Discussion of Draft Recommendations

Daniel Hungerford opened the final session of the conference by outlining the group's ultimate task—to create research recommendations from conference deliberations. Before the conference, he and Daniel Pollock drafted recommendations for the steering committee to consider. During the conference, the steering committee modified those recommendations, and they were distributed to attendees for general discussion.

Hungerford stated that the goal of the conference was not to achieve unanimity regarding the recommendations, but to have significant and general agreement. He indicated the process would be to discuss the recommendations one by one, identifying any gaps or omissions and offering general comments. He emphasized that the sequence of the recommendations did not imply a priority order. Because the published recommendations will include supporting text, he encouraged the group to consider any points of clarification that would be instructive. Hungerford then opened the floor for discussion.

Recommendation #1

Research on screening and intervention should address the full spectrum of alcohol problems among ED patients.

Richard Brown remarked that in many circles, "intervention" does not necessarily include referral, so he suggested that the first recommendation include "referral." Also, he said the phrase "alcohol problems" does not always include risky drinking and problem drinking, so he suggested adding "risky and problem drinking" to the recommendation.

Daniel Hungerford noted that the supporting text could provide detail on the spectrum of alcohol problems. He suggested the main point of the first recommendation was that research efforts should include the whole continuum of alcohol problems, not just a portion of the continuum such as alcohol-dependent drinkers.

Jean Shope advocated that the definition of "the full spectrum of alcohol problems" include primary prevention. She recommended this understanding be made explicit in the final document.

Gordon Smith suggested that the recommendations should address the problems of poly-substance abuse.

Carl Soderstrom wondered whether "alcohol problems" referred to the spectrum of drinking problems or the medical problems associated with drinking.

Herman Diesenhaus pointed out that hazardous drinking causes a complex set of problems that include personal, social, and legal problems in addition to medical problems. The phrase "alcohol problems" includes all those problems as well as the hazardous drinking. He noted that different pieces of the solution will lie in the medical realm and in the social welfare realm. He expressed concern about how to reflect this complexity in the recommendations.

Guohua Li suggested changing the phrase "among ED patients" to "in the emergency setting" because alcohol problems are not limited to patients. Perhaps the recommendations should address alcohol problems among providers and physicians.

Stephen Hargarten thought that the term "alcohol-related problems" would appeal to clinicians more than "alcohol problems" because they see those problems in their practices. He said that including "related" in terms gives the sense of broadening them.

Richard Ries said he did not believe that screening for alcohol neuropathy was intended to be part of the recommendation. He suggested that the recommendation be clear that it is addressing alcohol use disorders or problems, not for medical care consequences.

Hungerford replied that screening for specific medical care consequences was not part of the recommendation, but that consequence items may be used in the screening. He added that broad screening would identify people with medical conditions as well. He found that

screening with a low cut point on the AUDIT identified more people with severe alcohol problems and alcohol dependence than did not using a uniform screening method. He agreed that this issue needs clarification in this recommendation.

Richard Longabaugh said that the term "alcohol problems" implies that the patient's problem is consumption. He favored "alcohol-related problems" because consumption is not the problem. The problem is the consequences resulting from excessive drinking.

Elinor Walker endorsed the notion of using "the emergency care setting" rather than "the ED" particularly to include focus on the pre-hospital care setting.

Hungerford added that the trauma care setting should be included as well.

Li added his support to "alcohol-related problems," but suggested another alternative, "problem drinking," which is commonly used.

Edward Bernstein pointed out that the recommendations would likely stand alone for readings and come without context. With that in mind, he suggested listing the full spectrum of alcohol problems, from risky drinking to alcohol abuse to alcohol dependency. He felt that it would be a mistake to open this set of research recommendations with a recommendation that included screening for withdrawal or other conditions. Another possibility would be to say, "the full spectrum of alcohol misuse."

Recommendation #2

Screening instruments under consideration for use in EDs should be evaluated as a component of protocols that provide interventions for patients.

Robert Woolard supported the recommendation and noted that most research on screening has involved an evaluation of screening, but not an intervention. Trying to apply those findings to a clinical

setting, where there is the question of training and the link between the screening instruments and the intervention, becomes problematic. Enough research has been conducted on instruments alone, he said, and new research should link screens with interventions.

Linda Degutis recommended amending the recommendation to read, "screening, interventions, and methods under consideration." Then in the supporting text, she suggested addressing the different people who might be doing the screening and the need to tie it to intervention.

Longabaugh wondered whether the intended consumers of the document would include government officials, researchers, practitioners, and academicians.

Hungerford answered that the summary of the conference would be published in an emergency medicine journal and that readers would include these groups.

