Session 4: Overcoming Obstacles—Choosing Goals and Strategies—Biosketches

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J. Wayne Meredith, MD (Moderator): "Overcoming Obstacles—Choosing Goals and Strategies"

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David B. Hoyt, MD, (Presenter): "Are We the Problem? Overcoming Obstacles to Implementing Intervention Programs"

Dr. Hoyt is currently the Monroe E. Trout Professor of Surgery and Chief of the Division of Trauma, Burns, and ICU at the University of California at San Diego School of Medicine. He is a past Medical Director of the Trauma Research and Optimal Patient Care Division of the American College of Surgeons and also a past President of the American Association for the Surgery of Trauma. He is also currently the Medical Director of the Trauma Office of the American College of Surgeons. Between 1980 and 1982, he was a research fellow in Immunopathology at Scripps Clinic and Research Foundation. Dr. Hoyt has received numerous awards for his research efforts and is the author and co-author of 397 peer-reviewed publications.

Larry M. Gentilello, MD (Presenter): "Confronting the Obstacles to Screening and Interventions for Alcohol Problems in Trauma Centers"

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Are We the Problem? Overcoming Obstacles to Implementing Intervention Programs

David B. Hoyt, MD, FACS

Alcohol-related injuries comprise a large percentage of injuries in the United States. As the impact of these injuries on society increases, a well-functioning trauma system becomes increasingly important. During the last decade, evidence-based guidelines to reduce alcohol-related injuries have emerged. Further, evidence supports the effectiveness of brief intervention programs to reduce alcohol-related injuries and demonstrates that trauma centers can improve patient outcomes by integrating them into care. Although many obstacles have inhibited progress and made implementing preventive interventions a difficult task, economic constraints are among the biggest challenges to implementing intervention programs as part of routine trauma care.

Key Words: **Alcohol-related injuries, Intervention programs, Prevention.**

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A trauma system provides organized and coordinated health care services within a defined geographic area and improves patient outcomes by integrating appropriate health care resources into care of the injured patient. A well-functioning trauma system with an arsenal of resources is essential to reducing the burden of injuries on society.[1] These resources range from prevention programs to rehabilitation programs that take place after hospital treatment.

Within the trauma system, each trauma center focuses primarily on acute care problems to prevent deaths from early exsanguination or head injury.[2] Despite the documented improvement in mortality since trauma systems were implemented, the number of preventable deaths after injury has changed very little using current quality improvement methods.[3] It seems that prevention programs provide the greatest opportunity for reducing morbidity and mortality after injury, but only recently has a serious commitment to these programs become evident.

The last decade in medicine has been characterized by an emergence of evidence-based guidelines, a renewed commitment to quality and safety, and the failure of managed care. Multiple external pressures have shifted health care decisions to value-based consumerism. These pressures have arisen in part as a result of skyrocketing health care costs and a growing awareness that current health care systems do not always lead to optimal quality. Before making purchasing decisions, purchasers of health care, such as large corporations and other conglomerate entities, are increasingly interested in obtaining information on steps taken to reduce or eliminate medical errors and measures of quality. As consumers push to hold costs in check but increase health care quality, it is likely that medical professionals and decision makers will act on data that clearly show the efficacy of brief intervention programs in preventing alcohol-related injuries.

Inconsistencies in our beliefs and, to a certain extent, the erroneous belief that drinking behavior is something that cannot be changed have made the movement toward preventive interventions that focus on alcohol difficult to implement. Even insurance policies contain clauses that deny benefits when injuries are related to drinking, reflecting the attitude that alcohol use disorders are founded in misbehavior, rather than in disease.[4] These denials are particularly striking given the existence of data that suggest that brief intervention programs are effective in reducing alcohol use and subsequent alcohol-related injuries.[4,5] Although recent surveys of current trauma center practices show that more trauma centers are screening patients for alcohol-related problems than in the past,[6] trauma centers still face significant barriers to implementing interventions that will require ongoing physician education to overcome.[7]

The American College of Surgeons (ACS) has developed standards of care for trauma centers that are upheld through a well-organized evaluation system.[8] These standards ensure that injured patients receive timely diagnostic, therapeutic, and surgical care. Evidence supports this approach. By maintaining and ensuring standards, the overall quality of patient

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care is increased, and lives are saved. Many trauma centers that have implemented these standards have shown improved patient outcomes. When a trauma center adheres to ACS standards of care, studies suggest that mortality rates plateau.[9]

What will it take to include brief alcohol intervention programs in the accreditation criteria for trauma centers? Clearly, additional data will be helpful. But lack of data is not the major obstacle. To be considered a standard trauma center service by the Verification Review Committee or Executive Committee of the ACS, an intervention program has to be reasonable and evidence based. When possible, there needs to be consensus among surgeons. For more than 25 years, this has proven to be a valid process for revising standards of care. Brief intervention programs meet the criteria set by the ACS and should be considered an integral part of routine trauma care.

Adequate funding remains the biggest obstacle to implementing intervention programs. Recent studies by Schermer et al.[10] evaluate the resources required to implement a brief alcohol intervention program. In large trauma centers where routine alcohol screening was performed by one half-time employee, most at-risk patients were identified. In another intervention model, contract employees successfully captured most patients and identified those who would benefit from intervention. When compared with the overall costs of a trauma center, the cost of conducting screening and brief intervention programs is quite small. Currently, however, trauma centers are threatened by decreased reimbursement, malpractice issues, and failure of physicians to commit to these services When resources are strained, maintaining the trauma center as an injury management facility takes priority over public health issues, including intervention programs.

Although at-risk patients need brief alcohol intervention programs, such programs will never be implemented unless we—the medical community—become less of an obstacle. Our belief system must broaden to acknowledge alcohol problems as a treatable disease. Given its treatable nature, insurance laws should not deny payment if injury is alcohol related. It does no good for physicians to personally commit their efforts to screening and intervention services if trauma centers cannot obtain financing. Adequate funding to implement and sustain these programs can be obtained only through the combined efforts of trauma practitioners, public health workers, and local, state, and federal authorities. Let us join forces and support the integration of new clinical preventive services into trauma care. We can overcome financial obstacles by doubling our efforts to secure adequate resources to support these essential prevention programs.

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Confronting the Obstacles to Screening and Interventions for Alcohol Problems in Trauma Centers

Larry M. Gentilello, MD

Despite the demonstrated clinical benefits and decreased risks of injury recurrence, brief alcohol interventions are still not routine practice in trauma centers. Although alcohol and drugs play a significant role in trauma, few trauma specialists are aware of the potential benefits of interventions because alcohol treatment specialists have not widely disseminated their findings to other specialties. This article addresses some key obstacles that must be overcome to facilitate brief interventions as routine trauma practice. Included are discussions on training, cost and reimbursement factors, responsibility of the trauma surgeon, patient privacy and confidentiality issues, insurance laws and regulations, needed collaboration with partners, and research priorities and funding.

Key Words: **Alcohol, Trauma, Trauma centers, Obstacles, Brief interventions, Insurance, Partners, Injury, Alcohol treatment.**

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The efficacy of brief alcohol interventions has been demonstrated in varied populations including primary care patients, adolescents, older adults, and pregnant women. Four prospective randomized trials have also been conducted among injured patients. Although procedures and patient populations differed among the four trials, all demonstrated clinical benefit and a decreased risk of injury recurrence.[1–4] Despite this success, alcohol screening and intervention in trauma centers is currently not routine because of a number of obstacles. These obstacles can and should be overcome because alcohol and drugs play such a significant role in trauma that efforts to reduce injuries and their recurrence are unlikely to be successful if they are not addressed.

OBSTACLES

Lack of Knowledge

The typical medical school curriculum devotes only about 4 hours total toward education on the treatment of alcohol problems.[5–10] Thus, medical schools foster the notion that alcohol problems are peripheral issues for practicing physicians of all specialties.

A survey of members of the American Association for the Surgery of Trauma revealed that 83% of trauma surgeons had no training in either screening or detecting alcohol problems;[11] more than 75% of trauma surgeons were unfamiliar with any of the commonly used alcohol screening questionnaires, such as the CAGE or MAST alcohol screening questionnaires,[12,13] and 13% were not familiar with the term BAC (blood alcohol concentration) within the context of screening for alcohol problems.[11] Lack of knowledge is a major reason why trauma surgeons tend to overlook alcohol problems in their patients.[14] This presents a compelling obstacle to instituting screening and intervention programs in trauma centers.

To overcome this lack of knowledge, trauma fellowship programs should include a brief rotation that provides trainees with the basic skills needed to screen patients and to perform brief interventions. Using a simple questionnaire to identify those at risk, trauma surgeons can motivate patients to accept the need for change through brief intervention by capitalizing on the effects of a recent major injury.[15] The rationale for screening trauma patients for the presence of alcohol and drug problems should also be part of the educational curriculum of Advanced Trauma Life Support to provide an effective link between subsequent chapters within the of Advanced Trauma Life Support curriculum that discuss the importance of injury prevention programs.

Treatment Effectiveness

It is unlikely that trauma surgeons will advocate for intervention services if they are unaware of the potential benefits of treatment. For example, few are familiar with the magnitude of the treatment effect found in Project MATCH, a large, prospective, randomized trial involving 1,635 patients at 30 sites. Three

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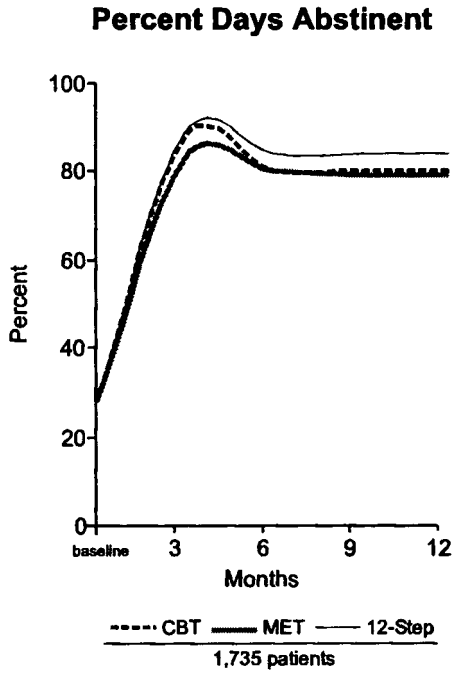

Fig. 1. *Percentage of days abstinent.*

different types of relatively brief interventions were studied: cognitive behavioral therapy, motivation enhancement therapy, and 12-step orientation. Each was found to significantly reduce alcohol intake (Figs. 1 and 2).[16]

The belief that alcohol treatments have not been proven effective is partially attributable to the expectation that alcohol- or drug-use problems should respond to treatment just as infections or other acute disorders respond to treatment.[17] For example, some would consider an intervention ineffective if the patient reduces alcohol intake but does not stop drinking completely, or if the patient resumes alcohol intake after 6 to 12 months of abstinence.

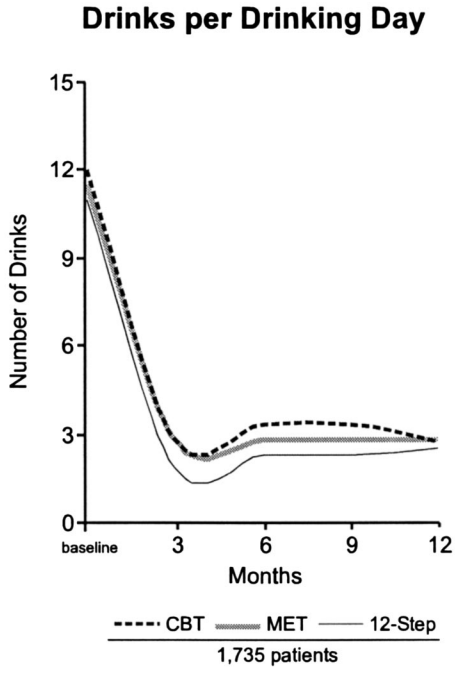

Fig. 2. *Drinks per drinking day.*

Trauma surgeons should consider substance-use problems as chronic rather than acute disorders. Hypertension, diabetes, and asthma are considered lifelong diagnoses that can be rendered asymptomatic but cannot always be cured by treatment. Frustration in managing these conditions is reduced or eliminated by the expectation that subsequent life events and stressors will likely result in periodic exacerbations of symptoms that require additional treatment. Even though there is a substantial likelihood of relapse, patients with chronic disorders usually benefit from assistance designed to control or eliminate symptoms.

Similarly, patients who were drinking heavily but who are asymptomatic for 1 year after an intervention have substantially reduced their risk of adverse health consequences during that 1-year period. This was demonstrated in a prospective study that used brief interventions with injured adolescents treated in an emergency department. Patients with an alcohol-related injury were randomized to receive a 35- to 40-minute intervention or to receive standard care. At 6 months, the intervention group had a 75% reduction in drunk-driving episodes. A review of motor vehicle department records indicated that only 3% of intervention patients had a moving violation compared with 23% of the control group. Intervention reduced the rate of alcohol-related injuries from 50% to 21%. All of these reductions were statistically significant.[18] However, it is unlikely that intervention will have a lifelong effect on the drinking patterns of these patients.

The level of evidentiary support for brief interventions exceeds that of most clinical protocols adopted by trauma centers. Studies to determine whether or not treatment works for trauma patients are therefore unnecessary. Instead of additional foundational studies to prove that interventions are effective, translational studies are needed on how to adapt interventions for the appropriate patients within the trauma care setting. Data on effectiveness are already available.

One such translational study modified the motivational intervention used in Project MATCH (described earlier) for trauma center use by reducing it to a single 30-minute session. In this prospective, randomized trial, the intervention group showed a 48% reduction in return visits to the emergency department and a 47% reduction in readmissions to the trauma center (compared with the control group) after up to 3 years' follow-up (Fig. 3).[1] The success of this trial led to the adoption of the intervention program as a hospital-funded service by a Level I trauma center in Seattle.

