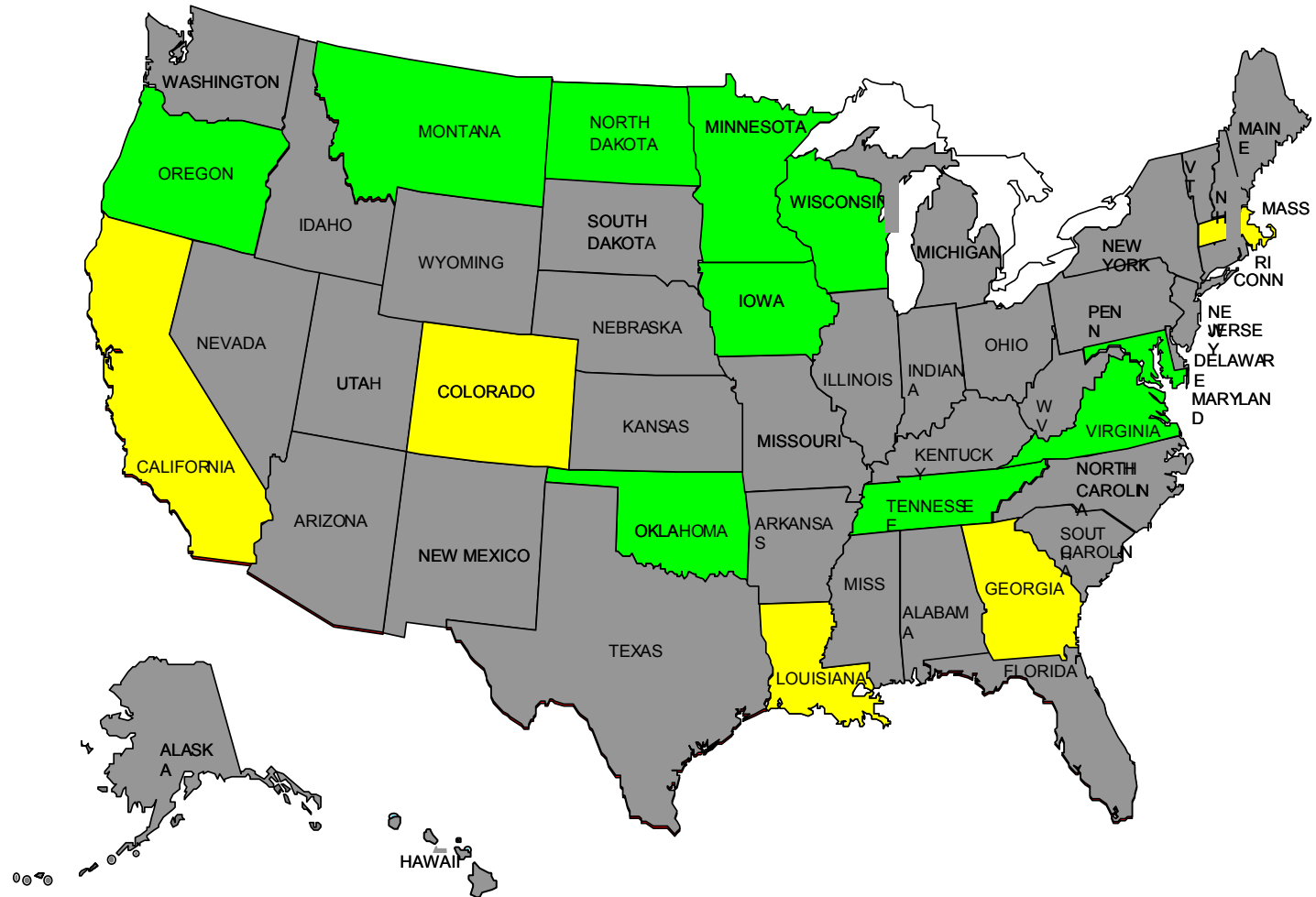
- **New codes Medicaid codes**
 - **H0049 Screening**
 - **H0050 Brief Intervention**
- **New Medicare codes**
 - **G0396 SBI > 15 minutes**
 - **G0397 SBI > 30 minutes**



Reimbursement for SBI

Payer	Code	Description	Fee Schedule
Commercial Insurance	CPT 99408	Alcohol and/or drug use structured screening and brief intervention services; 15-30 minutes	\$33.41
	CPT 99409	Alcohol and/or drug use structured screening and brief intervention services; greater than 30 minutes	\$65.51
Medicare	G 0396	Alcohol and/or drug use structured screening and brief intervention services; 15-30 minutes	\$29.42
	G 0397	Alcohol and/or drug use structured screening and brief intervention services; greater than 30 minutes	\$57.69
Medicaid	H 0049	Alcohol and/or drug screening	\$24
	H 0050	Alcohol and/or drug service, brief intervention, per 15 minutes	\$48.00

Medicaid Code Adoption



■ States that have adopted H codes

■ States considering adoption of H codes

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Joint Commission Undertakes Development of Standards for SBI

To further advance the expansion of the continuum of healthcare to include SBI, the Joint Commission on Accreditation of Healthcare Organizations (Joint Commission) has decided to undertake the development of standards for screening and brief intervention for alcohol and other drugs. The Joint Commission standards are generally developed with input from healthcare professionals, providers, measurement experts, consumers, government agencies and employers. As such, because of your expertise on SBI, you are being asked to collaborate with the Joint Commission in the development of standards and quality improvement for SBI.

AMERICAN BOARD

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Adolescent Medicine*

Blood Banking/Transfusion
Medicine

Cardiovascular Disease

Chemical Pathology

Child Abuse Pediatrics

Child & Adolescent
Psychiatry

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Electrophysiology

Clinical & Laboratory
Dermatology

Clinical Neurophysiology

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Pediatrics

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Dermatopathology

Dermatopathology
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OF ADDICTION MEDICINE

Surgery

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Obstetrics And

Gynecology



The Seal: **Darkness** within the circle represents the condition in which a person finds himself or herself when dependent on or addicted to alcohol, nicotine or other drugs. The **candle** represents the physician whose skill, compassion and knowledge of the science of Addiction Medicine assists the addicted or drug dependent individual and family find new life, signified by the **rays of light**.

The Motto (Science, Skill, Compassion) represents ABAM's purpose in certifying physicians.

Summary

- **SBIRT prevents repeated injuries**
- **SBIRT saves money**
- **Trauma centers are the first to require SBIRT**
- **Billing codes are available**
- **Making it routine is the next**

Message to Trauma Patients

**Make not thyself helpless drinking in
the beer shop, falling down.**

**Thy limbs will be broken, and no one
Will give thee a hand to help thee up**

Egyptian Papyrus, 1500 BC