Daniel Pollock added that the message of the recommendations could also be conveyed at professional meetings. The goal was to influence people who are in a position to make changes in the field.

Brown believed the recommendation was worded too strongly. To him, it was saying that work should not include screening research in isolation. He noted that little is known about effective screening for certain sub-populations, so screening research still has its place. Although he agreed that a total research portfolio should have a strong emphasis on intervention and not just screening.

Diesenhaus described his use of a slogan and abbreviation for a treatment strategy, "Screening, Brief Intervention, and Referral—SBIR." Research on the individual components is important, but the strategy for the emergency room setting is as follows: screen, decide if a brief intervention is called for, and if not, give a referral. Emergency setting personnel need to understand all three components and how they are linked. He was not sure if "referral" could be included every time, but acknowledged that it is a vital part of the work.

Hungerford emphasized that research on screening is needed. However, he believed research on screening instruments that is not linked with an intervention leads to the easy assumption that results will be generalizable to using that screening instrument in a full protocol. The second recommendation, therefore, is intended to point out that results from the screening literature are not necessarily generalizable to real-world settings in which screening would be paired with interventions.

Ries suggested that defining "SBIR" upfront might help clinicians understand the recommendations better. If we do not, a clinician who is interested in seizures or pancreatitis could easily misread the wording of this recommendation. To avoid that, for this recommendation we would have to say something like, "Problematic alcohol-use screening instruments under consideration for use in the ED should be evaluated as a component of protocols that provide alcohol-use interventions for patients to decrease problems or use."

Hungerford said he understood. If we do not pre-define "SBIR," we have to define what we are talking about with each recommendation. If we do define "SBIR" upfront, we make the reading more understandable and more efficient.

Gail D'Onofrio noted that in this context, we use "referral" to mean sending a patient to a specialized treatment facility. However, in emergency medicine, everyone gets a referral—to primary care, a clinic follow-up, or another health or social service. The "referral" in SBIR could include both meanings.

Hargarten's initial understanding of this recommendation was that screening activities for alcohol problems should be integrated with the screening and interventions the ED does for a whole range of problems. He suggested that the recommendation be worded in such a manner that this effort does not seem to be a parallel activity.

Hungerford proposed that just as screening research should be carried out in the context of protocols that include interventions, those protocols should be integrated with the whole system of ED operations.

Christopher Dunn thought the word "evaluate" made this recommendation vague. What would be evaluated—the usefulness of a screen or the psychometric properties of a screen? He believed that the screen can have an interventive effect, so he wanted research on whether patients fare as well with a screen as they do with brief advice or more sophisticated techniques.

David Fiellin advocated eliminating the second recommendation. To him the statement implied that screening instruments should be evaluated only as a component of protocols that provide interventions. He believed that the statement was dangerous because there are research methodologies that are related to evaluating screening and separate ones related to evaluating interventions, and we may not want to obligate tying the two together.

Thomas Babor supported technical research on screening and the wording of this recommendation. However, he raised a larger issue—the moral imperative of screening. He said that screening sets up the expectation that something has to follow. Without screening, there cannot be much intervention. He noted that the recommendation could be seen as a way of driving widespread applications of interventions. If that is the goal, he thought we should be examining how to accomplish screening. There are large obstacles to screening, and practical research on screening implementation, incentives, efficiency, and its ability to reach large numbers of people at low cost is necessary. He believed in a public health approach to screening which means we would not do it if the yield is low. He suggested that the technical aspects of screening were not as fruitful topics for research as how to screen the greatest number of patients at the lowest cost.

Bernstein suggested that the recommendation not be eliminated, but rewritten to reflect the discussion.

Pollock and **Hungerford** concurred. Hungerford added that the intent of the recommendation was not so much that integrating the screen with the intervention gave better estimates of the performance characteristics of the screen, but that it would redress the imbalance between

research emphasizing the performance characteristics and research on operational and practical characteristics.

Recommendation #3

Interventions that have shown promise in other clinical settings should be adapted to and evaluated in emergency departments.

Charles Bombardier wondered whether the recommendation should limit evaluation only to interventions shown to be effective in other settings. There might be interventions developed specifically for the ED that would be worthwhile to test.

Walker thought the goal of this recommendation was to de-emphasize fine-grained, developmental work and to emphasize pursuing work using available interventions.

Woolard noted that the effectiveness of screening, brief interventions, and referrals has been proven outside the emergency department, but not yet in the ED. Therefore, he hoped that the supporting text for this recommendation would include statements about the need for a large, multi-center trial in EDs.