Lack of Collaboration with Trauma Surgeons

There have been significant advances in the treatment of alcohol problems in the past decade. However, these advances have had little impact on trauma care because alcohol

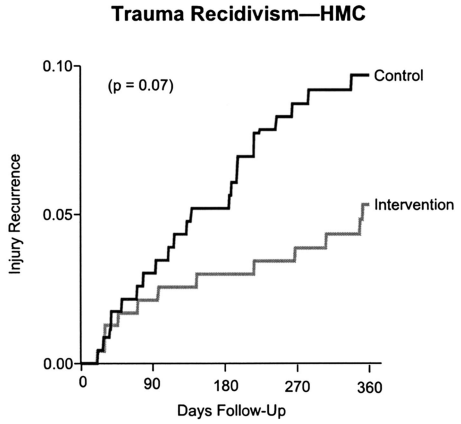

Fig. 3. *Trauma recidivism at Harborview Medical Center, Seattle, Washington.*[1]

treatment specialists and researchers have rarely disseminated their findings to specialists in trauma surgery. Addiction medicine specialists typically practice in an office setting and see patients who have accepted a referral or who are actively seeking treatment. Treatment does not have to be sought to be effective. Many patients who are not actively seeking alcohol treatment present to the health care system for treatment of disorders related to their substance use. Admission to a trauma center may be the only opportunity to provide these patients with an intervention.

Successful implementation of intervention programs in trauma centers will depend on several factors. Specialists in treating substance-use disorders must be willing to seek out and collaborate with trauma surgeons; to integrate their services into a hospital practice rather than a clinic-based environment; to help surgeons design screening and intervention programs; and to provide the necessary oversight, training, and quality review. Alcohol treatment specialists should know that their patients are more likely to die as a result of an injury than from cirrhosis, hepatitis, or pancreatitis. More than 95% of trauma patients are willing to discuss their alcohol intake with a counselor, and a recent life-threatening injury substantially increases their motivation to reduce or stop drinking.[19,20]

It is equally important for trauma surgeons to learn about brief interventions (i.e., validation of interventions in multiple randomized trials, the development of simple screening questionnaires, and how intervention techniques can easily be incorporated into trauma center routines at minimal cost). Both the alcohol treatment and trauma care fields should include education about substance-use problems and injuries at their respective professional and continuing medical education meetings.

Role Responsibility

Trauma surgeons may not view prevention of alcohol-related injuries as a key responsibility. This perception presents another obstacle to interventions. Treatment of alcohol use disorders in trauma settings differs from other specialty environments such as coronary care units, where acceptance of the responsibility to prevent repeat cardiac events has led to routine screening for hypertension, hypercholesterolemia, and other risk factors. In respiratory clinics, it is common for pulmonary specialists to ask their patients whether they use tobacco. Advice, assistance, and motivation are routinely offered in an effort to help them quit. Reducing the risk of alcohol-related injuries should be of similar vital interest to trauma surgeons.

Unlike coronary artery disease that cripples or kills only the patient, more than one third of the deaths attributed to drunk driving include other drivers, passengers, or pedestrians, which further increases the rationale for screening and intervention. Injury prevention should be a core responsibility for the trauma surgeon because alcohol use is the most common cause of injury in trauma center patients.

Trauma Center Verification Criteria

Studies of strategies to change physician behavior suggest that standards set by professional organizations and opinion leaders are an effective means of producing positive changes.[21] There is clear evidence that acceptance of screening and intervention programs is increasing within trauma professional societies.

A recent survey of American Association for the Surgery of Trauma members found that over 80% of trauma surgeons agree that it is important to discuss alcohol problems with their patients, and a similar percentage believe that a trauma center is an appropriate place to address alcohol problems.[22] Unless trauma professional organizations, opinion leaders, and trauma directors advocate prevention of alcohol problems, implementation of screening and intervention programs will be slow, uneven, and dominated by attitudinal obstacles; plus, hospital administrators will balk at providing the resources.

The American College of Surgeons (ACS) has a long history of supporting activities designed to improve care of the injured patient. Even though most trauma centers are verified by a state or regional process, most designating authorities require that trauma centers provide all resources required by the ACS Committee on Trauma. Even in states lacking a formal system of care, hospitals voluntarily seek verification by the ACS Committee on Trauma.

Alcohol screening and intervention should be an essential prevention activity required by the ACS for trauma center verification. Ignoring alcohol problems should be considered the medical equivalent of treating a hypertensive 55-year-old patient with a myocardial infarction while ignoring the underlying hypertension, or of treating patients with emphysema without asking whether they smoke. Hospital administrators will not provide the needed resources if the ACS Committee on Trauma does not insist that trauma patients deserve the same preventive interventions provided to patients with other types of medical problems.

Cost Factors

Some trauma surgeons are concerned that requiring trauma centers to provide alcohol interventions constitutes an "unfunded mandate." To be verified as a Level I or II trauma center, a hospital must offer physical, occupational, and speech therapy and a multidisciplinary rehabilitation team that offers nutritional counseling, pain management, psychology, psychiatry, and vocational counseling. Personnel for trauma registry maintenance, educational activities, community education, monitoring of prevention programs, outreach, and coordination with community prevention activities are also required.

A trauma center typically obtains these resources from the hospital because all are requirements of the ACS Committee on Trauma. Most trauma directors look toward these requirements not as a source of financial burdens but as the primary means of obtaining the support needed from their hospital administration. Hospitals have traditionally provided these resources rather than relinquish status as a trauma center. Overall, since 1991, the number of trauma centers in the United States has increased by 245%.[23] Although some hospitals have dropped out of the system, the cause is invariably a lack of commitment by personnel who refuse to provide surgical coverage, rather than the amount of resources required by the ACS Committee on Trauma.

A recent study on the feasibility of alcohol screening and intervention was conducted at four busy trauma centers: Grady Hospital in Atlanta (Emory University), Denver Health (University of Colorado), the University of California at San Diego Medical Center, and the University of New Mexico Health Science Center. At each center, only one half-time employee was needed to provide the service.[24] The nominal costs of such a program suggest that the current lack of interventions in trauma centers may be related to the level of importance attached to providing this service relative to competing cost concerns.

New therapies in trauma care are routinely implemented, even if the cost of providing the new therapy does not pay for itself. Unlike some new practices, there is evidence that addressing alcohol problems in trauma centers is cost-effective. Cost-benefit analysis of alcohol interventions for injured patients demonstrates a savings of nearly four dollars in direct injury-related medical costs for every dollar invested in screening and intervention for injured patients.[25] Other studies confirm this and show that most savings are attributable to reductions in motor vehicle crashes and reduced use of hospital and emergency department resources.[26]

Lack of Reimbursement

Trauma surgeons cannot bill insurance providers for alcohol interventions. If they provide advice or an intervention that results in spending more than the usual time allotted for a patient visit, they can bill for a higher level of service using a prolonged service evaluation and management code (99356 and 99357). When counseling or coordination of care takes more than 50% of the time spent with a patient, time becomes the controlling factor when billing for a particular evaluation and management service. For example, if a trauma patient requires 35 minutes for that day's care, including 18 minutes of counseling and coordination, the service can be billed using a time-based code.

Social workers cannot bill extra for screening and intervention because it is usually bundled into their overall fee. However, psychologists, chemical dependency counselors, and other staff with alcohol counseling credentials can bill for their services. In trauma centers with a favorable mix of insured patients, an intervention service is likely to be self-supporting, and most trauma centers can generate revenue to cover the costs.

Insurance Laws and Regulations

Insurance companies are allowed to deny payment for medical bills for injuries that occur while a patient is under the influence of alcohol. In a recent survey, 41% of trauma surgeons who do not screen patients for blood alcohol level cited the potential for denial of payment by the insurance company as a disincentive to providing interventions. The threat of insurance denials was a greater concern than cost, time, confidentiality, or the potential for offending patients.[22]

The National Association of Insurance Commissioners (NAIC) is an organization dedicated to streamlining the business practices of multistate insurers by maintaining uniformity of insurance laws across states. The primary instrument for doing so are model laws, which are drafted by the NAIC for adoption by the states. In 1947, the NAIC drafted the Uniform Accident and Sickness Policy Provision Law (UPPL), a model law.[27] That permits the denial of insurance payments for injuries sustained by persons if they are found to be under the influence of alcohol or drugs. Thirty-eight states adopted the UPPL; four others adopted it provisionally (narcotics only).

The intent of the UPPL was to reduce insurance costs by excluding coverage for injuries that result from "putting oneself in harm's way." It has not had the desired effect. Trauma surgeons avoid screening for alcohol problems in jurisdictions where the UPPL is or has been enforced. Consequently, insurers wind up paying for treatment because doctors do not perform screening to identify the patients who are intoxicated. Failure to document alcohol use for insurance purposes results in lost opportunities for identifying patients who might benefit from intervention.

Until this law is repealed, trauma centers can overcome the obstacle of nonpayment by using a screening questionnaire to detect alcohol or drug problems. These questionnaires can, and should, be excluded from the medical record to protect patient confidentiality.

There are a number of stakeholders in favor of repealing this anachronistic insurance law. Mothers Against Drunk Driving (MADD) considers repeal of the UPPL to be one of

its legislative priorities.[28] A drunk driver who is stopped by the police most likely faces at least one night in jail, loss of their driver's license, and a substantial fine. If the same individual has a car crash and is transported to a trauma center, unless law enforcement officers accompany the ambulance to the emergency department and wait until evidence is collected, the intoxicated driver usually escapes all legal and civil consequences. Studies demonstrate that 85% to 96% of drunk drivers involved in a crash avoid detection if they are transported to a trauma center.[29] This "safe haven" effect has been called the Achilles heel of efforts to prosecute drunk drivers.

In 2001, the NAIC unanimously voted to amend the UPPL.[30] The current model law prevents insurers from denying payment on the basis of patient intoxication. It is up to states to adopt the new model, as was recently done in Maryland, Vermont, North Carolina, North Dakota, Washington, Iowa, Nevada, and Rhode Island. Trauma surgeons, emergency medicine physicians, addiction treatment specialists, and other stakeholders should collaborate to ensure that policy makers are aware of the effects of the UPPL on alcohol screening, obtain legislative sponsorship to adopt the amendment, and be willing to testify in support of this legislative change.

Patient Privacy and Confidentiality

Many trauma surgeons believe that asking patients about alcohol and drug use is an invasion of privacy. Nearly one third of surgeons who do not screen cite this belief as a factor.[11,22] However, trials of alcohol screening in primary care, general medical clinics, trauma centers, and emergency departments all demonstrate a high rate of patient acceptance.[1,2] Patient surveys indicate that satisfaction with the quality of care is increased when physicians ask questions about alcohol.[31]

Because there are risks of stigma and discrimination against patients who use drugs or alcohol, confidentiality must be ensured. Federal regulations ensuring patient confidentiality (42 CFR Part 2) were adopted over 20 years ago. The regulations were designed to encourage individuals to seek alcohol and drug treatment. However, confidentiality regulations apply only to specialized alcohol treatment programs; hospitals that have a specialized alcohol treatment program; or medical personnel whose primary function is to provide alcohol and drug abuse diagnosis, treatment, or referral for treatment.

In 1990, the Department of Health and Human Services amended the regulations to specifically exclude records generated by trauma and emergency department physicians.[32] The congressional testimony stated, "We do not foresee that the elimination of hospital emergency rooms or surgical wards from coverage will act as a significant deterrent to patients seeking assistance for alcohol and drug abuse" because trauma patients do not come to the hospital to receive alcohol or drug treatment. Therefore, a BAC or screening questionnaire obtained during routine emergency department or trauma center care is not under special protection.

Some trauma centers are now screening and have staff whose primary function is to provide alcohol and drug abuse diagnosis, treatment, or referral for treatment. The reason for obtaining a BAC determines the level of confidentiality required. A trauma surgeon who obtains a BAC or drug toxicology screen to better manage the patient's injuries is not required to protect information identifying the individual as an alcohol or drug user. If a trauma surgeon obtains a BAC or administers a screening questionnaire specifically to provide alcohol screening, counseling, or a referral for counseling, and has specialized staff who will provide this service, the results should be kept confidential under CFR 42 and not be made part of the general medical record.

Release of information about alcohol and drug use requires written permission from the patient using a specialized CFR 42 release form. A general medical consent form is insufficient. This information can only be released against the patient's wishes by issuance of a subpoena. During any subsequent judicial hearing, the patient must be represented by an attorney (or provided an attorney if one cannot be afforded); the hearing must take place in closed chambers; disclosure must document involvement in a crime that is "extremely serious"; and there must be reasonable likelihood that disclosure will provide substantial value to the investigation. Thus, trauma centers that establish a screening and intervention service can keep screening and intervention information separate from the medical chart and can provide patients with considerable confidentiality protections.

Despite CFR 42, insurance contracts typically require the patient to agree to release all medical information to the insurer. The patient effectively signs away the federal right to confidentiality as a condition of the policy. To overcome confidentiality barriers, trauma centers can use questionnaires and keep the results separate from the general medical record as a matter of privacy under CFR 42.

Research Priorities and Funding

For the past two decades, funding priorities for screening and brief intervention research have focused on exporting these procedures to primary care settings. However, many patients with an alcohol problem do not have access to a primary care physician and only interface with the health care system when they come to an emergency department or trauma center for an injury or other acute problem.

Most urban and suburban areas are served by hundreds of primary care practitioners. Implementing screening and intervention services in primary care will require changing the practices of many individuals. Most metropolitan areas are served by only one or two major trauma centers. Changing practice within a few trauma centers offers a more practical means of widely expanding alcohol screening and intervention services in a given community.

Changes in a specialty are more likely to occur if they are supported by research conducted by individuals within the same specialty. Trauma surgeons do not read articles published in journals devoted to psychiatry or substance abuse, so publications in these journals are not likely to have an impact on the practice of trauma care. Consequently, it is important for trauma surgeons to be involved in conducting this type of research and in publicizing their findings within their own specialty journals.