Longabaugh noted that new and creative interventions may be developed in the ED that the rest of the field will want to adapt and explore.

Walker made a plea not to adopt the abbreviation "SBIR" because it is already used to designate small business innovation research grants by federal agencies. It could be very confusing. She suggested "SIR" instead.

Smith returned to the idea of linking alcohol interventions with the other interventions in the ED. If there were a package of interventions that providers could document and be reimbursed for, that would ease acceptance by practitioners and help institutionalize these new practices. Documentation would also help ensure interventions would not be repeated unnecessarily.

Pollock pointed out that proving the cost-effectiveness of a specified, well-described service in a clinical setting is a critical consideration in moving a new practice from a research endeavor to a reimbursable service. Whether the service emerges as an adaptation from primary care or as an innovation from the ED is less important than whether it can be evaluated to the satisfaction of those who make key decisions about whether it becomes part of standard practice.

Larry Gentilello asserted that effective treatments already exist, not just treatments that "hold promise." The "promise" has to do with the intervention's likelihood of success in the ED, not with its success in other settings. He suggested that the wording be made less tentative: for example, "treatments that work should be made to work in the ED."

Catherine Gordon proposed that the recommendations address the issue of financing and suggested the following phrase, "Research should also identify the most effective and cost-effective interventions and delivery mechanisms (e.g., provider types or technologies)." She said this type of information is absolutely critical for insurers.

Pollock asked Gordon whether research on alcohol interventions had to be done in a specific clinical setting in order for interventions provided in that setting to qualify for reimbursement. He also asked how Medicare distinguishes between prevention and treatment for the purposes of authorizing reimbursement.

Gordon explained that because Medicare is prohibited by statute from covering preventive services, it must draw a distinction between treatment and prevention. The kind of information insurers require to cover these services includes necessary frequency of treatment, types of providers best suited to provide treatment, an ironclad case that the intervention is effective, a consensus in the professional community around the intervention, and an ability to guard against the potential for fraud and abuse.

Pollock added the notion that demonstrations of effectiveness in primary care settings, in the eyes of policymakers and payers, are not tantamount to demonstrating cost-effectiveness in emergency departments, underscoring the importance of research in that setting.

Gordon agreed.

Recommendation #4

Research is needed to evaluate the effects of legal, privacy, confidentiality, regulatory, and human subjects issues on screening and interventions for alcohol problems among ED patients.

Brown praised the recommendation for addressing a very important issue. However, he thought the human subjects aspect might not belong, because human subjects issues will not affect screening and intervention on a daily basis in the clinical setting. They only affect research studies.

Bombardier suggested that in addition to evaluation, this research should develop ways to mitigate legal, privacy, and confidentiality problems associated with screening and treatment.

Ann Mahoney said the recommendation should be worded to focus on systems as well as individuals. For example, she indicated that the concerns institutional and professional systems have about reimbursement or legal, privacy, and confidentiality issues influence whether ED patients receive screening and interventions.

Hargarten commented that this area has the potential to cause consternation and divisiveness, so it will require a great deal of textual commentary to tease out the important issues that it addresses. He noted that alcohol screening in the ED is currently being discussed on the "ethics circuit." He suggested that perhaps ethics should be added to the recommendation.

Recommendation #5

Research is needed on how demographic and cultural attributes of ED patients, practitioners, and interventionists influence the success of screening and interventions for alcohol problems.

Hargarten said there should be some reference in the recommendations to the high-risk environment in which these people live and work and visit the ED. He wondered if this recommendation was the appropriate place.

Marilyn Sommers noted that different clinical settings can profoundly influence how screening and intervention is delivered. She cited differences between Level I trauma centers and community hospitals. She suggested that the influence of setting be made explicit somewhere in the recommendations.

Alison Moore indicated that these differences can also influence how researchers and clinicians tailor interventions to apply to people with different cultural attributes.

Li suggested that co-morbidity or patients' medical characteristics could also have a large impact on the success of interventions.

Recommendation #6

Research is needed to identify the factors that foster the organizational and practitioner behavior changes needed to institutionalize screening and intervention for alcohol problems among ED patients.

Walker urged that this research not be confined to academic medical centers, but be designed and carried out in partnerships with other stakeholders, particularly community-level providers. She believed that this should be in the recommendation, not just supporting text, because reviewers would want to know how screening and intervention can be implemented into clinical practice when considering grant applications.