Current funding sources do not foster the development of surgical investigators in this cross-disciplinary area. It is difficult to obtain funds from study sections that review grants for trauma research because peer reviewers in surgery do not view alcohol-related research as being part of their research agenda. There are equally formidable obstacles when attempting to obtain funding from study sections that focus on alcohol research. Reviewers are generally unfamiliar with the operating environment in trauma centers and prefer the use of highly controlled diagnostic and demographic groups to obtain unambiguous answers to questions about treatment. Although this approach has led to great strides in understanding how treatment works, studies conducted by alcohol research specialists may not provide trauma centers with clinically relevant intervention protocols.

The design and peer review of studies on alcohol interventions in trauma centers should embrace the perspectives of trauma specialists. Trauma surgeons understand what research questions are relevant and what types of programs are feasible in trauma care settings. Although grant applications from trauma surgeons may not use the study methods used by alcohol research specialists, funding such research will lead to the growth and development of research methodologies appropriate for trauma centers.

Lack of Collaboration with Partners

Trauma centers have many potential partners among advocacy groups that have an interest in reducing the societal burden imposed by alcohol and drugs. As previously mentioned, one of MADD's legislative priorities is to ensure that "State laws do not allow exclusionary coverage provisions in health insurance policies that would exclude payment of benefits of trauma patients for alcohol screening including BAC testing and alcohol treatment."[33]

If trauma centers performed functions that extended beyond the provision of surgical care, federal agencies and private groups that focus on treatment and prevention of alcohol and drug problems would support further development and funding of trauma systems. For example, by providing additional services such as screening, intervention, and referral for its patients, a trauma center could promote its role in the community and help other organizations accomplish their own goals and objectives. This could garner support from such organizations as the National Council on Alcoholism and Drug Dependence, the Center for Substance Abuse Treatment, the National Association of State Alcohol and Drug Abuse Directors, Join Together, the National Association of Addiction Treatment Providers, Physicians and Lawyers for National Drug Policy, and the American Society of Addiction Medicine. By identifying drunk drivers and facilitating interventions to reduce future risk of drunk-driving episodes, trauma centers also could earn support from organizations with an interest in traffic safety such as MADD, the National Commission Against Drunk Driving, and the Governor's Highway Safety Association. Partnerships with these organizations can influence hospital administrators as they consider how to allocate resources for funding intervention programs.

SUMMARY

There are obstacles to implementing alcohol screening and intervention programs in trauma centers. These include relative lack of training, knowledge, and collaboration with related specialties in addiction medicine. There are also potential roadblocks in the form of funding and insurance financing.

The maturation of trauma systems has increased awareness of the need to focus on injury prevention in addition to acute care. Because alcohol and drugs are the leading causes of injuries, there is a compelling need for specialists in trauma care, addiction medicine, and public health to develop formal strategies to address these obstacles.

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Interventions—Developing a Plan for Implementation

J. Wayne Meredith, MD

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Dr. Hoyt's and Dr. Gentilello's presentations were inspirational. However, in some respects, I disagree. Trauma programs and the outcomes from trauma care are excellent in some hospitals or trauma centers, but only a few places deserve the label Dr. Gentilello used in his introduction to these proceedings—"as good as it gets." Our first priority should be to develop a uniform trauma system in our country—one that's able to provide consistent, high-quality care. Regardless of our final recommendations for implementing alcohol screening and interventions in trauma centers, the impact of those recommendations will depend on the extent to which there is a uniform trauma system across the country.

In our zeal to support a very good cause, we must be careful not to exaggerate in the document that will come from this symposium. I do not believe that the majority of trauma occurring in this country is alcohol related, and certainly most of the injuries are not alcohol related. This doesn't mean that what we're talking about here today is not important. Alcohol-related trauma is a huge problem, and we need to address it aggressively. However, it is not prudent to approach issues such as this with hyperbole when we are only in the implementation phase. Hyperbole is valuable in the motivational phase, and this group is already motivated. We need to ensure that the recommendations are consistent with where we are in this field today. There is tremendous opportunity for collaboration between the alcohol research community, the prevention community, and the trauma community. It is clear to me that there are more patients who need these interventions in trauma bays than in primary-care offices or most medical practices. This is a "marriage of opportunity" with tremendous potential.

Trauma surgeons are going to do the right thing, and trauma directors are going to do the right thing. I do not think trauma centers will resist implementing alcohol intervention programs if "the right thing to do" has been defined. This will not require three prospective multi-center trials to prove it is the right thing to do. The program needs to be clear and simple with strategies designed to remove obstacles, and I think trauma centers across the country will be willing to implement it based on the fact that it's the right thing to do. Denial of insurance coverage is a huge issue. As long as exclusionary language remains a part of health policies, there will always be opposition to routine measuring of blood alcohol levels. And, it just takes a few stories on the trauma Listserve or circulating about in the trauma community to create insurmountable obstacles. One episode in your hospital where the insurance carrier denies a half a million dollar hospital bill because the injury occurred while the patient was intoxicated to would completely derail hospital support, and to some extent, trauma surgeons' support for existing or developing intervention programs. In North Carolina, for years we required alcohol intervention programs in our state designation process, along with BAC testing as part of the initial trauma resuscitation. When insurance carriers began denying payment for treatment of alcohol related injuries, we removed BAC testing from our state requirements for trauma center designation, and deleted it from our routine admission laboratory panel. That's certainly not good enough, and I don't pretend it is. But you can't perform BAC testing and risk the whole trauma center—that's just the practical, financial reality.

I agree with Dr. Hoyt in that we are not close to a position where the verification committee or the committee on trauma would be prepared to require either routine blood alcohol testing or a defined intervention program as a criterion for trauma center verification. But I do think we'll be in a position to open up some opportunities for this enterprise. We went through this process with the rehabilitation issue, a critically important part of trauma care. A lot of trauma centers had difficulty integrating the folks who were interested in rehabilitation into the routine care of the trauma patients. The verification committee and the committee on

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trauma have recognized rehabilitation as an important issue and have basically made the exclusion of rehabilitation personnel from the care of the injured patient, even in the acute setting, a criterion deficiency.

Instead of requiring alcohol interventions, we could develop the will to implement these approaches and develop the data to support them, making it possible to list active opposition to approaches by alcohol intervention experts within a center as a criterion deficiency. I think this should be our first step. There are a lot of opportunities available that will come out of this afternoon's heavy lifting, as we've been calling it. Now, I think we should get to the discussion since we've made a point of trying to make more time for it. These two speakers did a great job. Let's give them a round of applause.

Session 4: Discussion

J Trauma. 2005;59:S146–S154.

The editors of the proceedings prepared the following summary of participant comments made during the session.

Dan Hungerford

During this afternoon's discussion, Christine [Heenan] will construct a list up here on the newsprint of the obstacles and the strategies for overcoming these obstacles that we identify. We're passing out forms that you can use to rank the obstacles and strategies we come up with. The reason for doing this is not to identify what the majority of us believes, or to arrive at a consensus. After all, this is not a consensus conference. The goal is to sample the variety of perspectives represented here at the conference—to get some sense of how much or how little agreement there is on these issues.

One side of the form we're passing out deals with obstacles, and the other with strategies for overcoming obstacles. On the obstacles side, there's a scale of 1 to 5 for ranking the importance of each obstacle. There's also a yes/no question: "Is addressing this obstacle a necessary precondition to addressing others?" So, for example, in the discussion of insurance, we'd like to know if you think the insurance obstacle underlies a number of other obstacles. The other side of the form deals with strategies for overcoming obstacles, and the scoring is slightly different. There is a 1 to 5 scale for ranking importance of each strategy. In addition, there is a place to score the feasibility of each strategy. Please fill out the form so we can have your feedback even if you have to leave before the session is over.

In about 25 minutes or so, the steering committee will meet to consider recommendations. Your feedback on the forms and from our discussion this afternoon will help them generate draft recommendations that reflect much of our discussion, today and throughout the conference. Then tomorrow everyone will have a chance to provide feedback on the draft conference recommendations.

Christine Heenan

This afternoon's discussion will be divided into three parts. First, we will focus on questions for Dr. Hoyt and Dr. Gentilello. Then, we will list and attempt to categorize the obstacles to widespread implementation of interventions that have arisen during the last two days. During the third part, we will discuss strategies for overcoming obstacles. So that we can gauge the level of agreement among participants, we want each of you to complete a scoring sheet that is now being passed out. Let's begin with questions.

Herman Diesenhaus

One of the speakers in this session asked whether similar screening and intervention efforts exist in primary care settings. My agency, the Substance Abuse and Mental Health Services Administration (SAMHSA), and the Health Resources and Services Administration's (HRSA) Bureau of Primary Care collaborate on parallel efforts in community health centers. The San Diego model, presented by Dr. Sise during this morning's sessions is a good example. SAMHSA wants to support community-based grantees to improve access to interventions and treatment by linking emergency departments, primary care, and community agencies. The National Institute on Drug Abuse (NIDA) sponsored a July 2003 conference on substance abuse interventions in primary care. However, I'm concerned that these parallel efforts were fragmented. Can any of you give us input on how we can deal specifically with the issues you have in terms of your own system of care, and how we can integrate interventions? With other systems of care?

Larry Gentilello

There is a need to develop a core of trauma surgeons who do alcohol research, because I think if you're going to change the field of trauma care, the research has to come out of trauma surgery itself. I would also urge increased support for collaborative research that includes trauma surgeons. When I first wrote and submitted an NIAAA [National Institute on Alcohol Abuse and Alcoholism] grant on alcohol and injury, it included a good rationale based on trauma, but very little alcohol research methodology. It was actually quite naïve. NIAAA was very helpful in improving it and referred me to individuals with whom I could work. The advantage of that

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collaborative approach, where I eventually linked up with noted methodologists such as Dennis Donovan, was that when I eventually did get funded, the methodology used in the papers was sound enough to withstand scrutiny from both the alcohol treatment field and trauma surgeons. We certainly need, however, to develop a form of collaborative research that targets trauma surgeons specifically, because I don't think we're going to change anything in trauma centers if the grants are targeted and destined only for the alcohol treatment research community.

David Hoyt

In overseeing our medical group, I have observed that primary care physicians actually experience some of the same problems that we do in trauma, one problem being that we are all very busy. If anything, primary care physicians can be a little overwhelmed by their patient loads. I think the solution is extra resources, like the additional staff Michael Sise talked about in his presentation.

Janice Ford-Griffin

At Join Together in Boston, one of our initiatives is to emphasize the importance of quality treatment in the US, and attempt to increase the demand for such treatment through encouraging screening, interventions, and referrals in hospital and emergency room settings. For a number of years San Diego hosted alcohol and drug summit meetings. Did this collaboration result in an increased critical mass of interest and support that was helpful in establishing and expanding your programs, Dr. Hoyt?

David Hoyt

Michael Sise has been involved from the community standpoint and should comment, too. San Diego's success is a direct result of the commitment shown by trauma centers and directors. We also had support from public health partners, for both prevention efforts and trauma system development. I believe local leadership and collaboration are critical.

Michael Sise

The San Diego model was different because it involved community leaders in a single group. However, the most important thing that happened was that folks like Dave Hoyt and I took a step out of the trauma center. We showed up at alcohol and drug treatment conferences. We took part in a suicide/homicide audit committee. And, we had to learn a whole different language. We had to learn how not to finish each other's sentences. We had to learn English, right? I'm serious. I am deadly serious. That's what it takes. You have to learn a whole different language, move more slowly, and listen, all of which are not core skills for a trauma surgeon. Support from the county health director and treatment providers was also critical, but it made a big difference when trauma surgeons showed up at the substance abuse summit and community meetings.

Raul Caetano

The training issue has been raised several times during this session. When should we train trauma surgeons and other physicians about alcohol, drugs, and interventions—during medical school or residency? Who should do the training, and what should be the main focus? I serve on an advisory council for NIAAA, which has developed curriculum materials for primary care settings and is currently developing materials for social workers. I am also leading an educational initiative for the public health community. I think NIAAA would be responsive to a request for educational materials tailored to the needs of trauma surgeons. As a member of the national board of Mothers Against Drunk Driving (MADD), I know this organization is interested in science-based policies that prevent impaired driving, injuries, and underage drinking and would be very supportive of efforts in trauma centers.

Christine Heenan

How about some feedback on training trauma surgeons on substance-use issues?

David Hoyt

This problem is not unique to trauma surgeons. I think we should develop a curriculum for the medical-student level. A good place to start would be to partner with schools of public health.

Susan Nedza

The insurance laws we have been discussing do not apply to people who are covered by health plans which are federally chartered by ERISA [the Employee Retirement Income Security Act of 1974].* These plans are responsive to the payer community—large businesses that are represented on health issues by groups like The Leapfrog Group.† The Washington Business Group on Health, and the Pacific Business Group on Health. In the end, they are the deep pockets—not the insurer. Dr. Hoyt and Dr. Gentilello, would you both respond to whether or not you feel partnering with these groups presents an opportunity?

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*The Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans. http://www.dol.gov/dol/topic/health-plans/erisa.htm.

†"The Leapfrog Group is an initiative driven by organizations that buy health care who are working to initiate breakthrough improvements in the safety, quality and affordability of healthcare for Americans. It is a voluntary program aimed at mobilizing employer purchasing power to alert America's health industry that big leaps in health care safety, quality and customer value will be recognized and rewarded." Quoted from http://www.leapfroggroup.org/about_us.

Larry Gentilello

You are correct that self-funded and government insurance plans are not covered by the UPPL.[‡] These are actually the plans that cover the majority of patients in this country. So, rescinding the UPPL in the states that have it is only a partial solution. It takes a long time to change laws and will probably require different strategies at the state and federal levels. Changing policies in ERISA-based health plans will require federal action, and changes at either level will require a partnership that goes beyond just trauma surgeons. Partnering with the National Highway Traffic Safety Administration is a good idea because of its goal to meet federal targets for drunk driving.

David Hoyt

I agree. Private business groups are going to be one of the major change agents in the next 50 years, assuming that they stay solvent. The other one, though, will be Medicare. Medicare needs to weigh in because how it goes, so goes everyone else. A very important target for this conference would be to suggest that a critical set of services become Medicare approved.

Eric Goplerud

A useful framework for bridging the chasm between what is known to be effective and what is practiced is the Institute of Medicine's (IOM) report *Crossing the Quality Chasm*. The report describes the four essential areas for improving quality in clinical practice. One, knowledge or science of what practices work. Two, a workforce with the skills to implement those practices. Three, clinical and other support systems that encourage those practices, and four, the financial incentives. This knowledge could be summarized by the National Institute on Alcohol Abuse and Alcoholism, by the Preventive Services Task Force, or by updating Treatment Improvement Protocol 16 that Peter Rostenberg developed. We have the knowledge, but the big gap is in current practice, the skills area. Rapid-cycle quality improvement models used in emergency departments would be helpful. The Veterans Administration (VA) and others have used the Institute for Healthcare Improvement (IHI) to reduce waiting times in emergency departments. One thing that we might do is to call for an IHI collaborative. It could be funded by CDC, SAMHSA, or the Centers for Medicare and Medicaid Services (CMS). The network of Addiction Technology Transfer Centers supported by SAMHSA could develop training. On financing, I recommend commissioning a billing study to identify available CPT or CMS codes that could be used to obtain reimbursement. A cost-effectiveness study, using the model developed by the US Preventive Services Task Force, could also be useful. However, I would first just suggest the IOM's *Crossing the Quality Chasm* as the framework for helping us move from science into the application. This report is a well laid out roadmap for the general health care system.

Kimball Maull

Regarding BAC levels, a number of states allow hospitals to report this information. The scientific basis for the legislation allowing reporting of BACs came from a 1984 JAMA article, which showed that alcohol-impaired injured drivers were not being convicted of drunk driving. The conclusion was that hospitalization protects the injured drunken driver. In this article, we called for collaboration between the medical profession and the judiciary. I was a little distressed to hear a number of my colleagues say, "Well, it's not my responsibility." Despite the surgeon's priority to patch these patients up, if we let them back out on the highway, we are recreating the problem. So I have a plea. I know we are talking about screening and brief interventions, but if we do not address the hard-core drunk driver, then I think we will be abdicating the responsibilities of this conference. Does HIPAA legislation affect the state laws that allow hospital reporting of blood alcohol levels?

Susan Nedza

For reporting infectious diseases in Illinois, we have been told that if state law mandates reporting, it is HIPAA exempt.

Gordon Smith

There is an article on HIPAA reporting requirements for infectious disease published in *Morbidity and Mortality Weekly Report* about a month earlier.[§] It is the clearest thing I have read on HIPAA, and it underscores the mandate for public health reporting.

Herman Diesenhaus

One of the things that I'm going to carry away from this meeting is the need for a crosswalk between HIPAA requirements, 42CFR, and your needs. Our office— specifically Ann Mahony,[‖] who is also at this conference—is the federal agency which provides technical assistance on 42 CFR Part 2 in conjunction with the Office of General Counsel. We have

[‡]Embedded in the Uniform Accident and Sickness Policy Provision Law (UPPL) is a provision that allows insurance companies to deny payment to doctors and hospitals that render care to patients who are injured as a result of being under the influence of alcohol or any narcotic not prescribed by a physician. Further information at http://www.ensuringsolutions.org/alcoholexclusions/fact.htm.

[§]Lucido L, Koo D, Hodge JG. HIPAA Privacy Rule and Public Health: Guidance from CDC and the U.S. Department of Health and Human Services. MMWR 2003;52(S-1):1-12. Available online from http://www.cdc.gov/mmwr/preview/mmwrhtml/su5201a1.htm.

[‖]The current 42 CFR part 2 contact at SAMHSA is Dr. Kirk James at kirk.james@samhsa.hhs.gov and 240-276-1617. A useful publication is SAMHSA's Technical Assistance Publication Series 13: Confidentiality of Patient Records for Alcohol and Other Drug Treatment (DHHS Publication No. (SMA) 95-3018), available online at http://www.treatment.org/TAPS/TAP13/TAP13TOC.HTML.

a HIPAA coordinator[¶] and HIPAA workgroup who are looking at where 42CFR governs and where HIPAA governs. However, I don't know if they've addressed some of the specific issues that relate to trauma centers. The question that came up this morning is another important one. Is a whole hospital covered by 42CFR or just the specialty clinic? So, we will be glad to work with you on these issues.

Ronald Stewart

I don't think that physicians need to collaborate with the judiciary to identify and prosecute impaired drivers. The simple solution to the low prosecution rate is to put in the emergency department a police officer who has adequate authority to require that blood alcohol levels be drawn. It's a slippery slope when physicians have to report patients to law enforcement.

Christine Heenan

We need to get back to discussing specific obstacles and strategies. During both the morning and afternoon presentations and discussions, I've identified eight topics that were discussed: (1) reimbursement for new services offered in the trauma center; (2) outcomes and basic definitional issues, for example: "How do we define the problem? How do we define the population? How do we define success?"; (3) insufficient data about interventions in trauma centers—on efficacy, effectiveness, the best screening instrument, which populations to intervene with and under what circumstances, and intervention outcomes; (4) leadership in hospitals and trauma centers; (5) awareness or absence of training; (6) legal/policy, which includes laws that exempt insurers from paying for services to alcohol-impaired patients and HIPAA requirements; (7) financial concerns and resources, e.g. money for dedicated staff and training; and (8) patient barriers. Have I missed any topics?

Donald Trunkey

I'm confused about the insufficient data category. A 1996 study published in *Lancet* showed that long-term treatment for individuals with alcohol problems had better outcomes than treatment for patients with diabetes, asthma, or hypertension. The outcomes in that study were associated with long-term treatment, but this conference has focused on brief interventions. However, if the Lancet data are correct, one of our goals should be to get people into long-term treatment. If the data are not correct, then this is an obstacle.

Christine Heenan

I want to address a question to Dan Hungerford. Should we be considering obstacles and strategies in the context of brief interventions only or interventions that include long-term treatment as well?

Dan Hungerford

This is a bit of a false dilemma. Many people who advocate the use of brief interventions use the term as shorthand for providing a brief intervention for patients with mild-to-moderate problems and using a brief intervention to motivate patients with severe problems to act on your referral to more intensive treatment. So, I don't think it's a matter of focusing only on the people with milder problems to the exclusion of people with serious problems, or vice versa. I think we should cover the whole spectrum of problem severity. However, we need to tailor the onsite intervention to the severity of the patient's problem. The entry point is the screening. Concerns about insufficient evidence of efficacy reflect differences among trauma surgeons such as, "How much evidence is going to be needed by the trauma surgery community before it will move forward on promoting interventions for alcohol problems or alcohol and drug problems?"

Christine Heenan

Some of you may think there is sufficient data, but feel the data just hasn't been disseminated or shared. This is a knowledge obstacle. We shouldn't view our task here as coming to consensus on the obstacles listed, but rather to make sure the obstacles are roughly reflective of our discussion in this session and to add to the list, if necessary.

Larry Gentilello

Trauma centers have many commitments and recently terrorism and disasters have been added to the list. Shouldn't we add multiple competing priorities as another obstacle?

Susan Nedza

Another obstacle we discussed was the lack of a business case model—a cost-benefit analysis showing the value of screening.

Carl Soderstrom

Should we deal with obstacles as large as cultural change? Alcohol is big business, which influences the culture. To really affect change, we have to change the culture in the United States away from one that condones drunkenness. We also need to confront the negative stereotypes that develop during medical training. A study published a number of years ago in *JAMA*[#] demonstrated that medical students developed negative attitudes toward alcoholics during medical

[¶]The contact person for SAMHSA's monograph comparing 42 CFR Part 2 and the HIPAA Privacy Rule is Sarah Wattenberg, the SAMSHA HIPAA Coordinator. She can be contacted at Sarah.Wattenberg@samhsa.hhs.gov or by phone at 240-276-2975.

[#]Geller G, Levine DM, Mamon JA, et al. Knowledge, attitudes, and reported practices of medical students and house staff regarding the diagnosis and treatment of alcoholism. JAMA. 1989;261:3115–3120.

school. Another study** showed that emergency physicians believed alcoholism is treatable, but that alcoholism is difficult to treat. So, I believe that the culture of attitudes and misconceptions about alcohol is a major obstacle.

Basil Pruitt

The title of this conference includes drug problems too. Are screening and treatment procedures identical for patients with alcohol and drug problems?

Christine Heenan

Most of today's discussion has focused on alcohol. However, Tom Babor mentioned the ASSIST [Alcohol, Smoking and Substance Involvement Screening Test] instrument, which screens for both alcohol and drugs.

Larry Gentilello

It is rare to find patients with only one substance-use problem, particularly among younger patients. In our study at Harborview, 46% of the patients that we labeled alcohol problem patients actually also had a problem with drugs. Therefore, I recommend screening for both alcohol and drugs.

Christine Heenan

At this time, I think we should shift the discussion from identifying obstacles to considering strategies for implementing programs in trauma centers. Earlier in the conference, someone suggested that external partners could provide screening and intervention services rather than having emergency department staff assume additional duties. Dr. Sise, would you comment on this?

Mike Sise

The San Diego model uses an external partner. Dr. Dennis Kelso, who is experienced in substance-abuse counseling, screening and brief intervention, put together an organization to provide the screeners and to train them. So it's a matter of outsourcing.

Larry Gentilello

The primary goal of this particular strategy was to designate staff other than the trauma surgeon to provide these services.

Christine Heenan

Then I think the broader strategy is to consider designated staff. One specific strategy for implementation would be the San Diego model—an external partner staffs, trains, and employs the individuals who will do the brief interventions. Next, let's discuss more research and dissemination of research on efficacy and outcomes. Some specific discussion around research strategies included multi-center clinical trials and also collaborative research including experts in alcohol and addiction. (*No comments from group.*) How about the strategy of reorienting or broadening federal funding?

Larry Gentilello

I think the strategy should be "focusing federal funds." The federal effort is broad, with no specific focus on trauma centers. If we want trauma centers to become sites for screening and interventions, then federal agencies should specifically target them for funding. Trauma surgeons are at a disadvantage competing against alcohol researchers for grants on alcohol treatment efficacy, as they are experts that know the field better. So, trauma surgeons and alcohol researchers need to collaborate, but federal funding needs to be focused toward trauma care so that more research that is relevant to trauma centers actually gets performed.

Christine Heenan

So, targeting federal funds for trauma centers is one strategy. Collaboration is another strategy, and the two are not mutually exclusive. More trauma center-specific research that includes trauma surgeons would help trauma surgeons understand what this looks like and feels like. For this to be implemented in their care settings will require research done in trauma centers by trauma surgeons as PIs.

Herman Diesenhaus

As a federal employee, I have a question for Larry [Gentilello]. More focused federal funds for what? Research, dissemination, implementation, or all three? There are different funding mechanisms in different agencies.

Larry Gentilello

All three, and I would add there needs to be continued federal oversight and efforts. For example, two years ago we had a conference very similar to this on emergency medicine and implementing brief interventions. There were, I think, six federal agencies represented. After the conference ended, there was no follow up by any of the participating federal agencies with respect to helping participants actually implement the recommendations of the conference. I would like to see the federal agencies become as convinced as we are that intervention in trauma centers deserves funding for dissemination projects and foundational research. Perhaps CDC could take the lead in this follow up by alerting agencies about current research and specifically who is applying for grants. This information could be posted to the Trauma Surgery website.

Christine Heenan

And the federal government's response is?

**Chang G, Astrachan B, Weil U, Bryant K. Reporting alcohol-impaired drivers: results from a national survey of emergency physicians. Annals of Emergency Medicine. 1992;21(3):284–90.

Herman Diesenhaus

There have been several efforts to follow up. The announcement that's on the table from my agency is an implementation announcement that suffers from the very weakness you just pointed out. It is not dedicated to any one treatment system because of the need being so great. If there is going to be specific follow-up for trauma surgeons, you have to become salient to key decision makers in a way that you haven't been before. Before I became a federal employee, I used to think the feds could do it. Now that I am employed by the government, I can say that you have more power to influence federal funding than we do. So the point is, my agency is charged with implementation, dissemination, and training; the research institutes are charged with research, for example, multicenter clinical trails. This requires a totally different mindset. We can talk about curricular development later.

Christine Heenan

Actually, curricula reforms or programs within medical schools or residencies were discussed, but are not currently on our strategy board. So, we will add *reform training modules*. *Engage leadership, study financial outcomes,* and *widespread use of the BAC* were also discussed as strategies.

Anara Guard

Two other strategies are worth adding. First, Dr. Sise recommended community or local involvement. We need to add this to the list. Another strategy would be to cultivate nontraditional partnerships like the Institute for Healthcare Improvement (IHI).

Christine Heenan

Leap Frog would be another to add to this category along with nontraditional partners like IHI and large businesses with self-funded insurance plans.

Larry Gentilello

When Carol Schermer presented her survey, one of the leading obstacles was concerns about confidentiality. Should this be under the legal and policy category?

Christine Heenan

Confidentiality is listed by 14% of the surgeons surveyed as a perceived obstacle. We haven't yet discussed this as a group. Is confidentiality an obstacle in the trauma-center setting?

Eric Goplerud

There's a section on confidentiality in the TIP on trauma, which is an outdated 1995 report.[††] A very simple strategy would be to update this report to include HIPAA or create a totally separate report on confidentiality. We should also consider how to get other organizations to sign on to this agenda. There was a 1991 AMA Resolution that supports getting BACs on everybody admitted with trauma injury. Getting BACs should be one of our strategies, but having other organizations sign on to our strategies should also be a goal.

Christine Heenan

I've written it down as "sign on."