Robert Lowe suggested a range of research topics could come under this recommendation. Who should do interventions in the ED? How should ED interventions be linked to the primary care and public health systems? Which services should be provided in the ED and which should be provided elsewhere? How can referrals be effectively accomplished? How can interventions be paid for? He suggested wording for the supporting text for this recommendation. "Research in this category may address a broad range of organizational issues—from the structure of alcohol and screening treatment services within the ED to the relationship of the ED to other sources of primary care and the organizational and fiscal factors affecting that relationship. This research is crucial as the field progresses from evaluating efficacy in research settings to examining effectiveness in the current, complex health care delivery system."

Babor supported Lowe's revision and suggested adding the word "implementation" to the recommendation. Research is needed on how to implement and institutionalize these programs. Factors to be explored range from practitioner behavior and practice guidelines to policy changes that are needed to facilitate implementation of screening and intervention in these settings. If this recommendation is too narrowly defined, we will encourage people to look at small things like training programs. However, no matter how strong a training program is, if there are no incentives for practitioners to use the training or the legal restrictions are insurmountable or the health care system is in total chaos and you cannot find who is in charge of the department because somebody has bought out the hospital, you will have difficulty implementing an intervention.

Peter Rostenberg noted that most trauma care is delivered in community hospitals, and practitioners in that setting often do not relate to Level I trauma care research. Therefore, he supported including community hospitals in research efforts. He thought the biggest barrier was how to change the culture in the ED so that staff would ask screening questions.

Ries thought that the recommendations should encourage studying outcomes that are important to medical personnel, such as health care outcomes and recidivism, rather than alcohol use outcomes.

Hargarten related that a recent survey found that almost one-third of academic EDs have faculty in community settings. He thought that encouraging this linkage in research proposals could help increase this proportion. He also suggested that involving opinion leaders in the field of emergency medicine could help reduce the lag time between academic research showing the effectiveness of an intervention and broad implementation in non-academic, clinical settings.

Patricia Perry believed that the recommendation was not yet comprehensive. Hospital administrators merit mention because they are key to wide implementation. She thought state and federal policymakers should also be included in the statement. She observed that institutionalizing new practices was just the beginning of the task. Once they are in place, the program needs to be maintained. She wondered what factors influenced maintenance.

Pat Lenaghan suggested that clinicians need recommendations about what could be accomplished now. They need to know that screening works and that the sooner screening is implemented the sooner patients with alcohol problems can receive help. She noted that collaboration with community groups and public health agencies is appropriate for alcohol problems because they are not just present in the ED. She said that such collaboration has contributed to the success of domestic violence screening across the country.

Bombardier noted that barriers exist among departments within institutions as well as among institutions. He advocated developing information systems that follow patients so that data collected in the ED can be used later.

Ronald Maio suggested defining the unique role of the emergency department in the overall picture of treating alcohol problems. What can the emergency department do that cannot be done in other settings?

Soderstrom suggested that the term "practitioner" in this recommendation needs to be clarified because it can mean anyone who takes care of a patient, including RNs, MDs, therapists, and others.

Bernstein noted that alcohol-dependent patients clearly need specialized treatment and that some patients with hazardous drinking need outpatient counseling. He said if access to that counseling is not available, screening and interventions are less likely to happen in the ED. He called for research on barriers emergency physicians face in getting further care for ED patients with alcohol problems.

Hargarten wondered about supporting text that calls for policy-relevant research to institutionalize and to promote organizational changes. He suggested that research on ways of paying for these services could be an important factor in promoting and institutionalizing changes.

Recommendation #7

Research is needed to explore and define the role of information technology in facilitating screening and intervention for alcohol problems among ED patients.

Brown asked whether other forms of technology should be included, such as audio tape headsets.

Janet Williams suggested the phrase "information and communication technology." She said that these technologies can assist in follow-up and continuity of care.

Ries commented that educational videos in waiting rooms can be helpful.

Hargarten added that tele-medicine has a role in making the booster intervention a reality.

Recommendation #8

Funding agencies should support research on screening and interventions for alcohol problems among ED patients and make the mechanisms of research support known to potential applicants in emergency medicine.

Longabaugh wanted the recommendation to include research training as an explicit component. He said that it has been difficult to get good, physician applicants for Brown's post-doctoral program in intervention and treatment research. However, the program has produced a great deal of research. Mechanisms to facilitate the training of good researchers, particularly ones from emergency medicine, are needed and should be encouraged.

Hargarten added that training mechanisms should not be limited to physicians. He suggested including nurses and PhDs.

Diesenhaus noted that agencies are required to fund different types of research. SAMHSA funds applied research, and their application program is oversubscribed.

Brown felt that the recommendation placed too much responsibility on funding agencies. He suggested the recommendation encourage the emergency medicine academic organization to help its members find other funding opportunities. He thought there were many opportunities through other organizations that should be tapped.