Eric Goplerud

Another issue is to set up a national training quality improvement system, which is focused on trauma centers and uses, for example, the IHI collaborative model. One of the points that IOM's *Crossing the Quality Chasm*[‡‡] makes is that there is at least a 12- to 15-year lag from the time that science demonstrates something as being clinically effective until it moves into practice. We need to speed up this process.

Charles Lucas

Again, the only way to find out whether the legalization of street narcotics should be identified as a strategy is to put it on the list and let people vote on it. Over half of the people voted yes earlier this morning on a straw vote and that included just about all of the trauma surgeons. So let's put it on the list and find out where it stands.

Donald Trunkey

Could we change that to legalization/regulation?

Larry Gentilello

It's really important that we define what we mean. Legalization and decriminalization are distinctly different things, and people confuse the two. Dr. Lucas made the point that the *only* problem (and I emphasize the word "only") with morphine is that it's not sterile, causing abscesses. He made the point that the *only* problem with cocaine is that its dose is not regulated, causing toxicity. I would say that those are the only surgical problems that arise from drug addictions. Drug addiction in and of itself is a problem. Speak to any family member or patient, and they will tell you that. Legalization just means it is available, and its use is not a problem. We'll tax it and so on and so forth. Decriminalization makes it an illness—not a crime. So, if you're found to be in possession, following Dr. Trunkey's recommendation, you get treatment—not jail time. Decriminalization doesn't legitimize use and implies the hope of recovery. Legalization means that we

[††]Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series 16: Alcohol and Other Drug Screening of Hospitalized Trauma Patients. Rockville, MD: U.S. Department of Health and Human Services, 1995. DHHS Publication No. (SMA) 95-3039. Available online at http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.36481.

[‡‡]Institute of Medicine, Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press, 2001.

give up on treatment and let it be freely purchased, like going to a pot café in Amsterdam, so it can be taxed.

Donald Trunkey

I prefer legalization, but is it feasible? 70% of Americans oppose it. When I say legalization, implied in that is medical treatment. Medical treatment becomes mandatory once a crime has been committed. Whether treatment referrals are mandatory if a crime has not been committed is another issue. Drug use is going up. The most common drug we find in a study we're doing on high school athletes is Ecstasy, which they combine with alcohol. If we don't test for this to obtain good data, I think we will have wasted a real opportunity here.

David Hoyt

The thing that I've seen most effective in the last 10 years in getting the attention of our hospital administration, our dean's office, and the health care community that I live in has been identifying and measuring certain aspects of health care. In this case it would be providing interventions by what I'll call the providers. Is that on that list?

Christine Heenan

I think "process outcomes" covers that some, but it's also a strategy for engaging leadership.

David Hoyt

If identifying and measuring of certain aspects of health care is not on our strategy list, it should be. I'm talking about Leap Frog, which sort of boiled out of the business community in response to rising health care costs and as a way to influence health care quality. Whether it's right or not, it seems to have jarred the medical community into action. I think the implementation strategy that we're looking for, specifically for interventions (assuming we think it *is* good science), is really going to have to come from external agencies.

Christine Heenan

I think the Leap Frog engagement, the way you talked about it in your presentation discussion is meant to be captured in nontraditional partners, but it's also a strategy for engaging leadership in hospitals and trauma centers.

David Hoyt

That doesn't quite do it for me. Let's call it "engaging payers."

Mike Sise

Dan [Hungerford], I think this conference needs a screening and brief intervention. [Laughter.] If we're going to accomplish what we've set out to, we obviously need to have more education because there's a tremendous spectrum of levels of education on this topic among our opinion leaders.

Christine Heenan

Let's each assign our top three priorities, among the strategies that have been discussed; and note the obstacles you want addressed as guidance to the Steering Committee discussion that will follow this one. Meanwhile, Dr. Sise, why don't you make your bid for strategies you'd like to see in addition to education, as the top strategies that would occupy discussion about recommendations?

Mike Sise

There has to be a basic set of studies. Our non- trauma surgeons in this room ought to recommend the set for us to read—maybe the top dozen studies. We can use these to see whether we agree or not on the level of evidence. Then we can discuss what further evidence will be needed to convince both ourselves and our colleagues of what to do with our patients who are at risk for alcohol and drug misuse.

Christine Heenan

Okay. So, Are there other specific recommendations?

Anara Guard

If we're going to lobby, then I'm going to lobby against the obstacle of needing more outcomes and efficacy studies. The reading list should include an editorial by Dr. Barry Pless that appeared in the most recent issue of *The Journal of Injury Prevention* published by the British Medical Society and the leading commentary in the most recent issue of *Public Health Reports* by Judith Curland. Both are based on the prevention principle, which has been used in environmental health for a long time and is now being examined by other fields of public health. Basically, this principle states that if we had waited for perfect data on asbestos, if we had waited for perfect data on lead paint, we would still be waiting and doing nothing about the problem. My impassioned plea is that I think the data are good enough to use. What other choice do we have? To keep doing what we're doing now, which isn't much and isn't enough?

Susan Nedza

This is specifically what has been done in the medical errors arena. A bibliography was put together—an annotated bibliography including articles and a summary—and that has then been disseminated. This was done through the National Patient Safety Foundation. This is a model we should follow

Larry Gentilello

There's already a Cochrane report on alcohol interventions to prevent injuries, which concluded there was already sufficient evidence. So all we really need to do is download the Cochrane database. In his introduction to the conference, Dr. Pruitt mentioned the Cochrane collaboration reported insufficient evidence for prevention, but that was an analysis of primary prevention interventions—ones designed to prevent adolescents mostly from developing an alcohol problem

in the first place. With respect to the question, "Do interventions reduce the risk of repeat injury?" there already is a Cochrane Report on that answering in the affirmative.

Christine Heenan

What's another high priority strategy or recommendation that you'd like the Steering Committee to consider?

Larry Gentilello

The role of the COT [American College of Surgeons Committee on Trauma].

Christine Heenan

What would you like that role to be?

Larry Gentilello

The COT sets the standards and guidelines that those of us who do trauma care in the United States live by. It has more clout for getting this agenda put forward than probably any other entity. It could require that screening and interventions be an essential component of trauma care. Or, it could make it a recommended component, or something in between.

Christine Heenan

Dr. Meredith, how should the COT be engaged on these questions?

Wayne Meredith

Specific recommendations would be very helpful. The role of the COT can be played out in several ways. One, if we could develop a curriculum, we could use it to disseminate some of these skills to trauma surgeons. I'd applaud the effort and suggest that our prevention committee take that on. We also can engage folks like Larry [Gentilello] to help develop a position statement describing what should be done or to develop an evidence-based medicine guideline that the Committee on Trauma could recommend. The resultant product would be disseminated to trauma centers and trauma directors. And we can develop material for the gold book [*Optimal Resources for Care of the Injured Patient*]. There are many places in that book we could describe "ideal" trauma center care without mandating it as one of the essential criteria. I do not believe it will be possible to make an alcohol intervention program an essential criterion until some obstacles are removed—the insurance piece, for example, and where the resources would come from. Relatively quickly, we could probably gain the momentum to make intervention programs a criteria deficiency if a trauma director or a trauma program resisted efforts from either the prevention or the alcohol treatment communities to collaborate with the trauma program. Now *that* would be a criteria deficiency. One is not committed to trauma care or to proper prevention efforts if active participation is resisted. We cannot force the trauma centers to seek out the prevention and alcohol treatment communities. But, if those groups come knocking on the door, the COT can make sure somebody will answer and let them in.

Christine Heenan

Evidently, there are some specific strategies beyond developing a criterion deficiency.

Wayne Meredith

Developing an evidence-based medicine paper would be valuable.

Christine Heenan

Dr. Hoyt, do you have a specific recommendation or strategy?

David Hoyt

In September, the American Association for the Surgery of Trauma is dedicating part of its meeting to something that Carol [Schermer] is putting together. It will be an interactive questionnaire to poll trauma surgeons from around the country on these issues. That would be an opportunity to get feedback on the results of this conference.

Herman Diesenhaus

The Administrator of SAMHSA, the agency that I work for, and the Administrator of Health Resources and Service Administration (HRSA) are going to have a joint listening session to which representatives of various groups with issues for these agencies are invited. The current level of interaction that HRSA has with emergency medicine and trauma surgeons seems low. But HRSA and SAMHSA are the two federal agencies that are charged with training and capacity building for medical and substance treatment services.

Christine Heenan

I want to turn back to Larry Gentilello and ask, just because it was discussed as a major barrier on the insurance side, what happened in those six states that changed their insurance laws?

Larry Gentilello

The process usually starts by speaking to the state alcohol and drug abuse director. Every state has one. You make a presentation to the National Association of State Alcohol and Drug Abuse Directors (NASADAD)—and they always agree that these insurance denials are bad policy—and then you find a committed trauma or emergency physician in the state who is willing to testify and coordinate the effort. I've been working with emergency medicine people because long ago they passed a resolution to repeal the UPPL laws. You should also make a presentation to your State Board of Emergency Medical Servics (EMS). The board will unanimously agree that this law be repealed. So now you have two state agencies, the State Board of EMS and the State Board of

Alcohol and Drug Addiction, in agreement. These agencies have entree to legislators' offices and to state insurance commissioners' offices. Next, building a network of stakeholders is crucial; Mothers Against Drunk Driving, for example, is very active because it wants people tested. The National Commission Against Drunk Driving also is very active. Together; we have about 30 organizations, and others, who will write letters to key legislators and send mass e-mails and faxes at opportune times, and they will send people to testify. And we get it done.

Christine Heenan

I'm curious. Does law enforcement weigh in with opposition in any of the six states that changed their laws?

Larry Gentilello

Law enforcement is supportive. The American Association for the Surgery of Trauma (AAST) is the organization that has enabled this to happen. When I chaired its Prevention Committee, I approached key members, particularly Gill Cryer, who were very enthusiastic and supportive, and they provided the financial foundation to enable this coalition to get started.

Christine Heenan

Let's discuss the last three strategy offerings and then ask Dan [Hungerford] to set the agenda for tomorrow.

Peter Rostenberg.

Leadership. We are the "leadership," but we are not leaders only for trauma surgery in trauma centers. What we do here will be emulated in community hospitals throughout the country. That's where most trauma care in the U.S. is delivered. We have a tremendous opportunity and a tremendous responsibility. I'm not afraid to ask for money. To get leadership, we need to ask for money. Our efforts need ongoing funding.

Chris Dunn

I'm glad that Peter [Rostenberg] mentioned leadership because it is my understanding that all the strategies we've listed work toward the goal of disseminating brief interventions broadly to trauma centers. I think this dissemination task takes an organizational intervention. When I look on our list of strategies, leadership is the closest one to an organizational intervention. Perhaps some of you think of leadership as all encompassing and as including all possible organizational strategies that might influence trauma centers to implement brief interventions. But there are other ways too. Engage the American College of Surgeons. Capitalize on the survey that's going out by disseminating the results to help change organizations. Another way is through dissemination of innovation—as we saw with Carol Schermer's study. We need to broaden the "leadership" category in our minds so that when we assign a priority to it, we include all of these things.

Christine Heenan

Your point is correct. The only items on the list that speak to organizational change are "research on process outcomes" and "leadership," but despite Carol Schermer's presentation this morning, there hasn't been a discussion about dissemination to other institutions—specifically about what's working and where it's working. I think this is an important addition.

Christine Heenan

At this time, please turn in your scoring sheets. I think your input will yield some valuable suggestions for the Steering Committee. Dan [Hungerford], will now explain the agenda for tomorrow.

Dan Hungerford

I want to meet now for about an hour with the Steering Committee to sort through this afternoon's discussion and get its advice on specific recommendations. Between that meeting and tomorrow morning, I will put them in draft form and present them to the full group tomorrow morning. The rest of the morning will be devoted to getting your feedback. I think that our discussion of the obstacles and potential strategies this afternoon and looking at what you've written will be useful to the steering committee and me while we consider draft recommendations for tomorrow.

After the conference, I will take the feedback you give me tomorrow and incorporate it into revised recommendations and text to provide the background and rationale for each recommendation. After that, the steering committee and I will go through a series of iterations to produce a final set of conference recommendations on which we can agree.

Session 5: Discussion of Draft Recommendations

J Trauma. 2005;59:S155–S166.

Daniel Hungerford

To open the final session of the conference, I'll begin by distributing draft recommendations from the steering committee. This morning's discussion will be an opportunity to provide the steering committee with detailed feedback on these recommendations and to suggest important topics that may have been overlooked. Although each final recommendation will be only one or two sentences in length, each will also include a paragraph of supporting text. Our discussion this morning will help the committee to decide on final wording for the recommendations and to clarify the supporting text.

Final recommendations will not be a consensus or based on a majority vote of conference participants. Instead, they will represent areas of broad agreement among conference participants. I promise I will try to incorporate as many suggestions as possible into the next draft, but the steering committee, which represents the range of perspectives in the larger group, will have final approval of conference recommendations.

Please keep in mind that the sequence and numbering of these draft recommendations do not imply a priority order. Now, let's begin the discussion.

RECOMMENDATION 1: Trauma centers currently offer a variety of rehabilitative services, such as physical, occupational, speech, and nutritional therapies. Interventions for alcohol and drug problems carry the same high priority, and providing these interventions should be considered an integral part of the trauma center's mission.

There were no questions or comments on this recommendation, presumably because there was widespread acceptance.

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RECOMMENDATION 2: Because the alcohol and drug problems of trauma patients are a major public health concern and population-based surveillance data are not available, reporting of problems to public health authorities should be mandatory.

Raul Caetano

I think that the term "population-based" is inappropriate for this recommendation. A variety of national surveys do provide data on alcohol dependence, alcohol-abuse problems, and heavy or at-risk drinking for the United States population. This recommendation focuses on patients in a specific clinical setting. Although Cheryl Cherpitel* of the Alcohol Research Group at Berkeley (http://www.arg.org/) has published epidemiologic data on alcohol-related issues among patients treated in emergency rooms, we lack data for trauma patients.