Gentilello said he has long supported placing a priority on research in this area. However, funding agencies cannot be forced to accept this. He agreed with Brown that professional societies should be clear about funding opportunities. At the same time, the data indicate many missed opportunities for treatment in the ED. For some patients, the ED visit is the only contact with the medical care system. It can be their only opportunity for intervention, and injuries are the most common events that bring people into contact with the emergency department. We can present a strong case that work in the ED should be a high priority.

Pollock suggested that ED visits are crucial opportunities, and the supporting text for this recommendation can make that clear. It is possible to emphasize this topic without stating that it should take precedence over other issues or have a certain amount of resources devoted to it

Hungerford thought that work in the ED needed a higher priority and more resources if the field is to move forward.

Pollock asked for a more specific definition of "prioritization." It is unfortunate, but in the eyes of funders, it is perceived as a zero sum game.

Bernstein suggested that the supporting text for this recommendation would have to explain the need for political commitment to changing the health and social outcomes resulting from alcohol problems.

Hargarten suggested that we do not have to ask federal agencies to make research on alcohol problems in the ED a high priority. Instead, we could recommend that, compared with other settings, the prevalence of alcohol problems among ED patients makes it worthy of careful consideration. We can also recommend that research efforts should include an ED focus and that emergency medicine experts should be included in the grant review process. This strategy would attempt to broaden the focus of current research activities to include the ED.

Longabaugh commented that an NIAAA effort to conduct research on spirituality and addiction came about by setting aside funds specifically for this topic. He said the way to accomplish this is to find and work with agency staff interested in the topic. He believed that data on the prevalence and severity of alcohol problems in EDs can have a major impact.

Ries agreed and suggested that this recommendation should promote ED-based research by emphasizing the large number of ED patients affected by alcohol problems and the significant health care impact of those problems.

Fiellin suggested the recommendation should ask for a level of support that is commensurate with the burden of illness.

Gentilello pointed out that the literature includes 40 randomized trials on brief interventions in family and general practice settings. Three (one in press) are in emergency medicine. The emergency department at Harborview probably sees 50 times as many patients with alcohol problems as the psychiatry or family medicine departments. If we were to choose one place to set up a screening system to find people who need interventions, it should be the emergency department. He said there needs to be a shift in priorities.

Mary Dufour described how NIAAA sets research priorities. To secure some funding for this conference, she had to "compete" with other conferences, which indicates that this issue is high on the NIAAA list of priorities. NIAAA has a National Advisory Council with a subcommittee that helps to set research priorities. Interacting with the Council is an important way to influence research priorities, she said. Every three to five years, NIAAA reviews its whole research portfolio; it identifies gaps, which become research priorities. Alcohol and injury, as well as brief interventions, are on the list. NIAAA is a small institution with more priorities than money.

Brown suggested that the recommendation remain as is, but that the supporting text list ways that priorities could be changed. Because drug use is also an important issue among ED patients, he thought combining alcohol and drug research in EDs could lead to more research dollars. He noted a growing understanding of the importance of screening for alcohol and other drugs together. To appeal to NIDA, he said, the referral aspect of the research should be strong because of their focus on treatment.

Diesenhaus agreed that both support from staff in an agency and the "burden of illness" argument could be influential. He said that demand for research in EDs from outside an agency would also be important. He suggested that conference participants needed to interact with individuals and groups that influence policy.

Gentilello acknowledged that there is a demand problem. The goal is to help trauma surgeons and emergency physicians realize that dealing with alcohol problems is an integral part of their job. Research on alcohol problems is as important as research on sepsis and CPR. At the NIH web site, he found no information on alcohol-related research in the surgery section. It was all in the alcohol section, which surgeons do not explore. If we want surgeons to become interested, it should be repeated in the surgery section.

Longabaugh remarked that NIH is increasingly trying to individualize the routing of grant applications so that study section members are a matter of public record. If a study section does not include a relevant expert, then a cover letter with the grant application can request such an expert.

Li suggested that adding a reference to the *Healthy People 2010* objective to reduce alcohol-related injury and ED visits by 15% might enhance the rationale for more research.

General comments about the recommendations

After participants had given extensive feedback on specific proposed recommendations, **Hungerford** asked if they had general comments about the recommendations overall.

Fiellin reflected on increasing information about the biological basis for addictive disorders, the increasing effectiveness of pharmacotherapy, and the fact that we are trying look at these disorders the same way we look at chronic medical conditions like hypertension and diabetes. He asked whether we might initiate pharmocotherapy for patients with alcohol-related problems in the ED, much like we initiate use of oral hypoglycemics and anti-hypertensives with some type of follow-up.