Dan Hungerford

Research studies generally collect data from one or two emergency departments for a short period of time. These types of studies are not equivalent to a surveillance system, which would provide national estimates based on a probability sample of all emergency departments and would monitor changes in those estimates over longer periods.

Herman Diesenhaus

The Drug Abuse Warning Network (DAWN),† run by the Substance Abuse and Mental Health Services Administration (SAMHSA) may provide for a broader sample of emergency departments than single-institution studies. However, institutions that contribute data to DAWN may not use uniform methods, and DAWN does not include data from trauma centers. Perhaps a trauma center module could be added.

Larry Gentilello

Trauma centers do not generally collect data on alcohol abuse or dependence. Rather, trauma centers log data on a patient's blood alcohol concentration (BAC). Therefore, the data we have will be about patients who are intoxicated, i.e., who are intoxicated after a stabbing, a crash, or a fall.

* See http://www.arg.org/cherpitel.html for a brief bio and selected citations.

† See http://dawninfo.samhsa.gov for further information about DAWN.

Dan Hungerford

The central issue is what, specifically, would the recommendation ask trauma centers to report. Larry [Gentilello], are you suggesting that trauma centers should report BAC and tox screens?

Larry Gentilello

We need to clarify this. DAWN provides reasonable information about surges in problematic drug use in specific cities, such as new outbreaks of medical problems with Ecstasy or methamphetamine use. Hospitals in the system abstract information about drug use, even legal and over-the-counter drugs, from the medical records of patients. However, the weaknesses of the system are that doctors rarely order tox screens, and when they do, it is not on a systematic sample. Although the hospitals that DAWN samples are representative, the system clearly underestimates the proportion of patients who present under the influence of drugs. I am a member of DAWN's advisory board and can raise the issue of including trauma centers, but it will be a hard sale.

Dan Hungerford

There are two major issues with this recommendation: 1) what specific data should be reported? and 2) should reporting be mandatory? Let's have some discussion on the second issue.

Jeffrey Hammond

This recommendation could be dangerous without provisions for anonymity and confidentiality. Remember that celebrated lawsuit in New Jersey? It involved unauthorized release of emergency department records showing a patient's alcohol information and eventually cost the Medical Center at Princeton $2 million. I'm concerned about the definition of terms in this recommendation. Does the term "problem" in alcohol and drug problems refer to driving under the influence (DUI)? Elevated blood alcohol levels? Positive tox screens? "Public-health authorities" is also ill-defined. Do we mean local, regional, state, or federal authorities? Moreover, how will authorities use reported information? Finally, use of the term "mandatory" creates an unfunded mandate for reporting institutions and public health authorities. I'm concerned that the data will not be used. Although widespread surveillance might be an appropriate long-term goal, implementing screening and brief intervention should be the higher priority.

Eric Goplerud

There are a number of surveillance systems that might address alcohol and drug involvement in hospitalized trauma cases, for example, HCUP (the Healthcare Cost & Utilization Project),[‡] the National Hospital Discharge Survey,[§] and community epidemiology workgroups (CEWG) supported by the NIDA (National Institute on Drug Abuse), SAMHSA, and ONDCP (the White House Office of National Drug Control Policy).[‖] This recommendation should suggest using existing surveillance systems to obtain trauma data, and managers of these systems should be involved in determining how the data will be used.

Dan Hungerford

Some of you have indicated that trauma centers are not routinely or uniformly capturing data such as blood alcohol levels and tox screens and also are not transferring data to parties who could aggregate local data for broader public health use. I believe the goal of this recommendation should be to improve the quality of data by requiring the collection of routine and uniform data in trauma centers.

Eric Goplerud

One reason that DAWN has not been useful is that alcohol involvement was only reported when used in conjunction with other drugs. This has now been changed. I recommend that groups involved in collecting and using this data expand their focus to include trauma patients.

Gordon Smith

I agree. DAWN has had many problems from an epidemiologic point of view. However, it could be improved by including a random sample of perhaps 120 trauma centers and by funding routine alcohol and drug testing in those centers. The confidentiality of the data would need to be carefully protected. Carl Soderstrom has done innovative work testing leftover blood samples. I think that a cost-effective system could be built that would demonstrate that the prevalence of alcohol and drug involvement is far higher in trauma services than in outpatient emergency departments. The next step would be to form a working group.

Carl Soderstrom

DAWN data are abstracted from medical records. However, information in the record does not reflect any systematic method or protocol for asking questions. For example, abstractors identify drug mentions, a concept that is not well defined. Clearly, the number of patients tested for alcohol or drugs in emergency departments is miniscule. Adequate surveillance does not require a large number of hospitals, just a reasonable sample, and the National Trauma Data Bank[¶] could be used to identify centers that are already testing large

[‡] For further information, see http://www.ahrq.gov/data/hcup/.

[§] For further information, see http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm.

[‖] For further information, see http://www.whitehousedrugpolicy.gov/.

[¶] For further information, see http://www.facs.org/dept/trauma/ntdb.html.

numbers of patients. Ten large centers that test routinely might be adequate if the sample accounts for variation in mechanism of injury and demographics. Right now, the literature is full of anecdotal reports, with no consistent method. So, because the estimates we currently have are not useful, the National Trauma Data Bank would be a good place to start.

Dan Hungerford

Surveillance systems can be structured to serve two somewhat different goals: 1) to measure the total impact of a condition by producing accurate estimates of the prevalence of a condition in a population, in this case, hospitalized trauma patients or 2) to serve as a sentinel system—an early warning system for changes in the prevalence of a condition over time or in specific parts of the country. Relatively few institutions are required for a functional sentinel system, but data from a sentinel system may not be adequate to produce reasonable prevalence estimates for the patient population served by all trauma centers. Similarly, data from a few large institutions probably will not produce estimates that accurately reflect conditions in the many smaller, non-urban trauma centers. Which of these goals is the most important at this point in time?

Carl Soderstrom

In the Baltimore trauma center, 85% of the patients come from outside the beltway—not from the inner city. Throughout the country, there are many trauma centers that serve as the only center in a particular region, and patients come from rural, suburban, and urban populations. When choosing a sample, this is an important consideration.

Michael Sise

We're discussing a condition that has been a root cause for trauma deaths over five-and-a-half decades. The Arrestee Drug Abuse Monitoring[#] (ADAM) process (drug testing of all arrestees on entry to the justice system) has been one of the most effective strategies for drug prevention in San Diego County. Trauma centers are part of the public safety net. Therefore, I recommend mandatory admission drug and alcohol testing and mandatory reporting to appropriate public health authorities. It's important to note that reporting required by regulation is not protected by the Health Insurance Portability and Accountability Act (HIPAA). However, protecting the confidentiality of patients' records is crucial to avoid nonreimbursement issues with insurance companies.

Herman Diesenhaus

I don't think the federal government will invest in another large-scale system to produce epidemiologic data specific to alcohol and drugs. However, there are other systems that could be linked to the National Trauma Data Bank. ADAM is one system but it's primarily a research surveillance tool of the National Institute of Justice. Its goal was to become a national probability sample, and it has not. Another is the Drug Evaluation Network System** (DENS), which is a highly automated system that provides data on patients entering addiction treatment and treatment programs. We can work with you to achieve this if there is agreement that we need to expand existing systems.

Donald Trunkey

Trauma surgeons routinely see nursing home patients who have fallen. Because approximately 6% of these patients are on blood thinners, surgeons generally get an International Normalized Ratio (INR[††]) because it is considered good medical practice. More than 50% of trauma patients present with a drug or alcohol on board. Although I don't see a need to test patients under the age of 10, data from mandatory testing would be useful for a variety of purposes, namely, to produce accurate estimates of this problem, to inform prevention programs, to assist patients in entering substance-abuse treatment programs, and to ensure proper medical treatment of trauma. Why are we debating this recommendation?

Carl Soderstrom

Because it is very important that this data be accurate when we talk to politicians and policy makers.

Heidi Hotz

Before a trauma service can become a trauma center, it must have a trauma registry, which measures performance, informs injury prevention programs, and even affects staffing ratios. I support mandatory BACs and tox screens on trauma patients. The data can then be entered into the trauma center's registry and reported to county and state registries, which in turn can be downloaded into the National Trauma Data Bank. This data will improve trauma care for patients with substance use problems.

[#] The National Institute of Justice's ADAM program tracks trends in the prevalence and types of drug use among booked arrestees in urban areas. The data play an important role in assembling the national picture of drug abuse in the arrestee population and have been a central component in studying the links between drug use and crime. See http://www.adam-nij.net/.

** The Drug Evaluation Network System (DENS) is an ongoing, multisite, electronic data collection and reporting system providing standardized, automated, and timely data via modem on patients entering addiction treatment and treatment programs. Sponsored by the White House Office of National Drug Control Policy (ONDCP) and the Center for Substance Abuse Treatment (CSAT). See http://www.densonline.org/.

[††] INR is a standardized measure of blood clotting function.

Herman Diesenhaus

The Community Epidemiology Work Group (CEWG[‡‡]) is a network of researchers from major metropolitan areas and select foreign countries that meets semiannually to review the current epidemiology of drug abuse. They review a variety of reporting databases, primarily for data related to illicit drugs, but trauma center data are not included. This recommendation should address how either DAWN or CEWG data could supplement data from the National Trauma Data Bank.

Christopher Dunn

I think this conference has been one of contemplation, not action, with respect to implementing brief interventions in trauma centers. We've been talking about changing the world, i.e., mandatory reporting, rather than discussing ways we can use the resources we already have to implement something that, according to all of the speakers, works. I don't sense broad agreement among surgeons about whether a blood alcohol level is medically required to manage a multisystem trauma. However, we do need to know if cocaine use is the source of deep depression in a patient 3 days after surgery. Is this patient in cocaine withdrawal or suicidal naturally? Drug and alcohol tests are important. However, we need to decide whether these tests are required for managing multisystem trauma. If so, we need to order these tests more often.

Michael Sise

This conference presents an important opportunity because so many leaders in the trauma field are in attendance. Trauma centers already enter blood alcohol levels and tox screens in their trauma registries. These data are important to inform prevention programs. For example, having data on teens admitted to trauma services helps inform prevention programs in high schools. Now is the time to improve the data, immunize it from misuse by insurance companies, and make it reportable.

Donald Trunkey

I think most conference participants agree that reporting should be mandatory. However, I'm concerned that many surgeons will resist reporting, either because they believe substance abuse treatment is not available or for reasons associated with civil liberties and violation of patient trust. If we could demonstrate that mandatory testing and reporting leads to better treatment and prevention programs, this may no longer be an issue for resistant surgeons. An appropriate first step would be to evaluate mandatory testing and reporting in specific geographic regions. This course would also improve current data quality.

RECOMMENDATION 3: Routine BAC and toxicology testing improves surveillance data, allows analysis of drunk driving prevention efforts, is useful for monitoring emerging trends in drug use, improves clinical management, and facilitates screening and interventions. In many states, current insurance statutes allow denial of payment for trauma care of patients identified by these tests. These statutes have been identified as a significant barrier to routine BAC and toxicology testing and should be repealed.

Larry Gentilello

These statutes known as UPPL[§§] impede adoption of screening and intervention programs in trauma centers and mandatory reporting of results. For example, Wayne Meredith, chair of the American College of Surgeons Committee on Trauma (COT), has stated that the College will not require screening and interventions until these statutes are repealed. Trauma centers will not screen if insurance companies deny payment for medical treatment. Through funding I have obtained from the Robert Wood Johnson Foundation, I can use funds to gather data on how the law affects screening but not to lobby for or against the law. However, there are several groups concerned with this issue who could lobby for repeal of these laws in a few high-profile states. Before-and-after studies would demonstrate how changes in the law enable trauma centers to implement screening and intervention programs. Surgeons in those states would then be able to testify about the effects in other states contemplating changing the law. Although I am not suggesting this as a formal conference recommendation, funding to hire a lobbyist could be raised through groups such as Mothers Against Drunk Driving (MADD), members of the Coalition for American Trauma Care (CATC), the American Association for the Surgery of Trauma (AAST), the American College of Surgeons (ACS), and the National Commission Against Drunk Driving (NCADD).

Jeffrey Hammond

Many trauma patients in New Jersey are covered by Empire Blue Cross of New York. Denial of reimbursement is common in New Jersey. This issue has been debated extensively in the Trauma Center Council in New Jersey, and 8 of the 10 trauma centers in New Jersey do not test for BACs specifically for this reason. When trauma centers are on the cusp of financial viability, it doesn't take many denials to

[‡‡] Established by the National Institute on Drug Abuse (NIDA) in 1976, the CEWG is a network composed of researchers from major metropolitan areas of the United States and selected foreign countries that meets semiannually to discuss ongoing community-level surveillance of drug abuse and provide current descriptive and analytical information regarding the nature and patterns of drug abuse, emerging trends, characteristics of vulnerable populations, and social and health consequences. For more information, see http://www.nida.nih.gov/about/organization/CEWG/CEWGHome.html.

[§§] Embedded in the Uniform Accident and Sickness Policy Provision Law (UPPL) is a provision that allows insurance companies to deny payment to doctors and hospitals that render care to patients who are injured as a result of being under the influence of alcohol or any narcotic not prescribed by a physician. Further information at http://www.ensuringsolutions.org/alcoholexclusions/fact.htm.

stop screening. It only takes a few denials of payment to affect policy. Some surgeons have suggested taking the insurance companies to court. We don't have the resources or the time to litigate the issue. Instead, we should make overturning laws that allow for denial of reimbursement a number one priority.

Raul Caetano

Again, I'm concerned about the focus on blood alcohol testing. This is not essential for conducting interventions or beginning data collection. I think this would only delay implementation of screening and intervention programs.

Donald Trunkey

Because many trauma patients are unconscious when they arrive, how can surgeons determine a patient's real health problem without knowing BACs?

Raul Caetano

I realize that BACs and tox screens are required for clinical management. However, blood alcohol levels are not necessary in studies which characterize the association between trauma and alcohol or drug use. For those purposes, other measures of risk are adequate.

William Schecter.

I think this recommendation should note that BACs and other screening processes are complementary procedures. There is no good reason we should not be reporting the epidemic of alcohol and drug use to public health authorities, like we do for infectious diseases. Tox screens and BACs should be mandatory and reported in a confidential manner to public health authorities. This language should be included in the recommendation.

Eric Goplerud

With regard to repeal of UPPL, Larry [Gentilello] is absolutely convincing that the term "must" ought to be used instead of "should" and that we ought to be searching for advocates, i.e., the American Hospital Association, the National Conference of Insurance Legislators (NCOIL), or other groups. Otherwise, how can we get support for these recommendations to give them life beyond a Center for Disease Control report? Although what I'm about to say doesn't quite fit under this recommendation, we ought to be looking for a way to take these recommendations to other groups that are likely to be concerned, for example, mayors of large cities where this is a significant issue. There are a number of groups who do lobbying that ought to be engaged on this.

Dan Hungerford

So, you are saying we need to promote these proceedings?

Eric Goplerud

Absolutely.

Herman Diesenhaus

We should be reporting trauma cases with alcohol or drug involvement. We don't need to determine the best way to operationalize data elements for this task because that would take a great deal of work. I'm impressed by surgeons' claims that about half of their trauma cases have alcohol or drug involvement and believe that policy makers would support new programs if these estimates can be verified. However, I am not aware of any good estimates in the sentinel or national surveillance systems. Throughout my years of working with state-based substance abuse epidemiology programs, I've heard about recommendations to collect such data in emergency departments and hospitals, but I'm not aware of any state-based substance abuse epidemiologists who are collecting such data. The lack of estimates from trauma services is a significant omission that should engage state substance abuse agencies as part of their effort to document the size of the treatment gap.

Dan Hungerford

Okay, let's move on to Recommendation 4. First, Basil [Pruitt]?

RECOMMENDATION 4: Based on the current body of evidence on efficacy, many expert and consensus panels have recommended screening, on-site interventions, and referral for substance-use problems in medical settings. To increase support for interventions for these problems, the evidence and recommendations should be disseminated throughout the field of trauma surgery.

Larry Gentilello

It's been suggested that the COT make educational information available. Professional meetings sponsored by the AAST could provide seminars, lectures, and CME opportunities, and substance abuse experts could also be invited to participate. The recommendation needs to be more specific about how to accomplish this goal.

Michael Sise

I've given Gill Cryer 20 articles on the efficacy of substance-abuse interventions, and we are planning on conducting an attitude survey of trauma directors and key staff in Los Angeles and San Diego counties. After the survey, we will ask respondents to read a set of articles and then reassess attitudes. Our colleagues in San Francisco could join the effort.

William Schecter

I suggest that the continuing education also include surgeons outside AAST. An interactive panel discussion at the annual clinical congress of the American College of Surgeons

would be ideal. Publication of this discussion in the Journal of American College of Surgeons would reach surgeons who deal with trauma all the time but who are not members of AAST.

Raul Caetano

I'm a member of National Institute on Alcohol Abuse and Alcoholism's (NIAAA) advisory council, which will be meeting next week. After consulting Peggy Murray, an NIAAA staff person attending this conference, I've decided to recommend that NIAAA develop an educational module to disseminate knowledge on brief interventions to trauma surgeons.

Larry Gentilello

Conference participants who specialize in substance abuse treatment and research have indicated that they didn't realize the opportunities to intervene for substance abuse problems with patients in trauma care settings. Perhaps you could invite trauma surgeons to present at your meetings to further your understanding of the opportunities in this clinical setting.

Kimball Maull

The COT Subcommittee on Injury Prevention and Control has a module on alcohol that focuses on the physiology of alcohol, alcohol-related injury statistics, and the effectiveness of drunk driving laws. This module is one way to get information to surgeons, but it needs revision to include information on interventions and assessments.

Larry Gentilello

The COT has a variety of downloadable slide sets on injury prevention, drowning, bicycle helmets, etc. The one on alcohol and injury is downloaded far more often than the others and often by those from other countries. However, these slides contain little information on interventions.

Eric Goplerud

Because trauma centers operate in hospitals, I think educational efforts should include the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), other accreditation groups, and the American Hospital Association (AHA).

Heidi Hotz

As President of the Society of Trauma Nurses, I want to highlight the key role trauma nurses and trauma nurse coordinators play in managing the trauma registry, education in the community, and injury prevention activities. We have access to hospital CEOs who have important decision-making power over the operations of a trauma center and to case managers and social workers who might be available to implement interventions. We are also often involved in performance improvement programs in hospitals and trauma centers. I recommend that trauma nurses be included in the development of educational modules and dissemination efforts.

Ann Mahony

In addition to the content of this educational module, a dissemination strategy is key. I suggest that we identify target groups and determine which communication methods will be used. Some helpful concepts and case studies on dissemination strategies can be found in *The Tipping Point: How Little Things Can Make a Big Difference*, by Malcolm Gladwell.

Peggy Murray

There are volumes of literature on what brings about change in medical systems and physician behavior. Because staff at the Agency for Health Care Research and Quality (AHRQ) is familiar with this literature, they should also be included in these efforts.

RECOMMENDATION 5: Although evidence on the efficacy of screening, interventions, and referral for substance use already exists, further research is required to optimize implementation, cost effectiveness, and increased efficacy.

Anara Guard

Who should implement this research? Conference participants agree that the trauma community should be involved in further research efforts, but the trauma community is not familiar with the existing research on the efficacy of screening and brief interventions. So, it isn't realistic to expect them to conduct this type of research by themselves. Others need to be involved—alcohol researchers, injury control researchers, insurers, and others with a stake in reducing negative outcomes. Also, this type of research should be funded by federal agencies.

Harold Perl

Even when the efficacy of an intervention is beyond doubt, we would want further research to optimize its effectiveness. That effectiveness research might be in addition to more efficacy studies or in place of them.

Dan Hungerford

This type of research can also be used to help lower the cost of screening and intervention protocols.

Editorial Note: The recording equipment malfunctioned at this point in the discussion. The discussion focused on how future research should help adapt screening and intervention methods to trauma centers. Participants suggested that screening and intervention protocols must be integrated into trauma centers in ways that fit prevailing practice patterns. For example, protocols should minimize the need to hire new staff or reorganize service delivery. Participants expected

that further effectiveness research would be required to achieve this goal.

RECOMMENDATION 6: Research is required to develop a menu of options to allow screening and interventions to be easily implemented in trauma centers with different characteristics.

William Schecter

I don't understand the wording in this recommendation. We have already elucidated screening tools, including BACs and urine tox screens. Why do we need this recommendation at all?

Harold Perl

Research may be the wrong word to use. The menu needs to be established, operationalized, and widely disseminated so it will be used. Perhaps federal agencies and professional groups could collaborate on this.

Heidi Hotz

This recommendation represents a "how-to" manual—how to get this implemented. Text should be general so that it will be useful for Level I, II, III, and IV trauma hospitals and flexible so that it can be applied in hospitals with different levels of resources.

William Schecter

We've been talking about establishing and disseminating a practice guideline for the management of these patients.

Dan Hungerford

I agree. "Research" may not be the best word here. However, we need to be careful about disseminating a "how-to" menu or practice guideline without first testing it in the field. This type of evaluation will produce a final product that's easier to disseminate.

Harold Perl

Perhaps we could call this type of effort "implementation research" or "translational research," a term currently used by the National Institutes of Health (NIH).

Heidi Hotz

I recommend that this effort include not only information on implementing the practice guideline, but also information on evaluation tools.

Dan Hungerford

Right. There are formative evaluation tools that are used to help decide which methods of implementation are best and other tools to evaluate the quality of ongoing services.

Eric Goplerud

Diabetes programs have implemented quality improvement processes that use performance metrics, which are measurements of specific processes associated with good outcomes. I think we should develop and use performance metrics to accompany any practice guideline. Also, we need to explore the Department of Defense and the Department of Veteran Affairs joint guidelines on substance abuse,[III] which define performance metrics.

Peter Rostenberg

I would call this a start-up kit and suggest including information about how to implement blood alcohol tests or self-report screening instruments like the Alcohol Use Disorders Identification Test (AUDIT) or the CAGE. Trauma surgeons will understand the benefit of screening once they see the literature. The important thing is for institutions to do something to manage their patients appropriately and to help them with their substance use problems.

RECOMMENDATION 7: Strategies for making screening and intervention a billable and reimbursable service should be explored.

Donald Trunkey

Why is this a problem? I believe I have been reimbursed for BAC and tox screens.

Peggy Murray

Dr. Trunkey, has your institution received reimbursement for screening with the AUDIT or CAGE instruments?

Donald Trunkey

I don't know.

Peggy Murray

Some physicians who are really committed to doing this have figured out ways to bill successfully for screening. I know Jeffrey Samet in Boston and Richard Blondell, now in Buffalo, have.

Larry Gentilello

I think more guidance is required because there is a great deal of confusion on this issue. Surgeons often spend extra time with patients because they have to address multiple problems. Currently, they can cover the additional costs by using evaluation and management billing codes for a higher level of care. However, there are no specific codes that allow surgeons to bill for time spent screening a patient for alcohol-related harm or for providing a brief intervention. Moreover, insurance companies will not reimburse surgeons for brief

[III] "Management of Substance Use Disorders in Primary and Specialty Care" is available online at http://www.oqp.med.va.gov/cpg/SUD/SUD_Base.htm.

counseling because they do not have state qualifications as a counselor. For this reason, we need to recommend a billable code that allows surgeons to provide these clinical preventive services.

Eric Goplerud

Recommending a billable code could be helpful in two ways. First, it could provide a "cookbook" of ways for trauma centers to get reimbursed for these services. Second, it would allow us to identify the kinds of cases insurance companies and other payers will not reimburse. Professional organizations and insurance groups could then use this information to address payment issues more systematically.

William Schecter

I recommend that we separate the issues of screening and intervention. Screening is part of the physician's job. My interns are already required to determine the smoking and drinking habits of patients. It wouldn't be difficult to add the CAGE questionnaire or the AUDIT. This is just good medical practice. However, the intervention would take more time and could be implemented by someone else, perhaps the trauma nurse coordinator or some other clinician. Chris Dunn has demonstrated to the group that screening and intervention do not require a great deal of money or manpower. It's a matter of explaining to hospital administrators the efficacy of adding an additional person.

Heidi Hotz

The financial viability of these services in trauma hospitals is key. For example, we could work with the Centers for Medicare and Medicaid Services (CMS) to get a billable code for these services. Can we also broaden the recommendation's focus to include all aspects of finance? Any start-up manual should include information on a variety of funding sources for this program.

Harold Perl

This is not something that should be funded for 2 or 3 years by an outside research organization so that when the research funding is finished, the intervention is also finished. The goal should be to make funding for interventions sustainable. Because this is a necessary public health activity, it deserves sustained funding from insurance reimbursement, the hospitals themselves, or local government agencies.

RECOMMENDATION 8: Federal and other funding agencies should provide ongoing support to develop and foster the implementation of screening, intervention, and referral of trauma patients with substance use problems.

Donald Trunkey

Some trauma patients are arrested and incarcerated for substance use problems but never get treatment. Drug courts, which provide a treatment option to incarceration, are a much more acceptable approach. Further research is required to identify alternatives to taking away patients' drivers licenses. If we take their licenses away, they are not able to support themselves and their families. We're not doing the proper thing for many of our patients. Incarceration is not the answer unless they've committed a crime, but we should not incarcerate people whose only problem is drug or alcohol use.

Harold Perl

There is ongoing research on impaired driving at NIDA, and both NIDA and NIAAA are participating in a major initiative on treatment in correctional systems. Dr. Trunkey noted that there are models, but they are not universally implemented. Broad dissemination has yet to occur.

Dan Hungerford

Notice that the recommendation reads screening and intervention and referral. The label has evolved over time. When I started working in this field more than 10 years ago, this was called SBI—screening and brief intervention. "Referral" was not included. Brief interventions can stand alone if given to patients who are categorized only as being at-risk—ones who are drinking in excess but haven't yet experienced harm as a result. Referral is an additional component reserved for those with more serious problems that can't be addressed by a brief intervention alone. Recently, SAMHSA published a request for proposals for screening, brief intervention, referral, and treatment (SBIRT), a label that emphasizes brief intervention is not enough for some people.

I don't want trauma surgeons to think that the only option is a brief intervention and that we're not really dealing with the people who need specialized treatment.

Anara Guard

I think the conference recommendations should include background text that expresses the strong support of conference participants—from the trauma and the drug and alcohol communities—for treatment rather than incarceration or worse, doing nothing. This is underlying principle of these proceedings.

Kimball Maull

I know I have a minority opinion, but I challenge trauma surgeons to tell me that you have never encountered a patient for whom incarceration was not the best treatment. Dr. Trunkey's caveat was "If a patient has not committed a crime, then don't incarcerate." What about the patient who is driving under the influence and involved in a motor vehicle collision where no one else is injured? Is it a crime if this is the patient's fourth or fifth DUI offense?

Donald Trunkey

Trauma surgeons complain about recidivism but don't take steps to get people into treatment. In a case like this, the trauma centers probably did nothing about the alcohol prob-

lem during the previous four or five alcohol-related admissions. They probably discharged the patient without help or information about how to get help. It seems to me this is an example of system failure as much as an example of unwillingness on the part of the patient to change behavior.

RECOMMENDATION 9: Because the ACS-COT's "gold book"[¶¶] is so widely accepted and important to the practices and priorities of trauma centers, we recommend that the ACS adopt language that makes alcohol screening, intervention, and referral an essential (desired)[##] component of trauma center operations. Any recommendation in this report for widespread implementation of screening and brief interventions for at-risk alcohol users should not be viewed as a strategy to replace or substitute for screening, intervention, and referral to long-term treatment for patients with alcohol dependence.[***]

Heidi Hotz

I suggest that the first sentence be incorporated into the ACS-COT requirements for verification of trauma center status as defined in the "gold book" (*Resources for Optimal Care of the Injured Patient*). The use of both "essential" and "desired" in the language of this recommendation is confusing. In an earlier presentation, Dr. Meredith stated he would recommend to the Committee on Trauma that "desired" be used rather than "essential."

Dan Hungerford

Both "essential" and "desired" were included in this draft recommendation because I expected the discussion to focus on which word to use for the final version.

Heidi Hotz

I think interventions should start as a desired component, not because this program is less important, but because many hospitals are already straining to meet the minimum requirements to remain a trauma center and are facing extreme budget cutbacks.

Kimball Maull

Many program criteria have started out as desirable but are now essential and vice versa. Criteria tend to evolve with each iteration of the "Optimal Resources" document. There is no way to know what decision the subcommittee on the document and the executive committee will ultimately make. Certainly, Dr. Meredith's opinion will be important. However, I think this group should take a firm position on intervention becoming an essential component of trauma care.

Carl Soderstrom

For many years, the "gold book" has described alcohol and drug testing as an essential component for Level I and II trauma centers and a desirable component for Level III centers. In the last edition, this line was dropped. I suggest that this recommendation should make it desirable to have alcohol and drug testing in all trauma centers. In a second line, the recommendation should make it desirable to have screening and intervention programs for substance abuse. I realize that most people in the room want this to be an essential element. However, with recent fiscal, operational, and legal restraints, I believe it is important to get this issue back in the book in some form.

Larry Gentilello

If this group cannot agree on making screening and intervention essential, or merely desirable, what was the purpose of this conference, as we would not be taking into account the information that we have been hearing for the last two days? The surgeons here have indicated that excessive alcohol use accounts for about half the injuries they treat. The substance abuse researchers have told the conference that screening and counseling patients will save lives and decrease trauma recidivism and drunk driving. So, if we accept these two conclusions, it doesn't make sense to simply make screening and intervention desirable rather than essential. This would be like having a conference on diabetes and learning that all diabetic complications can be attributed to hyperglycemia and then saying that glucose control is desirable but not essential. It is like hearing that treating hyperglycemia in diabetics is essential to good practice and then concluding that it is only desirable to talk to their patients about taking insulin. Part of the reason we are in this predicament is that it we do not treat alcohol and drug problems as we do other diseases. Cardiologists would not debate whether or not treating hypertension reduces the risk of another heart attack, conclude that it does reduce the risk, but then decide that treatment of hypertension is only desirable. Cardiologists are clear and firm about addressing hypertension in every practice guideline and standard of care document they publish. They say it is a national problem and must be addressed, and they ensure broad public awareness. If alcohol, as it

[¶¶] The formal title for the "gold book" is *Optimal Resources for Care of the Injured Patient: 1999*. It lists the criteria and standards that a hospital must meet to present it as a Level I, II, or III trauma center. As such, it has the capability of affecting the standards of care in ways that are more far-reaching than exist for other specialties such as emergency medicine or family practice.

[##] The COT can require trauma centers to provide specific services by classifying them as "essential." If a trauma center does not provide an essential service, it can lose its designation as a trauma center. Other services can be classified as "desirable," but not essential. Providing desirable services is encouraged, but it does not affect a trauma center's certification status.

[***] At-risk alcohol users drink at levels that have been demonstrated to increase their risk for a variety of negative sequelae, e.g., motor vehicle crashes or engaging in violent behavior. Although most at-risk drinkers have been intoxicated, many have not been harmed as a result of their drinking, and most would not be eligible for a diagnosis of alcohol dependence. At-risk alcohol use is clearly a risk factor for alcohol dependence and alcohol-related harm, but it should not be confused with a diagnosable condition that represents a serious addiction.

relates to drunk driving, violence, and injury, is not a major problem and confronting it is not essential, then why are we having this conference? If the ACS doesn't feel that alcohol misuse is a serious public health problem that must be addressed, they can state that. However, if participants in this particular conference believe that addressing alcohol problems is essential, then we should make a firm statement regarding this issue.

Anara Guard

In earlier recommendations, the group has stated that alcohol and drug interventions are as important as other interventions and should be an integral part of the trauma center's mission. Because substance use problems are a major public health concern, another recommendation dealt with mandatory reporting of data to public health authorities. It seems incongruous to say that this issue is important enough to report but not to treat.

RECOMMENDATION 10: Because professional and institutional leaders need to be engaged in priority setting and resource allocation decisions, we recommend that leaders and decision makers at all levels involved in the provision of care in trauma centers be made aware of the efficacy of alcohol and substance use interventions and their importance to prevention and public health advancements.

Jeffrey Hammond

The recommendation, as written, confuses two issues—educational and financial. These should be addressed in separate recommendations. First, do hospital administrators and others who do not provide health care really understand how many trauma patients have substance use problems? One recommendation should focus on educating health care administrators about the financial and human costs associated with these problems. Second, I believe it's unfair to expect hospitals to be the sole supporter of services required to address a broad societal problem. Additional funding could come from insurance companies or alcohol producers.

William Schecter

We should have a global education recommendation that lists the types of people and groups that should be targeted. Because many decision makers use alcohol, some to excess, a broad educational process will be required.

Dan Hungerford

Conference presenters and participants have discussed at length the large financial burden that substance use places on society and trauma centers. Because the prevalence of substance use problems is so high among trauma patients, trauma centers provide an appealing setting in which to address these problems. However, this does not mean that trauma centers should bear all of the costs. Yesterday, Susan Nedza spoke about presenting a business case to the larger community who must recognize the costs of substance use to the community and make political decisions to reallocate resources. Along with the educational effort, we need some research on optional ways to allocate the costs of interventions.

Carl Soderstrom

Somewhere in the language of these recommendations there has to be "ownership." Trauma surgeons need to take a leadership role. They are the ones who get sued in the end, anyway.

Ann Mahony

I think the American Association of Medical Colleges should ensure that these issues are part of the curriculum in medical schools.

Larry Gentilello

If trauma centers participate in efforts to decrease drunk driving by screening and providing brief interventions, they could win support on other important issues from a broader group of stakeholders. Although trauma centers should be funded to carry out this important mission, I also feel that they should rethink their funding priorities. An earlier presentation claimed that injury is a neglected epidemic. The same presentation stated that 40 to 60% of trauma patients have alcohol or drug problems. For those patients, injury is not a neglected disease but a symptom of an often neglected alcohol or drug problem. Current trauma center requirements call for a trauma nurse clinician for every 600 to 1,200 patients, physical therapy, occupational therapy, speech therapy, vocational therapy, nutritional therapy, and even play therapy for pediatric trauma. Given the broad array of therapeutic services that are already routinely provided, it is strange that we single out alcohol therapy as an "unfunded mandate." Surgeons need to promote this, not as an unfunded mandate that they want to add to current services, but as a true core service so that it is one of the last services cut.

RECOMMENDATION 11: Screening and intervention programs are most realistically implemented in trauma centers when dedicated staff—not trauma surgeons or trauma nurses— are assigned the task of performing screenings and managing interventions. Whereas surgeons and other clinicians are capable of, and perhaps interested in, taking part in these interventions, competition for their time must be recognized.

Anara Guard

Recognizing competition for time does not seem appropriate wording for a recommendation. Let's restate this recommendation to say: Use staff other than surgeons and trauma nurses when at all possible because it is more efficient or effective.

William Schecter

I think it means that a separate individual or service should provide this service. Are any data available that support improved outcomes when designated individuals or services provide interventions rather than nurses or social workers who also have other duties?

Peggy Murray

Most research has focused on interventions delivered by physicians. A few studies have focused on interventions provided by nurses or nurse practitioners. Insurance companies will want to know what they are getting for their money if they reimburse for a brief intervention. This is an important issue that needs to be addressed.

Dan Hungerford

Brief interventions have been poorly implemented in some studies that used clinical staff who were already overwhelmed with other duties. In those cases, using staff trained for and dedicated to the brief intervention task could have increased efficacy dramatically.

Carl Soderstrom

Although surgeons are capable of screening and counseling, they may not be the staff best suited to do it. Surgeons are not trained to do brief interventions, and many studies indicate that other staff perform the task well. However, the recommendation should explicitly state that surgeons have a responsibility to ensure that screening and counseling are provided in trauma services.

Eric Goplerud

The essence of the recommendation is that screening and intervention is an essential trauma center service. Rather than prescribing who needs to do it, the recommendation should emphasize that it is a core service, organized and overseen by the clinical and administrative management of the trauma center.

Dan Hungerford

I propose that this recommendation be incorporated into the first recommendation that talks about intervention as an essential part of the trauma center's mission.

Harold Perl

Unlike studies in primary care or emergency departments, the few research studies in trauma centers did not use physicians to provide the interventions. Our recommendations should not get too detailed and should be small in number, sharply focused, and strongly worded. This recommendation should also not prescribe what type of staff person should screen and provide the intervention but, instead, should provide a menu of options. In this way, the party responsible can vary across individual trauma centers.

Jeffrey Hammond

I disagree with the basic premise of this recommendation. Trauma surgeons must accept responsibility for this service. It's nonsense to suggest their time is too valuable to be involved with intervention. Trauma surgeons take time to obtain informed consent before operating and spend time in the intensive care unit talking about end-of-life decisions. I should have already been trained on how to do brief interventions. Surgeons must learn how to do interventions to demonstrate the importance of this program. I propose deleting this recommendation.

Robert Schmieg

I concur and offer the following restated recommendation: "While screening and intervention programs may be most realistically implemented by dedicated staff assignments to these tasks, all members of the trauma service should be appropriately educated about, trained in, capable of, and empowered to provide direct or refer to screening and intervention programs."

William Schecter

Chris [Dunn], how can surgeons obtain training? If all of the bosses at the conference were trained to do interventions and actually began doing interventions, this would send a powerful message to the people they train.

Chris Dunn

An article by Gail D'Onofrio describes the training of emergency medicine residents at Yale in a 4-hour session using videotape and lecture.[†††] I am also preparing for a 1-day training session at a trauma center in Montana. The best training option is to get visiting privileges for the trainer. This way, trainees do not have to sit in a classroom all day. Instead, they can alternate watching the trainer work directly with patients and later, in another room, discuss what they just observed. By the end of a day, the students can map out the protocol and try it themselves. I've used this method successfully with an anesthesiologist at one site and trauma nurses at another. Research has not yet evaluated how much training is required. Usually the length of training sessions is set by the amount of money an institution can spend or by how long the staff can be available for training. A full day is a reasonable training session. However, I've given sessions in as little as 2 hours that left trainees feeling confident enough to perform interventions on their own.

Dan Hungerford

Who provided the training for the Robert Wood Johnson project led by Carol Schermer, and how long did it take?

[†††] D'Onofrio G, Nadel ES, Degutis LC, et al. Improving emergency medicine residents' approach to patients with alcohol problems: a controlled educational trial. Ann Emerg Med. 2002;40:50–62.

Chris Dunn

Theresa Moyers of the psychology faculty at the University of New Mexico picked nontherapists who were empathic and trained them in 2 days. Anyone can link to training in motivational interviewing at http://www.motivationalinterviewing.org/. Trainers used *Health Behavior Change* by Rollnick, Mason, and Butler as the basis of their training. Craig Field and Raul Caetano launched a randomized trial of motivational interviewing in Texas and trained nontherapists in only 4 days. I assisted them during the last 2 days of training, saw the trainees at work, and predict they will do a good job. However, 4 days of training is not required—a few hours is sufficient. An intervention does not have to include motivational interviewing.

Robert Schmieg

This discussion relates to Draft Recommendation 6. Can we change wording for that recommendation? For example, "Implementation of screening and interventions for trauma patients in centers with different characteristics should be assisted by establishment and dissemination of practice guidelines, which include diverse approaches so that local center choice of the appropriate options can be made. Educational modules should be developed for training, screening and intervention skills, and translational research should be pursued to evaluate the effectiveness of these measures."

Anara Guard

People and institutions interested in learning about these efforts or starting intervention programs need some kind of national center on screening, brief intervention, referral, and treatment—a centralized place to access reference materials, toolkits, speakers, and trainers. I'm also concerned that the draft recommendations focus only on what trauma centers should do. Can we draft a recommendation that describes what other stakeholders in the community should do to support these efforts? For example, they can alert programs about treatment availability, lobby for changes in policy, or leverage resources. These stakeholders can help trauma centers achieve these new standards of care.

Dan Hungerford

For me, one of the themes of the conference has been that solving societal problems requires broad societal involvement. The conference should have convinced us that trauma centers are an appropriate place to address substance abuse problems, if only because the prevalence of these problems is so high in trauma centers. However, substantial involvement by stakeholders outside trauma centers will be required to pay for programs and to change policies.

Robert Schmieg

A rewrite of Recommendation 10 might address your concerns. For example: "The provision of care of trauma patients involves professional and institutional leaders at all levels, including priority setting and resource allocation. Education must be provided to these current leaders and the developing leaders in society by the trauma surgery community on the efficacy of alcohol and substance use interventions, their importance to prevention and public health advancement, and the impact of these problems on local and national levels. We suggest these educational efforts include medical, nursing, and allied health professionals through core curriculums, residents as a formal part of residence curriculum, medical professionals on an ongoing basis, hospital administrators, community leaders, and elected officials at the federal, state, and local levels." I know I would love to be able to turn to any of my state legislators and tell them exactly how many trauma deaths have occurred in their counties and how many of those were related to alcohol and substance use. Most politics are local. We have to have the data to address these things at local levels—talking about things at the national level is too abstract—talking about what's in their backyard gets them moving.

Dan Hungerford

I'll officially close the conference by thanking all participants for your enthusiasm and commitment. People from so many different disciplines have cooperated to produce a stimulating and challenging conference. I promise to do all I can to see that the work of this conference continues.